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REPORTS

DATE:

6/26/2002

BLM LAND
LEASED TO
Jimmie COOPER

PHASE II GROUNDWATER
CHARACTERIZATION REPORT
JOHN HENDRIX EXCAVATION SITE
~~JIMMIE COOPER RANCH~~
MONUMENT, LEA COUNTY,
NEW MEXICO

ENERCON PROJECT NO. EQ-110

Prepared for:

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1.0 INTRODUCTION

Enercon Services, Incorporated (Enercon) has completed the Phase II Site Groundwater Characterization for the former Equilon Pipeline Company (Equilon) John Hendrix pipeline release site ("the site") located in the southwest quarter of Section 18, Township 20 South, Range 37 approximately 3 miles southwest of Monument, Lea County, New Mexico (**Figure 1**). This report details the installation of five monitor wells and one soil boring in order to aid in determining the extend of groundwater impacts, if any, from the historic pipeline release at the site. As part of the investigation, soil and groundwater samples were collected for laboratory analysis from the newly installed monitor wells (MW-1 to MW-5) and the soil boring SB-1.

The Equilon John Hendrix pipeline release occurred at an undetermined time in the past, with the inactive pipeline being permanently removed from the ground approximately 8 years ago. In order to determine the vertical and horizontal extent of hydrocarbon impacts at the site, Equilon installed 11 soil borings from June to July 1999 at the site. Based upon that investigation, the soil and groundwater was determined to have been impacted at the site. From August to December 2001, Equilon removed approximately 57,120 cubic yards of soil from the site and transported the hydrocarbon impacted soils to a local landfarm. Wall and bottom samples of the excavated site were collected and submitted for laboratory analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene and xylenes (BTEX). Upon receiving results, the site was subsequently backfilled with clean soils. Of the samples collected for analysis, only one sample from the south central wall at 28 feet was found to contain TPH (176 parts per million) above the New Mexico Oil Conservation District requirements of 100 parts per million (ppm) TPH. These soils were inadvertently left in place prior to commencement of backfilling activities. In order to determine the horizontal extent of groundwater impacts at the site, Enercon installed 5 monitor wells around the perimeter of the former excavation. In addition, a soil boring was placed in the vicinity of the south central wall sample in order to determine the amount of hydrocarbon impacted soils that remain in the ground. This report details the findings from the installation of those five monitor wells and one soil boring at the site.

2.0 SUBSURFACE INVESTIGATION

As per Enercon's Workplan dated April 2001, Enercon field personnel were on-site May 9 through May 13, 2001, to oversee the installation of five (5) monitor wells to a depth of 43 feet below ground surface (bgs) and one (1) soil boring to a depth of 33 feet bgs around the perimeter of the former excavation (**Figure 2**).

Soil samples were collected in each of the five (5) monitor wells and one soil boring at 5-foot intervals using a split spoon and were screened in the field for volatile organic constituents by an Enercon representative using a Photoionization Detector (PID) and head space techniques. Boreholes were advanced until groundwater was encountered. Two (2) soil samples, one from the zone immediately above groundwater and the sample from the

zone exhibiting the highest PID measurements were collected and submitted to Trace Analysis Inc. (Trace) in Lubbock, Texas for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH Dro/Gro) using EPA methods 8020 and 8015M for Diesel and Gasoline, respectively. In addition any sample that had a TPH (Dro/Gro) that exceeds the NMOCD regulations of 100 ppm was further analyzed for SPLP TPH (Dro/Gro) using EPA Method 8015B.

Subsurface conditions were similar in the five monitoring wells and one boring installed (**Appendix A - Boring Logs**). The surface material to a depth of approximately 10 to 13 feet bgs is comprised of light tan fine grain calcareous sand. From approximately 13 to 20 feet bgs the soils are comprised of buff sandy limestone. From approximately 20 feet to the termination of the borings at 33 to 43 feet bgs is comprised of tan fine grain calcareous sand.

The five monitor wells (MW-1 to MW-5) were constructed of 4-inch diameter schedule 40 PVC casing with 0.02-inch factory slotted well screen (**Appendix B - Monitor Well Completion**). Fifteen feet of screen was placed at the bottom of each boring. A sand pack was then installed from the bottom of each boring to approximately 2 feet above the casing/screen junction. A clean silica sand with a grain size larger than the well screen (sieve size 8 to 16) was used as the sand pack in the annular space between the casing and borehole. From approximately 2 feet above the screen to 3 feet bgs, a bentonite plug was installed in the annulus. Above the bentonite plug, a non-shrinking grout with 3 to 5% bentonite was installed in the annulus to the surface. The surface completion for the five (5) monitor wells included an eight-inch diameter steel surface monument style riser, a four-foot by four-foot by four-inch thick concrete pad, and a locking cap on the outer protective casing (**Appendix C - Site Photographs**).

The soil boring SB-1 was grouted to the surface using a bentonite plug after collection of the two soil samples.

3.0 ANALYTICAL RESULTS

3.1 Soil Analytical

Two soil samples were collected from each of the five monitor wells and the one soil boring and submitted to Trace Analysis of Lubbock, Texas for BTEX and TPH modified for Dro and Gro ranges. In addition, any sample with an analysis of TPH (Gro/Dro) concentration of greater than 100 mg/kg was further analyzed for SPLP TPH (Dro/Gro) using EPA Method 8015 and 8015B (**Table 1**). All BTEX concentrations were below detection limits for all samples collected except for MW-2 (28-30'), MW-3 (28-30'), and SB-1 (15-17'), which had a total BTEX concentration of 0.029 mg/kg, 0.22 mg/kg, and 0.0146 mg/kg, respectively. This is below the NMOCD regulations of 50 mg/kg. All TPH (Dro/Gro) concentrations were below detection limits for all samples collected except for MW-1 (8-10') and MW-3 (28-30'), which had TPH (Dro/Gro) concentrations of 1,498 mg/kg and 152.3 mg/kg, respectively. Since these two samples were above guidelines of

100 mg/kg, both samples were further analyzed for SPLP TPH (Dro/Gro) to determine the probability of leaching from the soil into the groundwater. The analytical results were below detection limits for the SPLP (Dro/Gro) for MW-1 (8-10') and for SPLP Dro for MW-3 (28-30'). An analytical result of 1.86 mg/kg SPLP Gro was detected for MW-3 (28-30').

3.2 Groundwater Analytical

On May 13 and May 14, 2002, Enercon field personnel collected groundwater samples with disposable bailers from the five (5) monitor wells (MW-1 to MW-5) for laboratory analysis of total BTEX using EPA method 8020 and Polynuclear Aromatic Hydrocarbons (PAH) using EPA Method 8270 (**Table 2**). The samples were placed in laboratory bottles, labeled, and stored on ice at 4° Celsius until being transported to Trace Analysis Inc. (Trace) in Lubbock, Texas for analysis.

Analytical results were below detection limits for all BTEX samples analyzed except for monitor well MW-3 which had a benzene concentration of 0.0042 mg/L. In addition, the PAH analysis were below detection limit for all monitor wells except MW-2 which had a total PAH concentration of 0.00070 mg/L result. The two analytes of concern were Flourene and Phenanthrene which had results of 0.00026 mg/L and 0.00044 mg/L, respectively (**Appendix D** - Laboratory Analytical). All samples were below the current New Mexico Water Quality Control Commission Ground Water Standards.

4.0 GROUNDWATER GRADIENT

Based on gauging data collected on May 13, 2002 from the five onsite monitor wells, the groundwater gradient for the site is to the south southeast (**Figure 3**).

5.0 CONCLUSIONS AND RECOMMENDATIONS

The results of Enercon's investigation have determined the following:

- No groundwater was impacted at the site with BTEX or PAH except for MW-1 and MW-2. Monitor well MW-1 had a benzene concentration of 0.0042 mg/L, which is below current state regulations of 0.01 mg/L benzene; while minor amounts of Flourene and Phenanthrene were detected in monitor well MW-2. No state or federal standards exist for Flourene and Phenanthrene.
- Soil samples MW-1 (8-10') and MW-3 (28-30') had TPH (Dro/Gro) concentrations in excess of the NMOCD recommended levels of 100 mg/Kg. Further analysis of these samples for SPLP TPH (Dro/Gro) found the samples were below detection limits except for MW-3 at 28 to 30 feet bgs which had an SPLP TPH (Gro) concentration of 1.86 mg/kg. .

Enercon recommends that Equilon perform quarterly sampling at the site. At the end of the four quarters, the data should be evaluated to determine the possibilities for pursuing closure at the site.

TABLE 1

SOIL ANALYTICAL RESULTS
EQUILON JOHN HENDRIX
MONUMENT, LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (in mg/kg)	Toluene (in mg/kg)	Ethylbenzene (in mg/kg)	Xylenes (in mg/kg)	Total BTEX (in mg/kg)	Chlorides (in mg/kg)	TPH (Dro/Gro) (in mg/kg)	PLP TPH (Dro) (in mg/kg)	PLP TPH (Gro) (in mg/kg)	Depth to groundwater	NMOCD Ranking
MW-1 (8-10')*	05/09/02	<0.010	<0.010	<0.010	<0.010	<0.010		1498*	<5.00	<1.00	34.0'	20
MW-1 (31-33')	05/09/02	<0.010	<0.010	<0.010	<0.010	<0.010		<50.0	NS	NS	34.0'	20
MW-2 (13-15')	05/13/02	<0.020	<0.020	<0.020	<0.020	<0.020		<50.0	NS	NS	34.0'	20
MW-2 (28-30')	05/13/02	<0.010	0.0126	0.01	0.0203	0.0429		<50.0	NS	NS	34.0'	20
MW-3 (13-15')	05/13/02	<0.020	<0.020	<0.020	<0.020	<0.020		<50.0	NS	NS	34.0'	20
MW-3 (28-30')*	05/13/02	<0.020	<0.020	0.0705	0.15	0.22		152.3*	<5.00	1.86	34.0'	20
MW-4 (13-15')	05/10/02	<0.010	<0.010	<0.010	<0.010	<0.010		<50.0	NS	NS	34.0'	20
MW-4 (30-32')	05/10/02	<0.010	<0.010	<0.010	<0.010	<0.010		<50.0	NS	NS	34.0'	20
MW-5 (13-15')	05/10/02	<0.020	<0.020	<0.020	<0.020	<0.020		<50.0	NS	NS	34.0'	20
MW-5 (29-31')	05/10/02	<0.010	<0.010	<0.010	<0.010	<0.010		<50.0	NS	NS	34.0'	20
SB-1 (15-17')	05/14/02	<0.010	<0.010	<0.010	0.0146	0.0146		<50.0	NS	NS	34.0'	20
SB-1 (30-32')	05/14/02	<0.010	<0.010	<0.010	<0.010	<0.010		<50.0	NS	NS	34.0'	20
NMOCD RANKINGS		10	NA	NA	NA	50	NA	100	NA	NA	NA	NA

ND = Not detected NA = Not applicable NS = Not sampled

* represents sample that is above current NMOCD standards

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
EQUILON JOHN HENDRIX
MONUMENT, LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (in mg/L)	Toluene (in mg/L)	Ethylbenzene (in mg/L)	Xylenes (in mg/L)	Total BTEX (in mg/L)	PAH		
							Total (in mg/L)	Fluorene (in mg/L)	Phenanthrene (in mg/L)
MW-1	05/13/02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002
MW-2	05/13/02	<0.001	<0.001	<0.001	<0.001	<0.001	0.00070	0.00026	0.00044
MW-3	05/14/02	0.0042	<0.001	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002
MW-4	05/13/02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002
MW-5	05/13/02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002
NMOC Standard		0.01	0.75	0.75	0.62	NA	NA	NA	NA
ND = Not detected		NA = Not applicable		NS = Not sampled					

TABLE 3

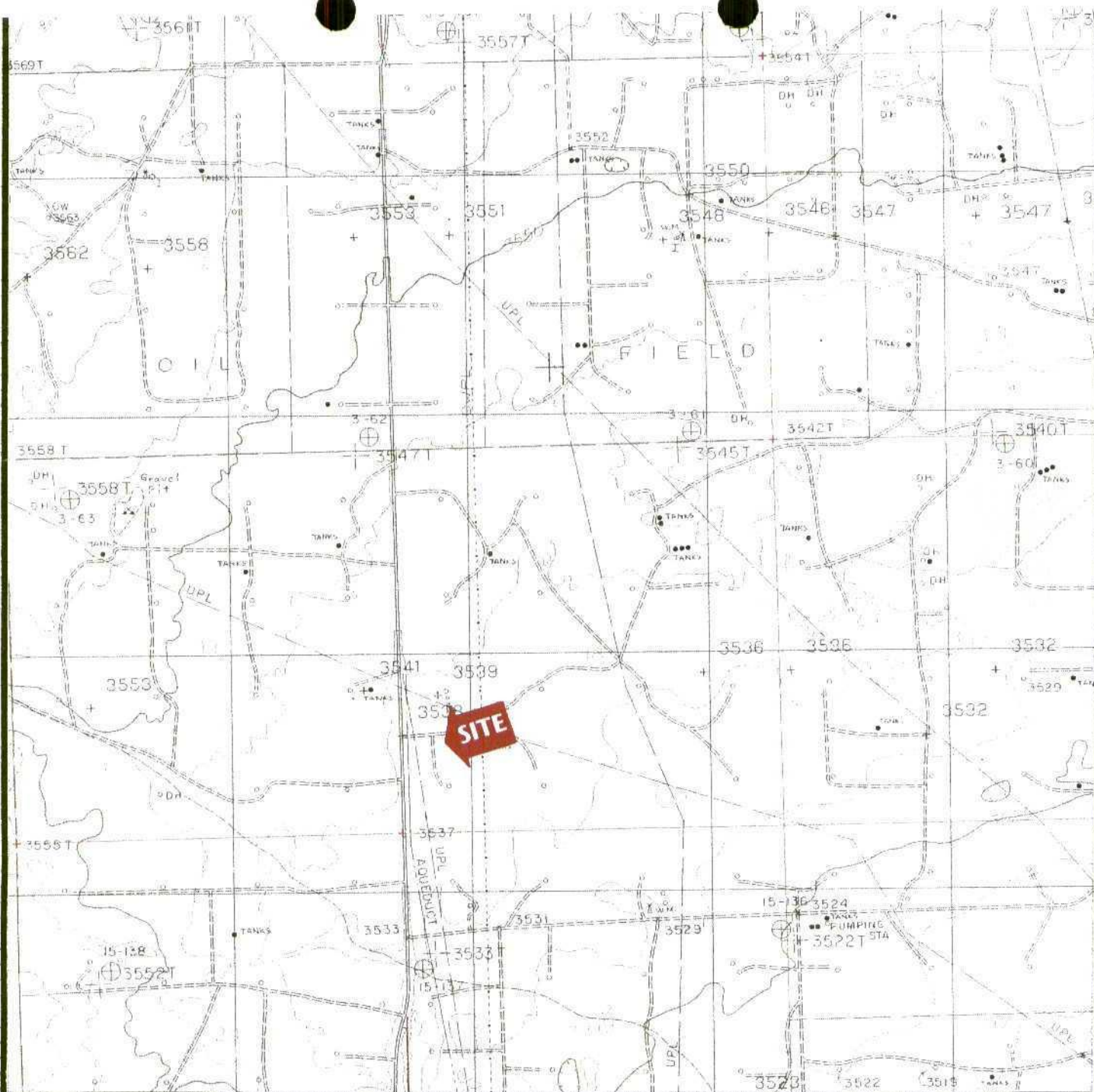
RELATIVE GROUNDWATER ELEVATIONS
EQUILON JOHN HENDRIX
MONUMENT, LEA COUNTY, NEW MEXICO

Monitor Well	Date Gauged	Relative Top of Casing Elevation (in feet)	Depth to PSH (in feet)	Depth to Water (in feet)	Corrected Groundwater Elevation (in feet)*	PSH Thickness (in feet)
MW-1	05/16/02	3,547.99		33.19	3,514.80	0.00
MW-2	05/16/02	3,546.85		32.32	3,514.53	0.00
MW-3	05/16/02	3,547.90		33.60	3,514.30	0.00
MW-4	05/16/02	3,547.97		33.57	3,514.40	0.00
MW-5	05/16/02	3,548.49		33.78	3,514.71	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.



**U.S.G.S. TOPOGRAPHIC MAP
MONUMENT SOUTH, NEW MEXICO
QUADRANGLE
DATED 1985**

EQ-110



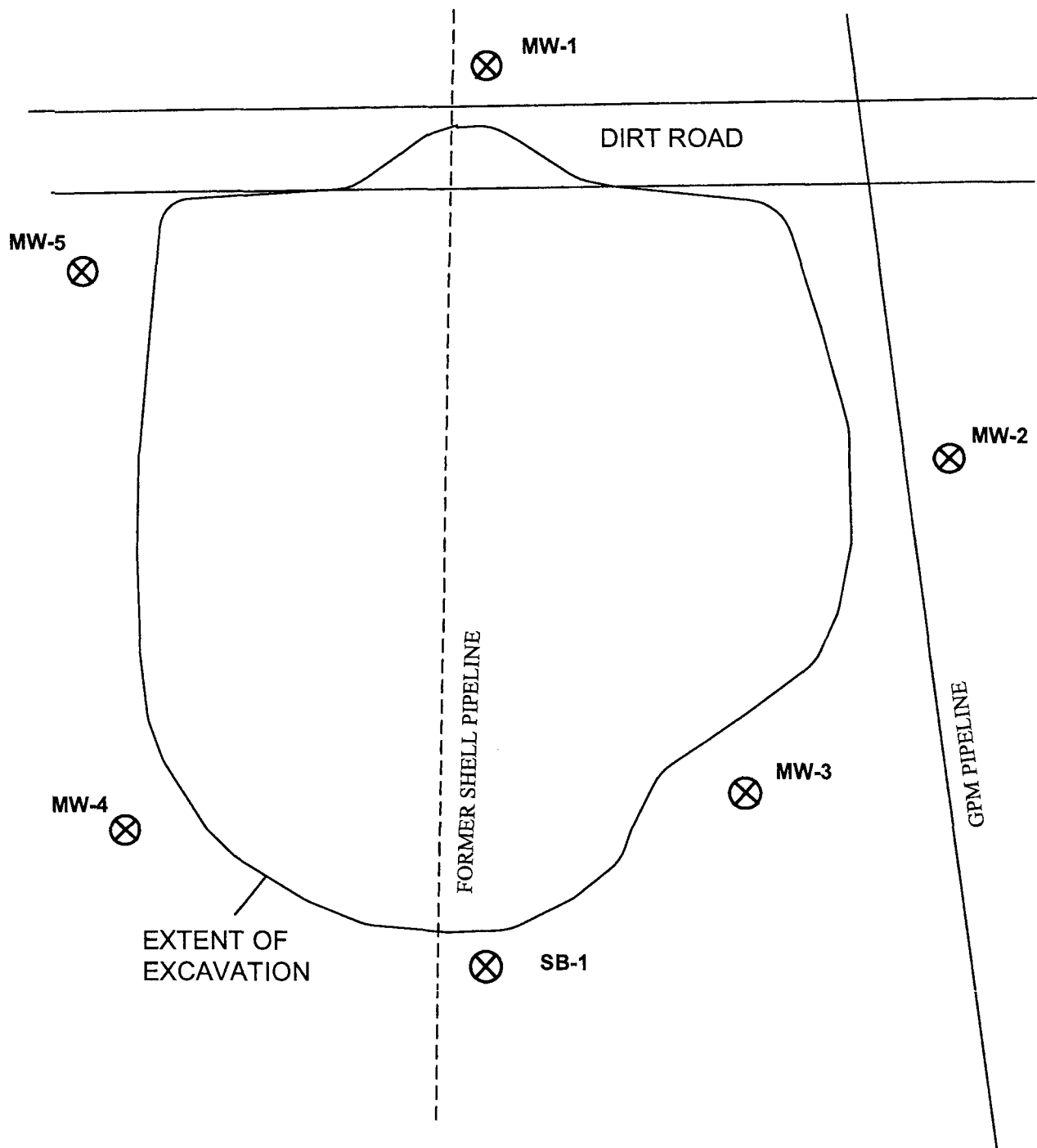
Figure 1

Scale: 1" = 1,000'

**JOHN HENDRIX EXCAVATION SITE
MONUMENT, LEA COUNTY
NEW MEXICO**



**ENERCON SERVICES, INC.
306 WEST WALL
SUITE 1312
MIDLAND, TX 79707
(915) 570-8726**

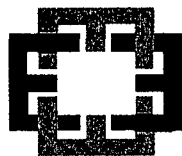


EQUIVA SERVICES, L.L.C.
EQ-110
Figure 2

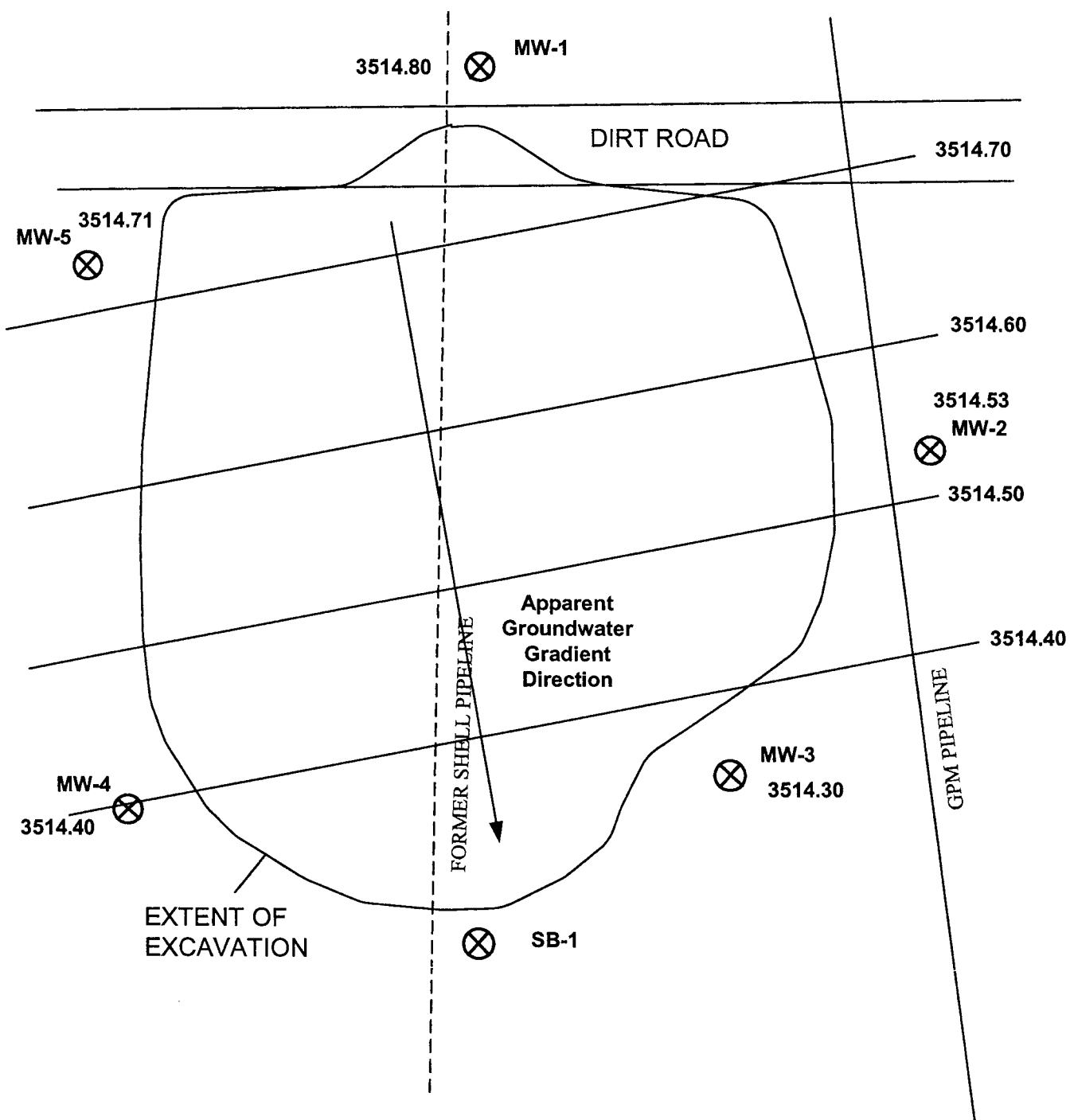


**Monitor Well and Soil Boring
Location Map**
SCALE: 1" = 50'

**JOHN HENDRIX SITE
MONUMENT
LEA COUNTY, NEW MEXICO**



ENERCON SERVICES, INC.
306 WEST WALL
SUITE 1312
MIDLAND, TX 79701
(915) 570-8726



EQUIVA SERVICES, L.L.C.
EQ-110
Figure 3



Groundwater Gradient Map

SCALE: 1" = 50'

JOHN HENDRIX SITE
MONUMENT
LEA COUNTY, NEW MEXICO



ENERCON SERVICES, INC.
306 WEST WALL
SUITE 1312
MIDLAND, TX 79701
(915) 570-8726

APPENDIX A
BORING LOGS

ENERCON SERVICES, INC. 306 West Wall, Suite 1312 Midland, Texas 79701		RECORD OF SUBSURFACE EXPLORATION			
Project #: EQ-110		Well/Boring #: MW-1		Date Drilled: 5/9/2002	
Project:	John Hendrix Lease	Drilling Eades Drilling		Drilling Air Rotary	
	Monument	Company:		Method:	
	Lea County, NM	Driller: Alan Eades		Logged By: JWK	
DEPTH (FEET)	SOIL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	OVA (PPM)	REMARKS
0.0					
5.0	Tan fine grain sand		SS	0	No hydrocarbon odor or staining
10.0			SS	12	Slight hydrocarbon odor with no staining
15.0	Tan fine grain calcareous sand		SS	2	No hydrocarbon odor or staining
	Tan/buff fine grain sandy limestone				
20.0			SS	0	No hydrocarbon odor or staining
25.0	Buff/tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining
30.0			SS	0	No hydrocarbon odor or staining
35.0	Tan fine grain sand				Groundwater encountered at 33 feet
40.0	Boring terminated at 43 feet and converted to a monitor well				

ABBREVIATIONS AND SYMBOLS

SS - Driven Split Spoon
 ST - Pressed Shelby Tube
 CA - Continuous Flight Auger
 RC - Rock Core
 THD - Texas Highway Department Cone
 CT-5' - Continuous Sampler

HSA - Hollow Stem Auger
 CFA - Continuous Flight Augers
 DC - Driving Casing
 MD - Mud Drilling

ENERCON SERVICES, INC. 306 West Wall, Suite 1312 Midland, Texas 79701		RECORD OF SUBSURFACE EXPLORATION			
Project #: EQ-110		Well/Boring #: MW-2		Date Drilled: 5/13/2002	
Project:	John Hendrix Lease Monument Lea County, NM	Drilling Company: Eades Drilling Driller: Alan Eades		Drilling Method: Air Rotary Logged By: JWK	
DEPTH (FEET)	SOIL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	OVA (PPM)	REMARKS
0.0	Backfill of fine grain clayee sand				
5.0	Buff fine grain sandy limestone		SS	0	No hydrocarbon odor or staining
10.0	Tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining
15.0	Buff fine grain sandy limestone	MW-2 (13-15')	SS	0	No hydrocarbon odor or staining
20.0			SS	0	No hydrocarbon odor or staining
25.0	Tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining
30.0		MW-2 (29-31')	SS	0	No hydrocarbon odor or staining
35.0					Groundwater encountered at 31 feet
40.0	Boring terminated at 40 feet and converted to a monitor well				

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ENERCON SERVICES, INC. 306 West Wall, Suite 1312 Midland, Texas 79701		RECORD OF SUBSURFACE EXPLORATION			
Project #: EQ-110		Well/Boring #: MW-3		Date Drilled: 5/13/2002	
Project:	John Hendrix Lease	Drilling Eades Drilling		Drilling Air Rotary	
	Monument	Company:		Method:	
	Lea County, NM	Driller: Alan Eades		Logged By: JWK	
DEPTH (FEET)	SOIL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	OVA (PPM)	REMARKS
0.0	Backfill of brown fine grained calcareous sand				
5.0	Tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining
10.0	Buff fine grain sandy limestone		SS	0	No hydrocarbon odor or staining
15.0		MW-3 (13-15')	SS	0	No hydrocarbon odor or staining
20.0			SS	0	No hydrocarbon odor or staining
25.0	Tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining
30.0		MW-3 (29-31')	SS	190	No hydrocarbon odor or staining
35.0					Groundwater encountered at 31 feet
40.0	Boring terminated at 40 feet and converted to a monitor well				

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 DC - Driving Casing
 MD - Mud Drilling

ENERCON SERVICES, INC. 306 West Wall, Suite 1312 Midland, Texas 79701		RECORD OF SUBSURFACE EXPLORATION				
Project #: EQ-110		Well/Boring #: MW-4		Date Drilled: 5/10/2002		
Project:	John Hendrix Lease	Drilling Eades Drilling		Drilling Air Rotary		
	Monument	Company:		Method:		
	Lea County, NM	Driller: Alan Eades		Logged By: JWK		
DEPTH (FEET)	SOIL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	OVA (PPM)	REMARKS	
0.0	Tan fine grain well sorted sand		SS	0	No hydrocarbon odor or staining	0.0
5.0						5.0
10.0						10.0
15.0	Tan/Buf fine grain sandy limestone	MW-4 (13-15')	SS	0	No hydrocarbon odor or staining	15.0
20.0	Buff/tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining	20.0
25.0						25.0
30.0						30.0
		MW-4 (30-32')	SS	0	No hydrocarbon odor or staining	30.0
					Groundwater encountered at 32 feet	
35.0						35.0
40.0	Boring terminated at 43 feet and converted to a monitor well					40.0

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 DC - Driving Casing
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ENERCON SERVICES, INC. 306 West Wall, Suite 1312 Midland, Texas 79701		RECORD OF SUBSURFACE EXPLORATION			
Project #: EQ-110		Well/Boring #: MW-5		Date Drilled: 5/10/2002	
Project:	John Hendrix Lease	Drilling Eades Drilling		Drilling Air Rotary	
	Monument	Company:		Method:	
	Lea County, NM	Driller: Alan Eades		Logged By: JWK	
DEPTH (FEET)	SOIL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	OVA (PPM)	REMARKS
0.0	Backfill of brown sand				
5.0			SS	0	No hydrocarbon odor or staining
10.0	Tan fine grain sand		SS	0	No hydrocarbon odor or staining
15.0	Tan/Buf fine grain sandy limestone	MW-5 (13-15')	SS	0	No hydrocarbon odor or staining
20.0	Buf/tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining
25.0			SS	0	No hydrocarbon odor or staining
30.0		MW-5 (29-31')	SS	0	No hydrocarbon odor or staining
35.0					Groundwater encountered at 31 feet
40.0	Boring terminated at 42 feet and converted to a monitor well				

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 CFA - Continuous Flight Augers
 DC - Driving Casing
 MD - Mud Drilling

ENERCON SERVICES, INC. 306 West Wall, Suite 1312 Midland, Texas 79701		RECORD OF SUBSURFACE EXPLORATION			
Project #: EQ-110		Well/Boring #: SB-1		Date Drilled: 5/14/2002	
Project:	John Hendrix Lease Monument Lea County, NM	Drilling Company: Eades Drilling Driller: Alan Eades		Drilling Method: Air Rotary Logged By: JWK	
DEPTH (FEET)	SOIL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	OVA (PPM)	REMARKS
0.0	Tan fine grain well sorted sand		SS	0	No hydrocarbon odor or staining
5.0			SS	0	No hydrocarbon odor or staining
10.0			SS	0	No hydrocarbon odor or staining
15.0	Tan/Buf fine grain sandy limestone	SB-1 (15-17')	SS	0	No hydrocarbon odor or staining
20.0	Buff/tan fine grain calcareous sand		SS	0	No hydrocarbon odor or staining
25.0			SS	0	No hydrocarbon odor or staining
30.0		SB-1 (30-32')	SS	0	No hydrocarbon odor or staining
	Boring terminated at 32 feet				Groundwater encountered at 32 feet
35.0					
40.0					

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APPENDIX B

MONITOR WELL COMPLETION

MONITOR WELL MW-1

DATE STARTED: 05/09/02

DATE COMPLETED: 05/09/02

INSTALLED BY: Eades Drilling

MONUMENT
COMPLETION
3' STICK-UP

LOCKING COVER

CONCRETE PAD

GROUT

BENTONITE SEAL

SAND PACK

DEPTH IN FEET BELOW LAND SURFACE

Surface TOP OF GROUT

3.0' TOP OF BENTONITE SEAL

26.0' TOP OF SAND PACK

28.0' TOP OF SCREEN

STATIC GROUNDWATER DEPTH:
33 feet

43.0' BOTTOM OF SCREEN

43.0' TOTAL DEPTH

CASING TYPE: 4" SCH. 40 PVC

SCREEN TYPE: SCH. 40 PVC 0.020 SLOT

GRAVEL PACK: 08/16 VOLUME SILICA SAND

ENERCON SERVICES CORPORATION

Monitor Well Installation Diagram

EQUIVA SERVICES INC.
JOHN HENDRIX LEASE
MONUMENT, LEA COUNTY NEW MEXICO

MONITOR WELL MW-2

DATE STARTED: 05/13/02

DATE COMPLETED: 05/13/02

INSTALLED BY: Eades Drilling

MONUMENT
COMPLETION
3' STICK-UP

LOCKING COVER

CONCRETE PAD

GROUT

BENTONITE SEAL

SAND PACK

DEPTH IN FEET BELOW LAND SURFACE

Surface TOP OF GROUT

3.0' TOP OF BENTONITE SEAL

23.0' TOP OF SAND PACK

25.0' TOP OF SCREEN

**STATIC GROUNDWATER DEPTH:
31 feet**

40.0' BOTTOM OF SCREEN

40.0' TOTAL DEPTH

CASING TYPE: 4" SCH. 40 PVC

SCREEN TYPE: SCH. 40 PVC 0.020 SLOT

GRAVEL PACK: 08/16 VOLUME SILICA SAND

ENERCON SERVICES CORPORATION

Monitor Well Installation Diagram

**EQUIVA SERVICES INC.
JOHN HENDRIX LEASE
MONUMENT, LEA COUNTY NEW MEXICO**

MONITOR WELL MW-3

DATE STARTED: 05/13/02

DATE COMPLETED: 05/13/02

INSTALLED BY: Eades Drilling

MONUMENT
COMPLETION
3' STICK-UP

LOCKING COVER

CONCRETE PAD

GROUT

BENTONITE SEAL

SAND PACK

DEPTH IN FEET BELOW LAND SURFACE

Surface TOP OF GROUT

3.0' TOP OF BENTONITE SEAL

23.0' TOP OF SAND PACK

25.0' TOP OF SCREEN

**STATIC GROUNDWATER DEPTH:
31 feet**

40.0' BOTTOM OF SCREEN

40.0' TOTAL DEPTH

CASING TYPE: 4" SCH. 40 PVC

SCREEN TYPE: SCH. 40 PVC 0.020 SLOT

GRAVEL PACK: 08/16 VOLUME SILICA SAND

ENERCON SERVICES CORPORATION

Monitor Well Installation Diagram

**EQUIVA SERVICES INC.
JOHN HENDRIX LEASE
MONUMENT, LEA COUNTY NEW MEXICO**

MONITOR WELL MW-4

DATE STARTED: 05/10/02

DATE COMPLETED: 05/10/02

INSTALLED BY: Eades Drilling

MONUMENT
COMPLETION
3' STICK-UP

LOCKING COVER

CONCRETE PAD

GROUT

BENTONITE SEAL

SAND PACK

DEPTH IN FEET BELOW LAND SURFACE

Surface TOP OF GROUT

3.0' TOP OF BENTONITE SEAL

26.0' TOP OF SAND PACK

28.0' TOP OF SCREEN

**STATIC GROUNDWATER DEPTH:
32 feet**

43.0' BOTTOM OF SCREEN

43.0' TOTAL DEPTH

CASING TYPE: 4" SCH. 40 PVC

SCREEN TYPE: SCH. 40 PVC 0.020 SLOT

GRAVEL PACK: 08/16 VOLUME SILICA SAND

ENERCON SERVICES CORPORATION

Monitor Well Installation Diagram

**EQUIVA SERVICES INC.
JOHN HENDRIX LEASE
MONUMENT, LEA COUNTY NEW MEXICO**

MONITOR WELL MW-5

DATE STARTED: 05/10/02

DATE COMPLETED: 05/10/02

INSTALLED BY: Eades Drilling

MONUMENT
COMPLETION
3' STICK-UP

LOCKING COVER

CONCRETE PAD

GROUT

BENTONITE SEAL

SAND PACK

DEPTH IN FEET BELOW LAND SURFACE

Surface TOP OF GROUT

3.0' TOP OF BENTONITE SEAL

25.0' TOP OF SAND PACK

27.0' TOP OF SCREEN

**STATIC GROUNDWATER DEPTH:
31 feet**

42.0' BOTTOM OF SCREEN

42.0' TOTAL DEPTH

CASING TYPE: 4" SCH. 40 PVC

SCREEN TYPE: SCH. 40 PVC 0.020 SLOT

GRAVEL PACK: 08/16 VOLUME SILICA SAND

ENERCON SERVICES CORPORATION

Monitor Well Installation Diagram

**EQUIVA SERVICES INC.
JOHN HENDRIX LEASE
MONUMENT, LEA COUNTY NEW MEXICO**

APPENDIX C
SITE PHOTOGRAPHS

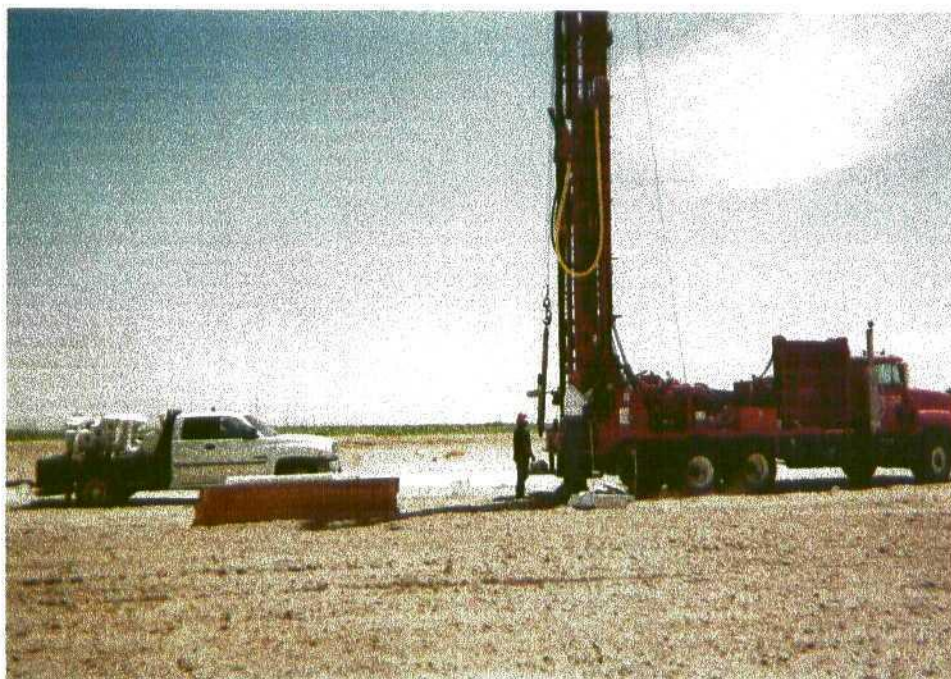


Photo 1: Drilling of monitor well MW-1.

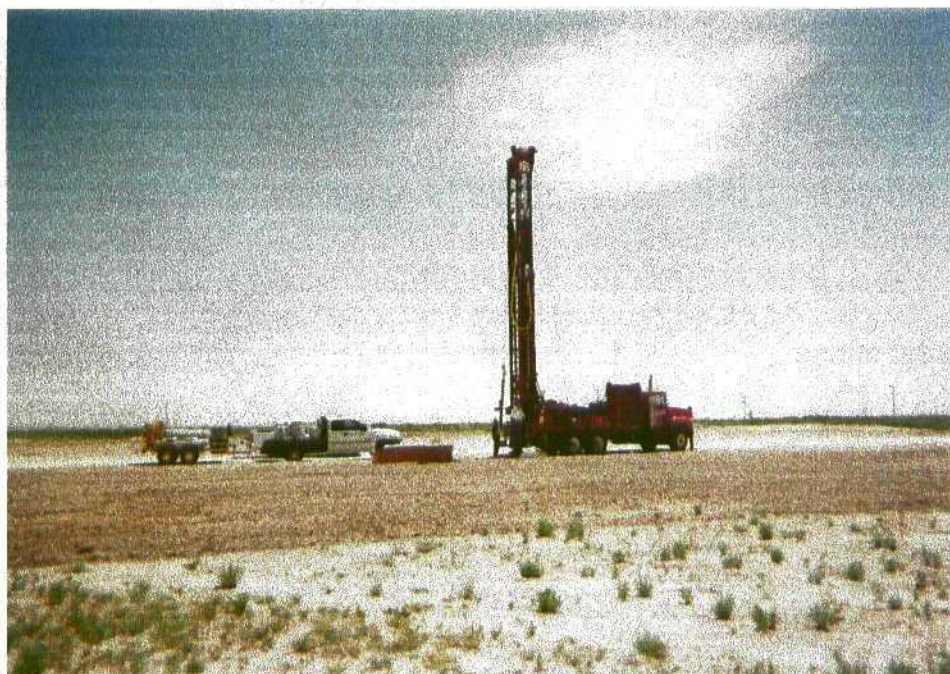


Photo 2: Drilling monitor well MW-1.



Photo 3: Installation of pipe for monitor well MW-1.



Photo 4: Completed monitor well MW-1.



Photo 5: Moving the drill rig from monitor well site to another.



Photo 6: Drilling of monitor well MW-2.

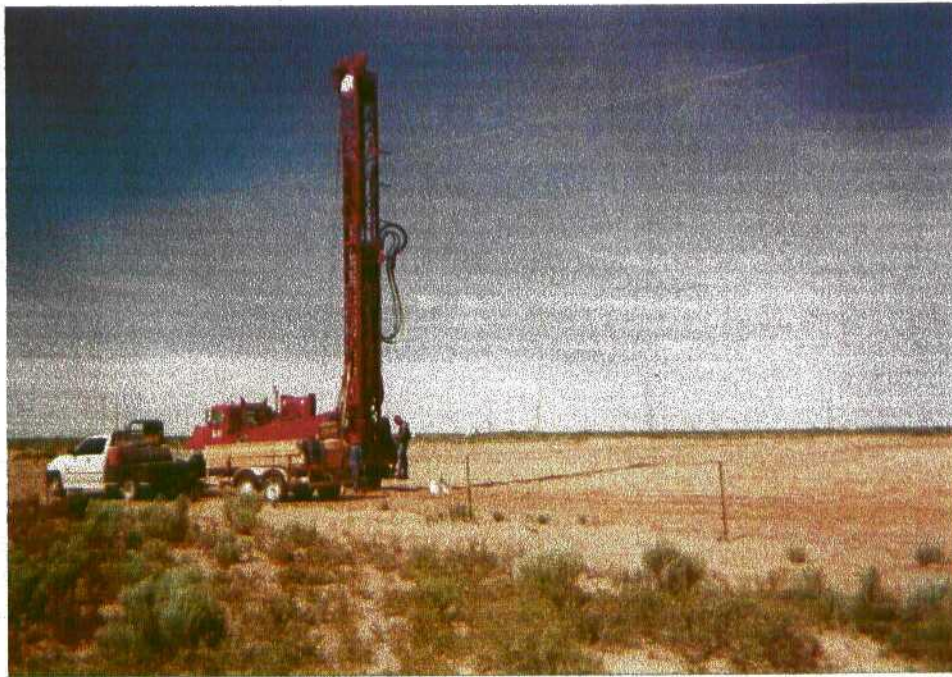


Photo 7: Drilling of monitor well MW-2.



Photo 8: Installed piping for monitor well MW-2.



Photo 9: Completed monitor well MW-2.

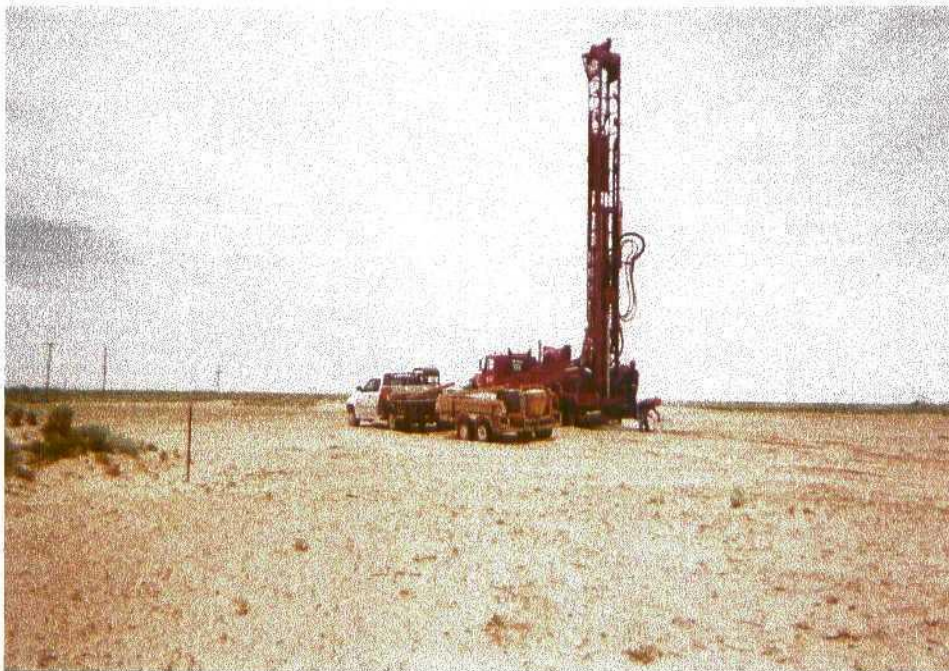


Photo 10: Drilling of monitor well MW-3.



Photo 11: Drilling of monitor well MW-3.



Photo 12: Completed monitor well MW-3.

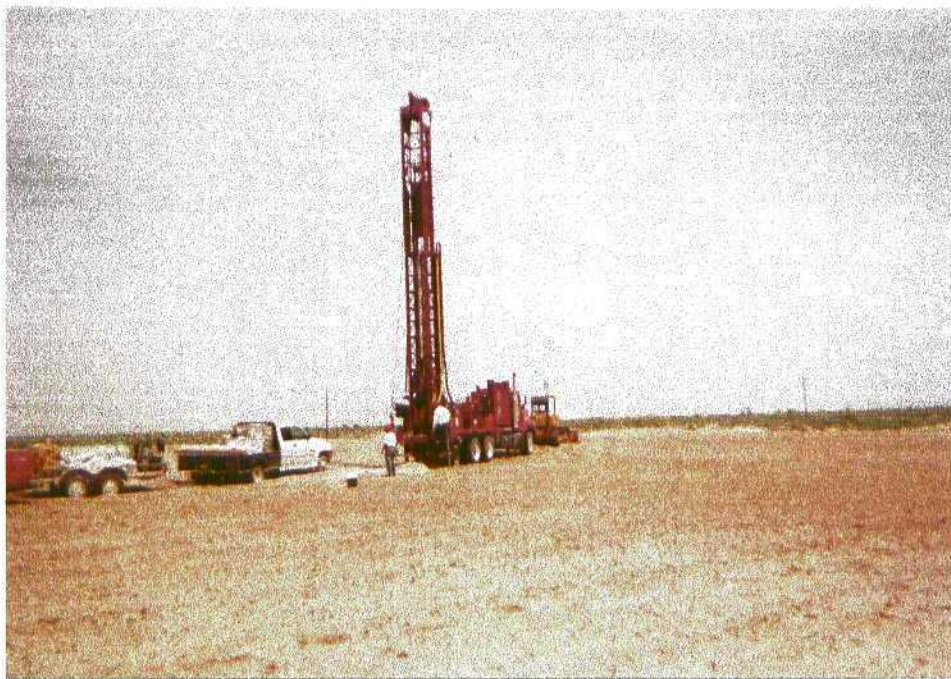


Photo 13: Drilling of monitor well MW-4.

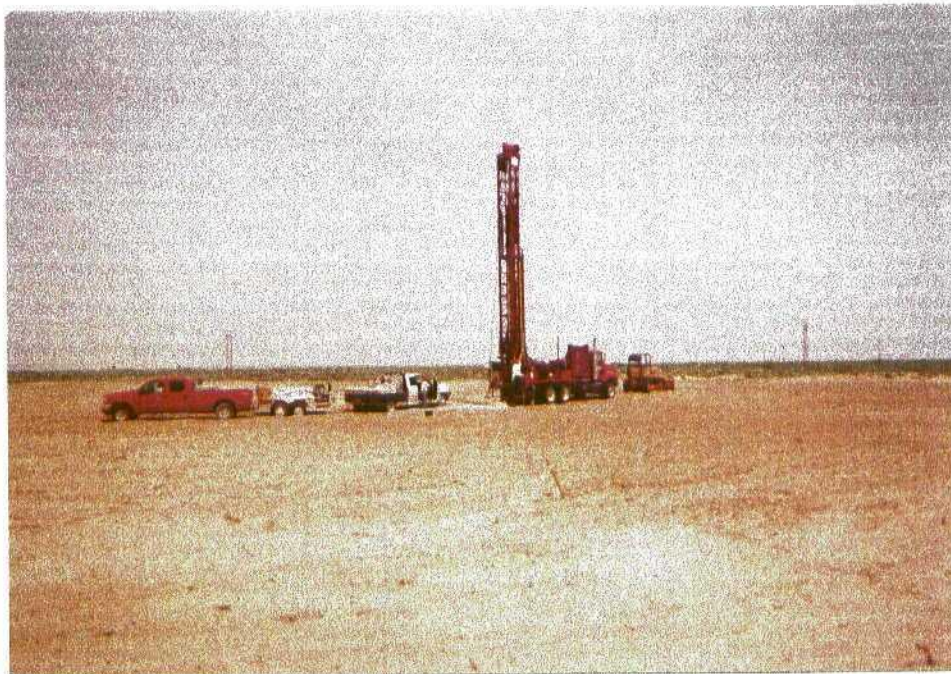


Photo 14: Drilling of monitor well MW-4.



Photo 15: Installing piping for monitor well MW-4.

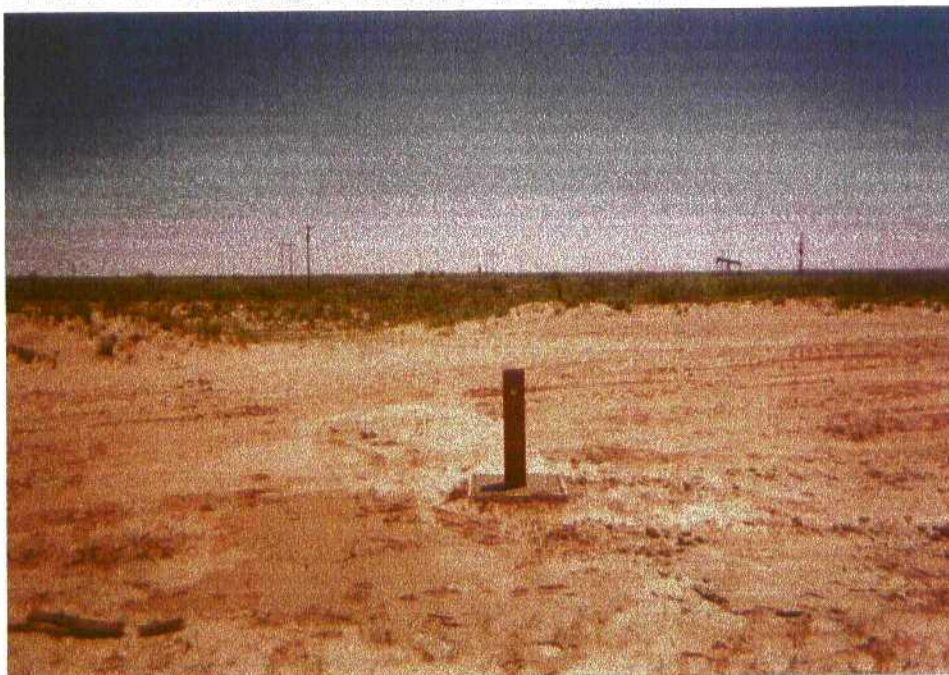


Photo 16: Completed monitor well MW-4.

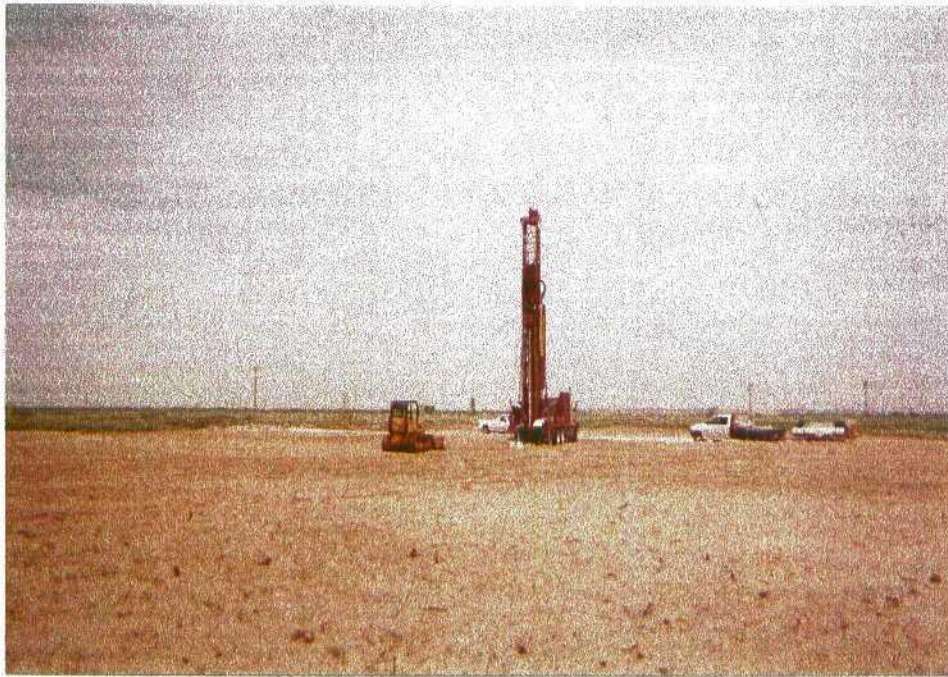


Photo 17: Drilling of monitor well MW-5.



Photo 18: Drilling of monitor well MW-5.



Photo 19: Completed monitor well MW-5.

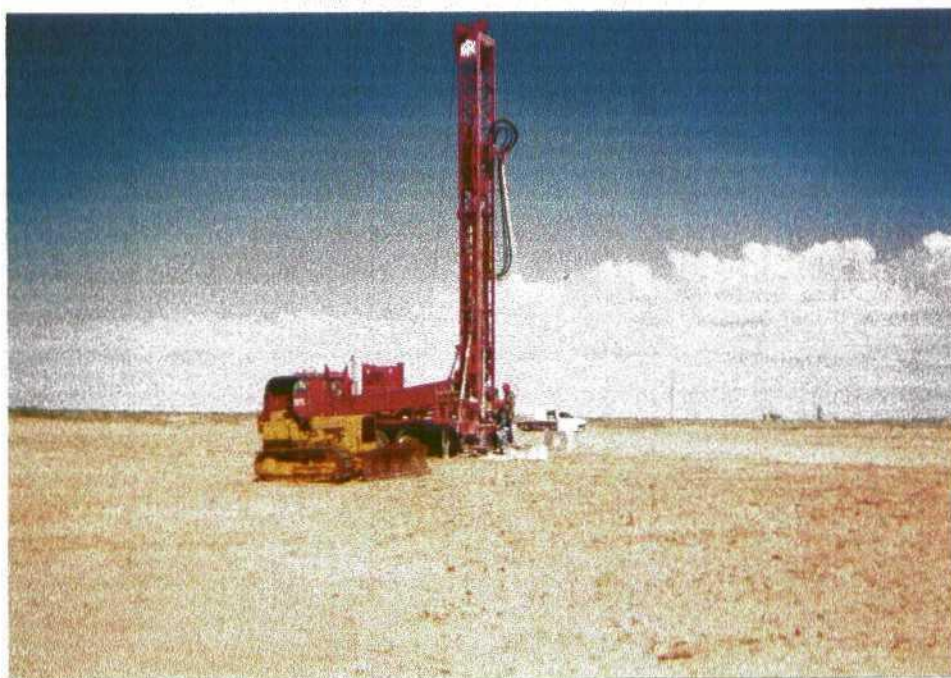


Photo 20: Drilling of soil boring SB-1.



Photo 21: Drilling of soil boring SB-1.



Photo 22: Drilling of soil boring SB-1.



Photo 23: Completed soil boring SB-1.

APPENDIX D
LABORATORY ANALYTICAL

Report Date: May 17, 2002 Order Number: A02051411
EQ-110 300110Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: May 17, 2002

Order ID Number: A02051411

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
196983	MW-1 (8-10')	Soil	5/9/02	14:19	5/14/02
196984	MW-1 (31-33')	Soil	5/9/02	15:25	5/14/02
196985	MW-5 (13-15')	Soil	5/10/02	10:10	5/14/02
196986	MW-5 (29-31')	Soil	5/10/02	11:00	5/14/02
196987	MW-4 (13-15')	Soil	5/10/02	13:29	5/14/02
196988	MW-4 (30-32')	Soil	5/10/02	13:59	5/14/02

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	BTEX					TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
196983 - MW-1 (8-10')	<0.010	<0.010	<0.010	<0.010	<0.010	1470	28
196984 - MW-1 (31-33')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
196985 - MW-5 (13-15')	<0.020	<0.020	<0.020	<0.020	<0.020	<50.0	<2.00 ¹
196986 - MW-5 (29-31')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
196987 - MW-4 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
196988 - MW-4 (30-32')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00

¹Sample diluted due to lack of sample extract.

TRACE ANALYSIS, 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 17, 2002

Order ID Number: A02051411

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
196983	MW-1 (8-10')	Soil	5/9/02	14:19	5/14/02
196984	MW-1 (31-33')	Soil	5/9/02	15:25	5/14/02
196985	MW-5 (13-15')	Soil	5/10/02	10:10	5/14/02
196986	MW-5 (29-31')	Soil	5/10/02	11:00	5/14/02
196987	MW-4 (13-15')	Soil	5/10/02	13:29	5/14/02
196988	MW-4 (30-32')	Soil	5/10/02	13:59	5/14/02

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 13 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.


Dr. Blair Lefkovich, Director

Analytical Report

Sample: 196983 - MW-1 (8-10')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20308 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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		0.848	mg/Kg	10	1	85	70 - 130
4-BFB		0.730	mg/Kg	10	1	73	70 - 130

Sample: 196983 - MW-1 (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		1470	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		191	mg/Kg	1	150	127	70 - 130

Sample: 196983 - MW-1 (8-10')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20310 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
GRO		28	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	10	0.10	111	70 - 130
4-BFB		1.05	mg/Kg	10	0.10	105	70 - 130

Sample: 196984 - MW-1 (31-33')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20308 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

Report Date: May 17, 2002
EQ-110

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300110

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Monument, New Mexico

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	¹	0.589	mg/Kg	10	1	58	70 - 130

Sample: 196984 - MW-1 (31-33')

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		113	mg/Kg	1	150	75	70 - 130

Sample: 196984 - MW-1 (31-33')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20310 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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		0.923	mg/Kg	10	0.10	92	70 - 130
4-BFB		0.750	mg/Kg	10	0.10	75	70 - 130

Sample: 196985 - MW-5 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20308 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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

Continued ...

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

... Continued Sample: 196985 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
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		0.761	mg/Kg	20	1	76	70 - 130
4-BFB	3	0.679	mg/Kg	20	1	67	70 - 130

Sample: 196985 - MW-5 (13-15')

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		125	mg/Kg	1	150	83	70 - 130

Sample: 196985 - MW-5 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20310 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
GRO	4	<2.00	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.923	mg/Kg	20	0.10	92	70 - 130
4-BFB		0.906	mg/Kg	20	0.10	91	70 - 130

Sample: 196986 - MW-5 (29-31')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20308 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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

²Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0047 which is the MDL.

³Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

⁴Sample diluted due to lack of sample extract.

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.797	mg/Kg	10	1	80	70 - 130
4-BFB		0.722	mg/Kg	10	1	72	70 - 130

Sample: 196986 - MW-5 (29-31')

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		131	mg/Kg	1	150	87	70 - 130

Sample: 196986 - MW-5 (29-31')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20310 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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		0.829	mg/Kg	10	0.10	83	70 - 130

Sample: 196987 - MW-4 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20308 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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		0.753	mg/Kg	10	1	75	70 - 130
4-BFB	5	0.682	mg/Kg	10	1	68	70 - 130

⁵Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

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Sample: 196987 - MW-4 (13-15')

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		126	mg/Kg	1	150	84	70 - 130

Sample: 196987 - MW-4 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20310 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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		0.788	mg/Kg	10	0.10	79	70 - 130

Sample: 196988 - MW-4 (30-32')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20308 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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		0.838	mg/Kg	10	1	84	70 - 130
4-BFB		0.768	mg/Kg	10	1	77	70 - 130

Sample: 196988 - MW-4 (30-32')

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

Report Date: May 17, 2002
EQ-110

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300110

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Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	87	70 - 130

Sample: 196988 - MW-4 (30-32')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20310 Date Analyzed: 5/14/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19421 Date Prepared: 5/14/02

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		1.09	mg/Kg	10	0.10	109	70 - 130
4-BFB		0.874	mg/Kg	10	0.10	87	70 - 130

Quality Control Report Method Blank

Method Blank QCBatch: QC20308

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		0.984	mg/Kg	10	1	98	70 - 130
4-BFB		0.838	mg/Kg	10	1	84	70 - 130

Method Blank QCBatch: QC20310

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.996	mg/Kg	10	0.10	100	70 - 130
4-BFB		1.02	mg/Kg	10	0.10	102	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

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

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC20308

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.994	0.971	mg/Kg	10	1	<0.010	99	2	70 - 130	20
Benzene	0.990	.992	mg/Kg	10	1	<0.010	99	0	70 - 130	20
Toluene	0.904	0.986	mg/Kg	10	1	<0.010	90	8	70 - 130	20
Ethylbenzene	0.915	0.999	mg/Kg	10	1	<0.010	91	8	70 - 130	20
M,P,O-Xylene	2.95	3.15	mg/Kg	10	3	<0.010	98	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	0.961	0.983	mg/Kg	10	1	96	98	70 - 130
4-BFB	0.878	0.963	mg/Kg	10	1	87	96	70 - 130

Laboratory Control Spikes QCBatch: QC20310

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.03	9.01	mg/Kg	10	1	<1	90	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	0.905	0.925	mg/Kg	10	0.10	90	92	70 - 130
4-BFB	1.02	1.1	mg/Kg	10	0.10	102	110	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.

Continued ...

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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	132	144	mg/Kg	1	150	88	96	70 - 130

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

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20308

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.827	0.878	mg/Kg	10	1	0.0145	81	6	70 - 130	20
Toluene	0.821	0.901	mg/Kg	10	1	0.0258	79	9	70 - 130	20
Ethylbenzene	0.841	0.915	mg/Kg	10	1	0.0191	82	8	70 - 130	20
M,P,O-Xylene	2.86	2.8	mg/Kg	10	3	0.0173	94	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	0.873	0.885	mg/Kg	10	1	87	88	70 - 130
4-BFB	0.777	0.835	mg/Kg	10	1	77	83	70 - 130

Matrix Spikes

QCBatch: QC20310

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.89	10.4	mg/Kg	10	1	<1.00	99	5	80 - 120	20

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

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Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.942	0.976	mg/Kg	10	0.10	94	98	70 - 130
4-BFB	0.96	0.993	mg/Kg	10	0.10	96	99	70 - 130

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

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

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC20308

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	5/14/02
Benzene		mg/L	0.10	0.0948	95	85 - 115	5/14/02
Toluene		mg/L	0.10	0.0968	97	85 - 115	5/14/02
Ethylbenzene		mg/L	0.10	0.0966	97	85 - 115	5/14/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/14/02

CCV (2) QCBatch: QC20308

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EQ-110

Order Number: A02051411
300110

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0966	96	85 - 115	5/14/02
Benzene		mg/L	0.10	0.0925	92	85 - 115	5/14/02
Toluene		mg/L	0.10	0.0889	88	85 - 115	5/14/02
Ethylbenzene		mg/L	0.10	0.089	89	85 - 115	5/14/02
M,P,O-Xylene		mg/L	0.30	0.305	101	85 - 115	5/14/02

ICV (1) QCBatch: QC20308

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.097	97	85 - 115	5/14/02
Benzene		mg/L	0.10	0.0997	100	85 - 115	5/14/02
Toluene		mg/L	0.10	0.0981	98	85 - 115	5/14/02
Ethylbenzene		mg/L	0.10	0.0988	99	85 - 115	5/14/02
M,P,O-Xylene		mg/L	0.30	0.316	105	85 - 115	5/14/02

CCV (1) QCBatch: QC20310

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.867	86	85 - 115	5/14/02

ICV (1) QCBatch: QC20310

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.93	93	85 - 115	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

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EQ-110

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300110

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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

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

Report Date: May 30, 2002 Order Number: A02051411
EQ-110 300110

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Monument, New Mexico

Summary Report

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

Report Date: May 30, 2002

Order ID Number: A02051411

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
196983	MW-1 (8-10')	Soil	5/9/02	14:19	5/14/02

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: 196983 - MW-1 (8-10')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.1	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: May 30, 2002

Order ID Number: A02051411

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

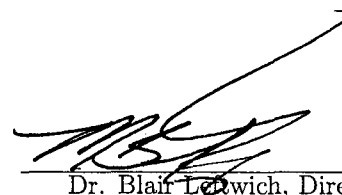
Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196983	MW-1 (8-10')	Soil	5/9/02	14:19	5/14/02

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 LeDewich, Director

Report Date: May 30, 2002
EQ-110

Order Number: A02051411
300110

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Monument, New Mexico

Analytical Report

Sample: 196983 - MW-1 (8-10')

Analysis: SPLP DRO Analytical Method: Mod. 8015B QC Batch: QC20399 Date Analyzed: 5/28/02
Analyst: MM Preparation Method: 1312 Prep Batch: PB19485 Date Prepared: 5/23/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 196983 - MW-1 (8-10')

Analysis: SPLP GRO Analytical Method: 8015 QC Batch: QC20429 Date Analyzed: 5/22/02
Analyst: DN Preparation Method: 1312 Prep Batch: PB19522 Date Prepared: 5/22/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.1	mg/L	1	0.10

Report Date: May 30, 2002
EQ-110

Order Number: A02051411
300110

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Monument, New Mexico

Quality Control Report Method Blank

Method Blank QCBatch: QC20399

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Method Blank QCBatch: QC20429

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: QC20399

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	28.2	28.6	mg/L	0.10	250	<5.00	113	1	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: QC20429

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	1.11	1.05	mg/L	1	1	<0.1	111	5	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: QC20399

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	280	112	75 - 125	5/28/02

Report Date: May 30, 2002
EQ-110

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300110

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Monument, New Mexico

ICV (1) QCBatch: QC20399

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	283	113	75 - 125	5/28/02

CCV (1) QCBatch: QC20429

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	1.03	103	85 - 115	5/22/02

ICV (1) QCBatch: QC20429

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	1	100	85 - 115	5/22/02

Report Date: May 30, 2002 Order Number: A02051504
EQ-110 300110

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Monument, New Mexico

Summary Report

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

Report Date: May 30, 2002

Order ID Number: A02051504

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
197041	MW-3 (28-30')	Soil	5/13/02	15:32	5/15/02

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Sample: 197041 - MW-3 (28-30')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		1.86	mg/L

Report Date: May 17, 2002 Order Number: A02051504
EQ-110 300110

Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: May 17, 2002

Order ID Number: A02051504

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
197038	MW-2 (13-15')	Soil	5/13/02	9:57	5/15/02
197039	MW-2 (28-30')	Soil	5/13/02	10:51	5/15/02
197040	MW-3 (13-15')	Soil	5/13/02	13:43	5/15/02
197041	MW-3 (28-30')	Soil	5/13/02	15:32	5/15/02

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Sample - Field Code	BTEX						TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	Test Comments (ppm)	DRO (ppm)	GRO (ppm)
197038 - MW-2 (13-15')	<0.020	<0.020	<0.020	<0.020	<0.020	* 1	<50.0	<2.00
197039 - MW-2 (28-30')	<0.010	0.0126	0.01	0.0203	0.0429	-	<50.0	7.41
197040 - MW-3 (13-15')	<0.020	<0.020	<0.020	<0.020	<0.020	* 2	<50.0	<2.00
197041 - MW-3 (28-30')	<0.020	<0.020	0.0705	0.15	0.220	* 3	100	52.3

¹ Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.00473 which is the MDL.

² Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.00473 which is the MDL.

³ Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration 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.

Report Date: May 21, 2002 Order Number: A02051504
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Monument, New Mexico

Summary 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
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

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

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Sample - Field Code	BTEx				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEx (ppm)
197042 - MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
197043 - MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
197044 - MW-3	<0.001	<0.001	<0.001	<0.001	<0.001
197045 - MW-5	<0.001	<0.001	<0.001	<0.001	<0.001

Sample: 197042 - 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

Continued on next page ...

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

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300110

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Monument, New Mexico*Sample 197042 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: 197043 - MW-2

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		0.00026	mg/L
Phenanthrene		0.00044	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: 197044 - 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

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

Report Date: May 21, 2002 Order Number: A02051504
EQ-110 300110

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Monument, New Mexico

Sample: 197045 - MW-5

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.

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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 30, 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
197041	MW-3 (28-30')	Soil	5/13/02	15:32	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 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

Report Date: May 30, 2002
EQ-110

Order Number: A02051504
300110

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Analytical Report

Sample: 197041 - MW-3 (28-30')

Analysis: SPLP DRO Analytical Method: Mod. 8015B QC Batch: QC20399 Date Analyzed: 5/28/02
Analyst: MM Preparation Method: 1312 Prep Batch: PB19485 Date Prepared: 5/23/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 197041 - MW-3 (28-30')

Analysis: SPLP GRO Analytical Method: Mod. 602 QC Batch: QC20484 Date Analyzed: 5/24/02
Analyst: CG Preparation Method: 1312 Prep Batch: PB19557 Date Prepared: 5/24/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		1.86	mg/L	5	0.10

Quality Control Report Method Blank

Method Blank QCBatch: QC20399

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Method Blank QCBatch: QC20484

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: QC20399

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	28.2	28.6	mg/L	0.10	250	<5.00	113	1	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: QC20484

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	1.13	1.15	mg/L	1	1	<0.1	113	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: QC20399

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	280	112	75 - 125	5/28/02

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ICV (1) QCBatch: QC20399

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	283	113	75 - 125	5/28/02

CCV (1) QCBatch: QC20484

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.955	95	85 - 115	5/24/02

ICV (1) QCBatch: QC20484

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.983	98	85 - 115	5/24/02

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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: May 17, 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

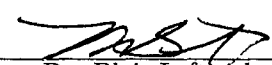
Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197038	MW-2 (13-15')	Soil	5/13/02	9:57	5/15/02
197039	MW-2 (28-30')	Soil	5/13/02	10:51	5/15/02
197040	MW-3 (13-15')	Soil	5/13/02	13:43	5/15/02
197041	MW-3 (28-30')	Soil	5/13/02	15:32	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.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 197038 - MW-2 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20324 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

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		0.797	mg/Kg	20	1	80	70 - 130
4-BFB		0.836	mg/Kg	20	1	84	70 - 130

Sample: 197038 - MW-2 (13-15')

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		133	mg/Kg	1	150	89	70 - 130

Sample: 197038 - MW-2 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20323 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

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		1.30	mg/Kg	20	0.10	130	70 - 130
4-BFB		0.935	mg/Kg	20	0.10	93	70 - 130

¹Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.00473 which is the MDL.

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Sample: 197039 - MW-2 (28-30')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20324 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.0126	mg/Kg	10	0.001
Ethylbenzene		0.01	mg/Kg	10	0.001
M,P,O-Xylene		0.0203	mg/Kg	10	0.001
Total BTEX		0.0429	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.737	mg/Kg	10	1	74	70 - 130
4-BFB		0.710	mg/Kg	10	1	71	70 - 130

Sample: 197039 - MW-2 (28-30')

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		127	mg/Kg	1	150	85	70 - 130

Sample: 197039 - MW-2 (28-30')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20323 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

Param	Flag	Result	Units	Dilution	RDL
GRO		7.41	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.899	mg/Kg	10	0.10	90	70 - 130
4-BFB		1.05	mg/Kg	10	0.10	105	70 - 130

Sample: 197040 - MW-3 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20324 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001

Continued ...

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... Continued Sample: 197040 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
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		0.723	mg/Kg	20	1	72	70 - 130
4-BFB	3	0.694	mg/Kg	20	1	69	70 - 130

Sample: 197040 - MW-3 (13-15')

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		134	mg/Kg	1	150	89	70 - 130

Sample: 197040 - MW-3 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20323 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

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		0.944	mg/Kg	20	0.10	94	70 - 130
4-BFB		0.990	mg/Kg	20	0.10	99	70 - 130

Sample: 197041 - MW-3 (28-30')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20324 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001

Continued ...

²Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.00473 which is the MDL.

³Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

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... Continued Sample: 197041 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		0.0705	mg/Kg	20	0.001
M,P,O-Xylene		0.15	mg/Kg	20	0.001
Total BTEX		0.220	mg/Kg	20	0.001
Test Comments	4	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.783	mg/Kg	20	1	78	70 - 130
4-BFB	5	1.33	mg/Kg	20	1	133	70 - 130

Sample: 197041 - MW-3 (28-30')

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		100	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: 197041 - MW-3 (28-30')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20323 Date Analyzed: 5/15/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19434 Date Prepared: 5/15/02

Param	Flag	Result	Units	Dilution	RDL
GRO		52.3	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.967	mg/Kg	20	0.10	97	70 - 130
4-BFB	6	3.49	mg/Kg	20	0.10	349	70 - 130

⁴Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.00473 which is the MDL.

⁵High surrogate recovery due to peak interference.

⁶High surrogate recovery due to peak interference.

Quality Control Report Method Blank

Method Blank QCBatch: QC20323

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		1.02	mg/Kg	10	0.10	102	70 - 130

Method Blank QCBatch: QC20324

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		0.974	mg/Kg	10	1	97	70 - 130
4-BFB		0.824	mg/Kg	10	1	82	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: QC20323

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.65	9.1	mg/Kg	10	1	<1	86	5	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	0.889	0.932	mg/Kg	10	0.10	89	932	70 - 130
4-BFB	1.06	1.04	mg/Kg	10	0.10	106	104	70 - 130

Laboratory Control Spikes

QCBatch: QC20324

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.955	1	mg/Kg	10	1	<0.010	95	4	70 - 130	20
Benzene	0.980	0.982	mg/Kg	1	1	<0.010	98	2	70 - 130	20
Toluene	0.913	0.937	mg/Kg	10	1	<0.010	91	2	70 - 130	20
Ethylbenzene	0.963	0.913	mg/Kg	1	1	<0.010	96	5	70 - 130	20
M,P,O-Xylene	3.12	3.05	mg/Kg	1	3	<0.010	104	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	0.998	0.994	mg/Kg	10	1	99	99	70 - 130
4-BFB	0.876	0.958	mg/Kg	1	1	87	95	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: QC20323

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	⁷ 47.7	⁸ 76.4	mg/Kg	10	1	7.41	48	52	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	0.849	⁹ 0.659	mg/Kg	10	0.10	85	66	70 - 130
4-BFB	¹⁰ 2.46	¹¹ 3.76	mg/Kg	10	0.10	82	125	70 - 130

Matrix Spikes QCBatch: QC20324

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.714	0.816	mg/Kg	10	1	<0.010	71	13	70 - 130	20
Toluene	0.721	0.872	mg/Kg	10	1	0.0126	70	19	70 - 130	20
Ethylbenzene	0.703	0.796	mg/Kg	10	1	0.01	69	12	70 - 130	20
M,P,O-Xylene	2.25	2.62	mg/Kg	10	3	0.0203	74	15	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	0.709	0.794	mg/Kg	10	1	70	79	70 - 130
4-BFB	0.75	0.855	mg/Kg	10	1	75	85	70 - 130

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

⁷High MS/MSD recovery due to GRO contents of sample spiked. LCS, LCSD show the method to be in control.

⁸High MS/MSD recovery due to GRO contents of sample spiked. LCS, LCSD show the method to be in control.

⁹Low MSD surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

¹⁰High MS/MSD recovery due to GRO contents of sample spiked. LCS, LCSD show the method to be in control.

¹¹High MS/MSD recovery due to GRO contents of sample spiked. LCS, LCSD show the method to be in control.

CCV (1) QCBatch: QC20323

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	5/15/02

ICV (1) QCBatch: QC20323

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	5/15/02

CCV (1) QCBatch: QC20324

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0957	83	85 - 115	5/15/02
Benzene		mg/L	0.10	0.0912	91	85 - 115	5/15/02
Toluene		mg/L	0.10	0.0905	90	85 - 115	5/15/02
Ethylbenzene		mg/L	0.10	0.0939	94	85 - 115	5/15/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/15/02

CCV (2) QCBatch: QC20324

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0963	96	85 - 115	5/15/02
Benzene		mg/L	0.10	0.0969	96	85 - 115	5/15/02
Toluene		mg/L	0.10	0.0954	95	85 - 115	5/15/02
Ethylbenzene		mg/L	0.10	0.0937	93	85 - 115	5/15/02
M,P,O-Xylene		mg/L	0.30	0.284	94	85 - 115	5/15/02

ICV (1) QCBatch: QC20324

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0935	81	85 - 115	5/15/02
Benzene		mg/L	0.10	0.098	98	85 - 115	5/15/02
Toluene		mg/L	0.10	0.0975	98	85 - 115	5/15/02
Ethylbenzene		mg/L	0.10	0.0971	97	85 - 115	5/15/02
M,P,O-Xylene		mg/L	0.30	0.310	103	85 - 115	5/15/02

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

Report Date: June 13, 2002 Order Number: A02051504
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Monument, New Mexico

Summary Report

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

Report Date: June 13, 2002

Order ID Number: A02051504

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
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-4	Water	5/13/02	15:35	5/15/02
197045	MW-5	Water	5/13/02	16:05	5/15/02

0 This report consists of a total of 3 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	BTEx				
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEx (ppm)
197042 - MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
197043 - MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
197044 - MW-4	<0.001	<0.001	<0.001	<0.001	<0.001
197045 - MW-5	<0.001	<0.001	<0.001	<0.001	<0.001

Sample: 197042 - MW-1

Param	Flag	Result	Units
Naphthalene		<0.00020	mg/L
Acenaphthylene		<0.00020	mg/L
Acenaphthene		<0.00020	mg/L
Fluorene		<0.00020	mg/L
Phenanthrene		<0.00020	mg/L
Anthracene		<0.00020	mg/L
Fluoranthene		<0.00020	mg/L
Pyrene		<0.00020	mg/L
Benzo(a)anthracene		<0.00020	mg/L
Chrysene		<0.00020	mg/L
Benzo(b)fluoranthene		<0.00020	mg/L
Benzo(k)fluoranthene		<0.00020	mg/L

Continued on next page ...

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

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Sample 197042 continued ...

Param	Flag	Result	Units
Benzo(a)pyrene		<0.00020	mg/L
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L
Dibenzo(a,h)anthracene		<0.00020	mg/L
Benzo(g,h,i)perylene		<0.00020	mg/L

Sample: 197043 - MW-2

Param	Flag	Result	Units
Naphthalene		<0.00020	mg/L
Acenaphthylene		<0.00020	mg/L
Acenaphthene		<0.00020	mg/L
Fluorene		0.00026	mg/L
Phenanthrene		0.00044	mg/L
Anthracene		<0.00020	mg/L
Fluoranthene		<0.00020	mg/L
Pyrene		<0.00020	mg/L
Benzo(a)anthracene		<0.00020	mg/L
Chrysene		<0.00020	mg/L
Benzo(b)fluoranthene		<0.00020	mg/L
Benzo(k)fluoranthene		<0.00020	mg/L
Benzo(a)pyrene		<0.00020	mg/L
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L
Dibenzo(a,h)anthracene		<0.00020	mg/L
Benzo(g,h,i)perylene		<0.00020	mg/L

Sample: 197044 - MW-4

Param	Flag	Result	Units
Naphthalene		<0.00020	mg/L
Acenaphthylene		<0.00020	mg/L
Acenaphthene		<0.00020	mg/L
Fluorene		<0.00020	mg/L
Phenanthrene		<0.00020	mg/L
Anthracene		<0.00020	mg/L
Fluoranthene		<0.00020	mg/L
Pyrene		<0.00020	mg/L
Benzo(a)anthracene		<0.00020	mg/L
Chrysene		<0.00020	mg/L
Benzo(b)fluoranthene		<0.00020	mg/L
Benzo(k)fluoranthene		<0.00020	mg/L
Benzo(a)pyrene		<0.00020	mg/L
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L
Dibenzo(a,h)anthracene		<0.00020	mg/L
Benzo(g,h,i)perylene		<0.00020	mg/L

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

Report Date: June 13, 2002 Order Number: A02051504
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Monument, New Mexico

Sample: 197045 - MW-5

Param	Flag	Result	Units
Naphthalene		<0.00020	mg/L
Acenaphthylene		<0.00020	mg/L
Acenaphthene		<0.00020	mg/L
Fluorene		<0.00020	mg/L
Phenanthrene		<0.00020	mg/L
Anthracene		<0.00020	mg/L
Fluoranthene		<0.00020	mg/L
Pyrene		<0.00020	mg/L
Benzo(a)anthracene		<0.00020	mg/L
Chrysene		<0.00020	mg/L
Benzo(b)fluoranthene		<0.00020	mg/L
Benzo(k)fluoranthene		<0.00020	mg/L
Benzo(a)pyrene		<0.00020	mg/L
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L
Dibenzo(a,h)anthracene		<0.00020	mg/L
Benzo(g,h,i)perylene		<0.00020	mg/L

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

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Analytical and Quality Control Report

Kyle Landreneau
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Report Date: June 13, 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-4	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: QC21024 Date Analyzed: 5/19/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB20024 Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.00020	mg/L	1	0.0002
Acenaphthylene		<0.00020	mg/L	1	0.0002
Acenaphthene		<0.00020	mg/L	1	0.0002
Fluorene		<0.00020	mg/L	1	0.0002
Phenanthrene		<0.00020	mg/L	1	0.0002
Anthracene		<0.00020	mg/L	1	0.0002
Fluoranthene		<0.00020	mg/L	1	0.0002
Pyrene		<0.00020	mg/L	1	0.0002
Benzo(a)anthracene		<0.00020	mg/L	1	0.0002
Chrysene		<0.00020	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(a)pyrene		<0.00020	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.00020	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.00020	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

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EQ-110

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Monument, New Mexico

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: QC21024 Date Analyzed: 5/19/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB20024 Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.00020	mg/L	1	0.0002
Acenaphthylene		<0.00020	mg/L	1	0.0002
Acenaphthene		<0.00020	mg/L	1	0.0002
Fluorene		0.00026	mg/L	1	0.0002
Phenanthrene		0.00044	mg/L	1	0.0002
Anthracene		<0.00020	mg/L	1	0.0002
Fluoranthene		<0.00020	mg/L	1	0.0002
Pyrene		<0.00020	mg/L	1	0.0002
Benzo(a)anthracene		<0.00020	mg/L	1	0.0002
Chrysene		<0.00020	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(a)pyrene		<0.00020	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.00020	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.00020	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-4

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

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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-4

Analysis: PAH Analytical Method: S 8270C QC Batch: QC21024 Date Analyzed: 5/19/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB20024 Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.00020	mg/L	1	0.0002
Acenaphthylene		<0.00020	mg/L	1	0.0002
Acenaphthene		<0.00020	mg/L	1	0.0002
Fluorene		<0.00020	mg/L	1	0.0002
Phenanthrene		<0.00020	mg/L	1	0.0002
Anthracene		<0.00020	mg/L	1	0.0002
Fluoranthene		<0.00020	mg/L	1	0.0002
Pyrene		<0.00020	mg/L	1	0.0002
Benzo(a)anthracene		<0.00020	mg/L	1	0.0002
Chrysene		<0.00020	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(a)pyrene		<0.00020	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.00020	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.00020	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 ...

Report Date: June 13, 2002
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... 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: QC21024	Date Analyzed: 5/19/02
Analyst: RC	Preparation Method: E 3510C	Prep Batch: PB20024	Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.00020	mg/L	1	0.0002
Acenaphthylene		<0.00020	mg/L	1	0.0002
Acenaphthene		<0.00020	mg/L	1	0.0002
Fluorene		<0.00020	mg/L	1	0.0002
Phenanthrene		<0.00020	mg/L	1	0.0002
Anthracene		<0.00020	mg/L	1	0.0002
Fluoranthene		<0.00020	mg/L	1	0.0002
Pyrene		<0.00020	mg/L	1	0.0002
Benzo(a)anthracene		<0.00020	mg/L	1	0.0002
Chrysene		<0.00020	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.00020	mg/L	1	0.0002
Benzo(a)pyrene		<0.00020	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.00020	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.00020	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: QC21024

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.00020	mg/L	0.0002
Acenaphthylene		<0.00020	mg/L	0.0002
Acenaphthene		<0.00020	mg/L	0.0002
Fluorene		<0.00020	mg/L	0.0002
Phenanthrene		<0.00020	mg/L	0.0002
Anthracene		<0.00020	mg/L	0.0002
Fluoranthene		<0.00020	mg/L	0.0002
Pyrene		<0.00020	mg/L	0.0002
Benzo(a)anthracene		<0.00020	mg/L	0.0002
Chrysene		<0.00020	mg/L	0.0002
Benzo(b)fluoranthene		<0.00020	mg/L	0.0002
Benzo(k)fluoranthene		<0.00020	mg/L	0.0002
Benzo(a)pyrene		<0.00020	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.00020	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.00020	mg/L	0.0002
Benzo(g,h,i)perylene		<0.00020	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: QC21024

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	<0.00020	63	1	16 - 96	20
Acenaphthylene	57.50	58.58	mg/L	1	80	<0.00020	71	1	20 - 110	20
Acenaphthene	55.65	57.07	mg/L	1	80	<0.00020	69	2	18 - 108	20
Fluorene	58.70	59.56	mg/L	1	80	<0.00020	73	1	22 - 102	20
Phenanthrene	63.65	61.33	mg/L	1	80	<0.00020	79	3	25 - 103	20
Anthracene	64.81	62.23	mg/L	1	80	<0.00020	81	4	22 - 110	20
Fluoranthene	71.73	61.20	mg/L	1	80	<0.00020	89	15	21 - 110	20
Pyrene	51.22	53.69	mg/L	1	80	<0.00020	64	4	22 - 100	20
Benzo(a)anthracene	59.56	59.66	mg/L	1	80	<0.00020	74	0	30 - 99	20
Chrysene	43.72	43.86	mg/L	1	80	<0.00020	54	0	27 - 108	20
Benzo(b)fluoranthene	50.96	48.95	mg/L	1	80	<0.00020	63	4	19 - 102	20
Benzo(k)fluoranthene	57.13	56.97	mg/L	1	80	<0.00020	71	0	35 - 103	20
Benzo(a)pyrene	52.11	49.83	mg/L	1	80	<0.00020	65	4	24 - 105	20
Indeno(1,2,3-cd)pyrene	50.61	49.83	mg/L	1	80	<0.00020	63	1	22 - 108	20
Dibenzo(a,h)anthracene	35.94	34.04	mg/L	1	80	<0.00020	44	5	23 - 77	20
Benzo(g,h,i)perylene	45.39	47.77	mg/L	1	80	<0.00020	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: QC21024

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	62.90	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

Company Name: Eneagon Services Inc Phone #: 915-570-8726
Address: 306 West Wall, Site 1312, Midland, Tx 79701 Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: /Equivia Services
(If different from above) Atn: Kyle Landreman Incident # 300 110
Project #: EQ-110 Project Name: John Hendrix

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

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX					PRESERVATIVE METHOD	SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE
197038	MW-2 (13 to 15')	1	4oz	✓						X	
39	MW-2 (28 to 30')	1	4oz	✓						X	
40	MW-3 (13 to 15')	1	4oz	✓						X	
41	MW-3 (28 to 30')	1	4oz	✓						X	

Relinquished by: <u>Jeffrey Kindley</u>	Date: <u>May 14 2002</u>	Time: <u>0700</u>	Received by: <u>Selen Shelton</u>	Date: <u>5/14/02</u>	Time: <u>0700</u>
Relinquished by: <u>Selen Shelton</u>	Date: <u>5/14/02</u>	Time: <u>1830</u>	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # A02051304

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8020/602	✓	TPH 8015 M (D001600) *	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCBs 8080/608	Pest. 8080/608	BOD, TSS, PH	Turn Around Time if different from standard	Hold
	✓													
	✓													
	✓													
	✓													

LAB USE ONLY		REMARKS:	
Intact	Y/N	* Any TPH (D001600) that is	
Headspace	Y/N	Z 100 ppm total is to	
Temp	Y/N	be further analyzed for	
Log-in Review	Y/N	SPLP TPH (D001600)	

Carrier # Shelton 1103-511-7101

TraceAnalysis, Inc.

6701 Aberdeen Ave., Suite 9

Lubbock, TX 79424-1515

(806) 794-1296

Report Date: May 21, 2002
EQ-110Order Number: A02051619
300110Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: May 21, 2002

Order ID Number: A02051619

Project Number: EQ-110
Project Name: 300110
Project Location: Monument, New Mexico

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
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.

Sample - Field Code	BTEX					TPH DRO	TPH GRO
	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
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

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: A02051619

Project Number: EQ-110
Project Name: 300110
Project Location: Monument, New Mexico

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
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
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 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

Report Date: May 21, 2002
EQ-110

Order Number: A02051619
300110

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Monument, New Mexico

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

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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

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

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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: 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

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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

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

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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: 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

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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 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

Continued ...

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... Continued

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
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: 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

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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: 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

Report Date: May 21, 2002
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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

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

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (806) 378-1296

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID: **P020541**

Company Name:

Environ Services Inc.
(Street, City, Zip)

Phone #:

915-570-8726

Fax #:

Address: **306 West Wall, Suite 1312, Midland, TX 79701 915-684-7587**

Contact Person:

Jeffrey Kimbly

voice to:
different from above)

Ryle Landman

Incident # **300110**

object #:

Project Name:

EQ-110

object Location:

Monument New Mexico

Sampler Signature:

Jeffrey Kimbly

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX						PRESERVATIVE METHOD						SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	NaHSO ₄	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME	
0083	MW-1 (8 to 10')	1	40Z	✓									✓	05/04/02	1419		
84	MW-1 (31 to 33')	1	40Z	✓									✓	05/09/02	1525		
85	MW-5 (13 to 15')	1	40Z	✓									✓	05/10/02	1010		
86	MW-5 (29 to 31')	1	40Z	✓									✓	05/10/02	1100		
87	MW-4 (13 to 15')	1	40Z	✓									✓	05/10/02	1329		
88	MW-4 (30 to 32')	1	40Z	✓									✓	05/10/02	1359		

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 Volatiles	✓															
TCLP Semi Volatiles	✓															
TCLP Pesticides	✓															
RCI	✓															
GC-MS Vol. 8260B/624	✓															
GC/MS Semi. Vol. 8270C/625	✓															
PCBs 8082/608	✓															
Pesticides 8081A/608	✓															
BOD, TSS, pH	✓															
Turn Around Time if different from standard	✓															

ANALYSIS REQUEST

(Circle or Specify Method No.)

REMARKS:

LAB USE ONLY

* Any Sample with Combined
TPH/DISTGRO of ≥ 100 ppm
run additional analysis for
SPLP TPH on that sample.

Thank you, Jeff Kimbly

Carrier # **Greyhound 103 566770**

Received by: **Helen Skelton** Date: **5/13/02** Time: **0700**

Received by: **Jeffrey Kimbly** Date: **May 13 2002** Time: **0700**

Received by: **Helen Skelton** Date: **5/13/02** Time: **1830**

Submitted of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. **6 samples-HS**
ORIGINAL COPY

BLM LAND
LEASED TO
Jimmie COOPER

EQUIVA SERVICES, INC.
JOHN HENDRIX EXCAVATION SITE
~~JIMMIE COOPER RANCH~~
MONUMENT, LEA COUNTY,
NEW MEXICO

ENERCON PROJECT NO. EQ-110

Prepared for:

MR. KYLE LANDRENEAU
EQUIVA SERVICES, LLC.
PMB 284
40 FM 1960 WEST
HOUSTON, TEXAS 77090

RECEIVED

MAR 28 2002

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

March 27, 2002

Prepared by:

ENERCON SERVICES, INC.
ENVIRONMENTAL & INDUSTRIAL SERVICES GROUP
306 West Wall, Suite 1312
Midland, Texas 79701
(915) 570-8726
(915) 684-7587 Fax

March 27, 2002

Mr. Kyle Landreneau
Equiva Services LLC
PMB 284
40 FM 1960 West
Houston, Texas 77090

**RE: SUMMARY OF STATUS OF FIELD ACTIVITIES AT THE JOHN HENDRIX
EXCAVATION SITE LOCATED ON THE JIMMIE COOPER RANCH IN
MONUMENT, LEA COUNTY, NEW MEXICO**

Dear Mr. Landreneau,

The following report details the status of the above historic referenced spill site located in Lea County, New Mexico (see Figure 1 in Appendix A). As of this report, the site has been excavated/backfilled and the road located north and adjacent to the site has been rebuilt. Reseeding of the site is planned in April during the rainy season.

Prior to commencement of activities, the site was ranked according to the New Mexico Oil Conservation District (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases*. Ranking is determined based on depth to groundwater, distance from water source/domestic wells, and distance to nearest surface water body. Based on these criteria, and prior drilling at the site in which groundwater was encountered at 29 feet below ground surface (bgs), the following soil remediation action levels were set for the site:

Benzene (mg/Kg)	10
BTEX (mg/Kg)	50
TPH (mg/Kg)	100

On August 11, 2001, Enercon Services Inc. (Enercon) along with Allstate Environmental Services (Allstate) were onsite to begin fencing around the excavation area. On August 14, 2001, excavation of the site was initiated with the sand dunes located over the release area removed and stockpiled on the southwest corner of the site. From August 14 until December 10, 2001, approximately 57,120 cubic yards of hydrocarbon impacted soils were excavated and transported to C & C Landfarm located in Monument, New Mexico for disposal (see Figure 2, Appendix A for site diagram). The dimensions of the excavation were approximately 230 feet by 260 feet by 34 feet deep and extended to within 15 feet of the GPM gas pipeline located east of the excavation (See Appendix B for site photographs).

During excavation activities, soil confirmation samples were collected and submitted to Trace Analysis Inc. (Trace) in Lubbock, Texas for analysis of total petroleum hydrocarbons (TPH) using EPA method 8015M and total BTEX using EPA method 8021B. Wall samples and bottom samples were collected at 28 feet bgs and 34 feet bgs (vadose zone), respectively. Of the analytical results of the samples collected, only one had levels above the NMOCD requirements of 100 ppm TPH (See Table 1 for analysis and Appendix C for laboratory reports). The sample was the south wall central at 28 feet bgs with TPH results at 176 ppm. The benzene and total BTEX levels for all the wall and bottom samples collected were below the NMOCD requirements of 10 ppm and 50 ppm total BTEX.

In order to further delineate the horizontal extent of the hydrocarbon impacted soils during excavation activities, soil borings were installed along the southeast, east and northeast perimeter of the excavation on November 1, 2001 (See Figure 3 for soil sample and boring locations). Of the eight borings drilled, only one had Total Petroleum Hydrocarbon (TPH) levels above the NMOCD requirements of 100 parts per million (ppm) TPH. Boring C-4 at 28 to 30 feet below ground surface (bgs) had TPH levels of 162 ppm. (see Table 2 for drilling analysis). Due to the proximity of the boring to the GPM gas pipeline, the soils at boring C-4 were not excavated. The benzene and total BTEX levels for all the borings were below the NMOCD requirements of 10 ppm benzene and 50 ppm total BTEX.

While excavating the site on August 27, 2001, groundwater was encountered at 34 feet bgs directly below the former Equilon pipeline. A slight amount of oil was noted floating on the groundwater at this time. Mr. Paul Sheely and Mr. William Olsen of the NMOCD Hobbs and Santa Fe offices were informed on August 28, 2001, of the groundwater impact at the site. Mr. Sheely visited the site on August 29, and informed Enercon personnel that a minimum of three monitor wells will need to be installed in order to determine groundwater gradient direction along with vertical and horizontal extent of groundwater impacts at the site.

Backfilling of the site commenced on October 1, 2001, and was completed on January 14, 2002. Clean stockpiled soils, generated during the excavation, were placed back into the pit from October 1 to October 14, 2001. From October 15, 2001 until January 14, 2002, approximately 58,660 cubic yards of clean offsite backfill soils were placed inside the pit and the excavation brought to 2 feet above surface grade. The caliche road located on the north side and adjacent to the excavation was rebuilt and completed on January 13, 2002.

If you have any questions pertaining to the status of the site, please contact Jeffrey Kindley at (915) 570-8726 or Charles Harlan at (972) 484-3854.

Sincerely,
Enercon Services, Inc.

Jeffrey Kindley
Jeffrey Kindley, P.G.
Project Manager- Midland

Jeffrey Kindley for
Charles D. Harlan, C.P.G.
Manager, Environmental Services-Dallas

TABLE 1
SOIL ANALYTICAL RESULTS
EQUILON JOHN HENDRIX
MONUMENT, LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (in mg/kg)	Toluene (in mg/kg)	Ethylbenzene (in mg/kg)	Xylenes (in mg/kg)	Total BTEX (in mg/kg)	TPH (Dro/Gro) (in mg/kg)	Depth to groundwater	NMOCD Ranking
Northwest Corner 34' Bottom	09/21/01	0.014	0.188	0.159	0.552	0.913	<50.0	34.0'	20
Northeast Corner 34' Bottom	11/19/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
North 34' Bottom	11/05/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
North Central 34' Bottom	11/05/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Southwest Corner 34' Bottom	09/21/01	<0.010	0.133	0.14	0.378	0.651	<50.0	34.0'	20
Southeast Corner 34' Bottom	11/20/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
South 34' Bottom	10/17/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
South Central 34' Bottom	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
West Central 34' Bottom	09/21/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
East Central 34' Bottom	11/20/01	<0.010	<0.010	0.141	0.374	0.515	<50.0	34.0'	20
B-1 34' Bottom	09/27/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
B-2 34' Bottom	09/28/01	<0.010	0.010	<0.010	<0.010	0.010	<50.0	34.0'	20
B-3 34' Bottom	10/17/01	<0.010	<0.010	<0.010	0.023	0.023	<50.0	34.0'	20
B-4 34' Bottom	11/01/01	0.072	<0.010	<0.010	<0.010	0.072	<50.0	34.0'	20
B-5 34' Bottom	11/12/01	<0.010	<0.010	0.014	<0.010	0.014	<50.0	34.0'	20
B-6 34' Bottom	11/19/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Northwall Central 28'	09/18/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Northwall Westside 28'	09/18/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Northwall Eastside 28'	10/31/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Westwall Northside 28'	09/18/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Westwall Central 28'	09/18/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Southwall Central 28' *	10/17/01	<0.010	<0.010	0.037	0.069	0.106	176	34.0'	20
Southeast wall 28'	10/31/01	<0.010	<0.010	<0.010	0.449	0.449	<50.0	34.0'	20
Westwall South 28'	10/17/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Eastwall Central 28' * (*)	10/31/01	<0.050	<0.050	<0.050	<0.050	<0.050	147	34.0'	20
Eastwall Central 28'	11/12/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
Eastwall Southside 28'	10/31/01	<0.020	<0.020	0.370	<0.020	0.37	85	34.0'	20
Eastwall Northside 28'	10/31/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	34.0'	20
NMOCD Rankings		10	NA	NA	NA	50	100	NA	NA

ND = Not detected

NA = Not applicable

NS = Not sampled

* represents sample that is above current NMOCD standards

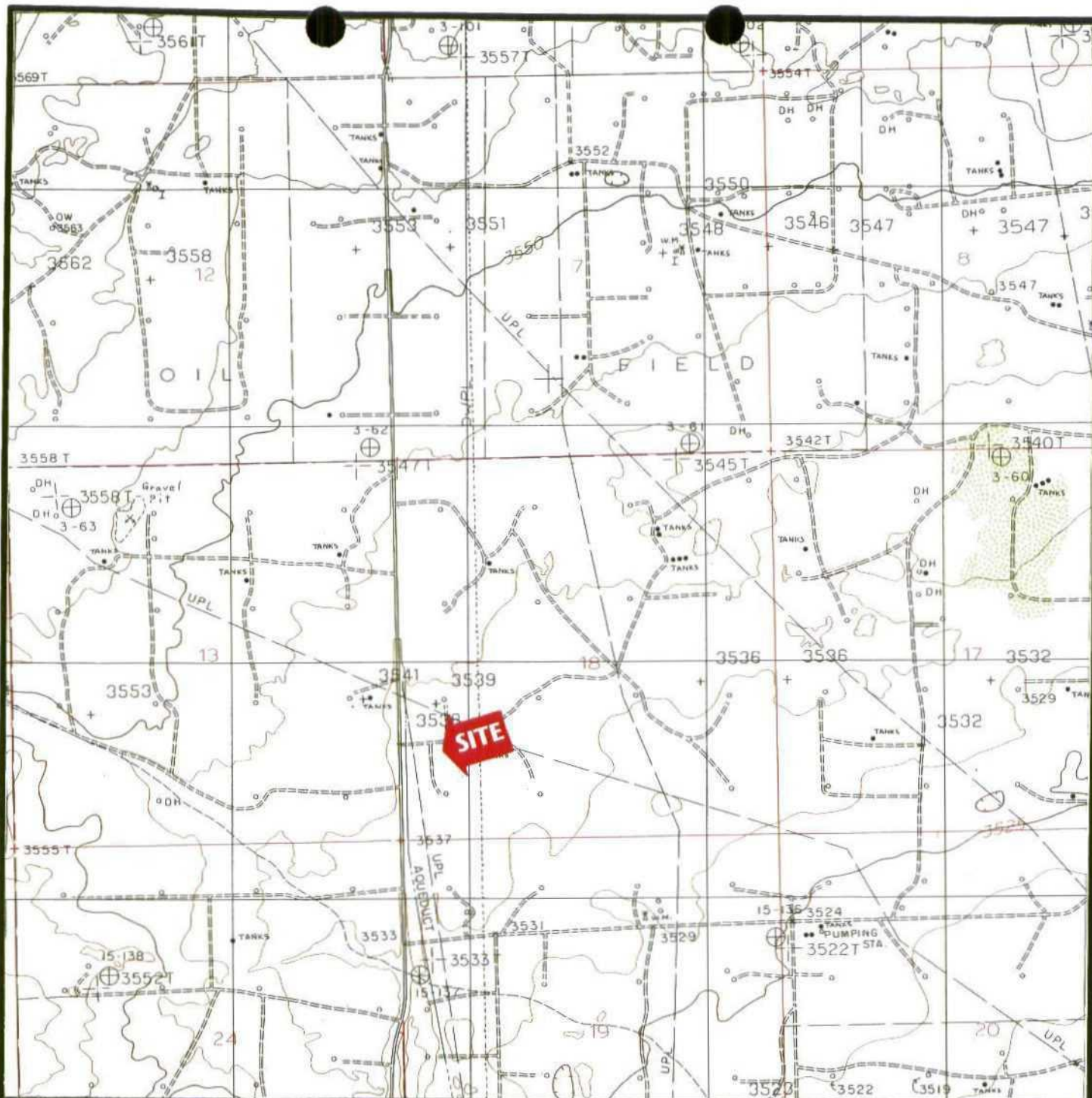
(*) Two extra feet of soil removed and resampled on 11/12/01 (Below NMOCD standards).

TABLE 2
DRILLING SOIL ANALYTICAL RESULTS
EQUILON JOHN HENDRIX
MONUMENT, LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (in mg/kg)	Toluene (in mg/kg)	Ethylbenzene (in mg/kg)	Xylenes (in mg/kg)	Total BTEX (in mg/kg)	TPH (Dro) (in mg/kg)	TPH (Gro) (in mg/kg)	TPH Dro/Gro (in mg/kg)
C-1 (13-15')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-1 (33-35')	11/01/01	<0.010	<0.010	<0.010	0.029	0.0367	<50.0	<1.0	<50.0
C-2 (13-15')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-2 (33-35')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-3 (13-15')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-3 (33-35')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-4 (28-30') *	11/01/01	<0.010	<0.010	0.216	<0.010	0.216	162	16	178
C-4 (33-35')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-5 (28-30')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	2.6	<50.0
C-5 (33-35')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	2.11	<50.0
C-6 (13-15')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-6 (33-35')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-7 (13-15')	11/01/01	<0.020	<0.020	<0.020	<0.020	<0.020	<50.0	<1.0	<50.0
C-7 (33-35')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
C-8 (13-15')	11/01/01	<0.020	<0.020	<0.020	<0.020	<0.020	<50.0	<1.0	<50.0
C-8 (33-35')	11/01/01	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.0	<50.0
NMOCD Rankings		10	NA	NA	NA	50	NA	NA	100

ND = Not detected NA = Not applicable NS = Not sampled
 * represents sample that is above current NMOCD standards

APPENDIX A
Figures 1, 2 and 3



**U.S.G.S. TOPOGRAPHIC MAP
MONUMENT SOUTH, NEW MEXICO
QUADRANGLE
DATED 1985**

EQ-110



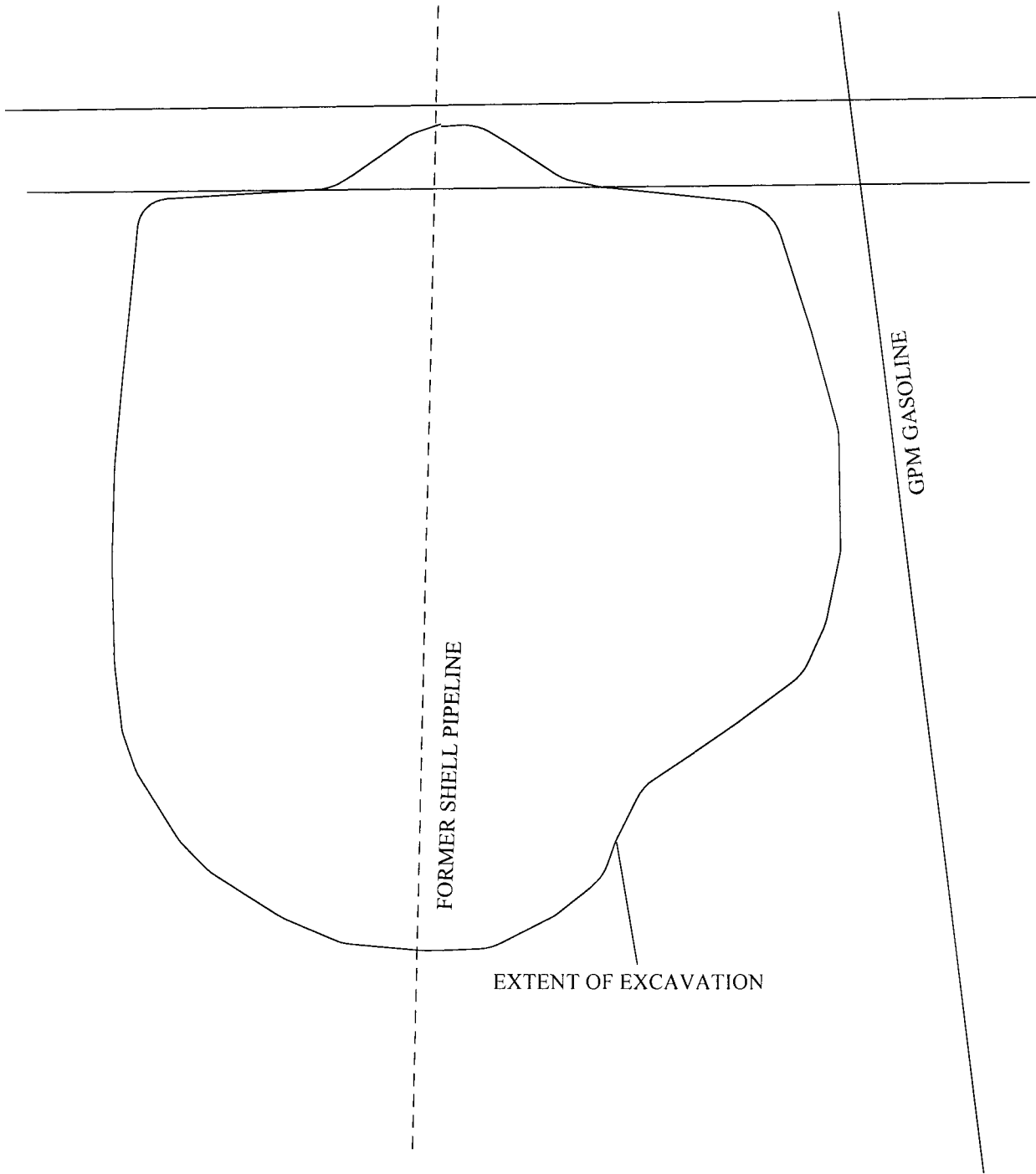
Figure 1

Scale: 1" = 1,000'

**JOHN HENDRIX EXCAVATION SITE
MONUMENT, LEA COUNTY
NEW MEXICO**



**ENERCON SERVICES, INC.
306 WEST WALL
SUITE 1312
MIDLAND, TX 79707
(915) 570-8726**



EQUIVA SERVICES, L.L.C.

EQ-110



FIGURE 2: SITE MAP

SCALE: 1" = 50'

**JOHN HENDRIX SITE
MONUMENT
LEA COUNTY, NEW MEXICO**



**ENERCON SERVICES, INC.
306 WEST WALL
SUITE 1312
MIDLAND, TX 79701
(915) 570-8726**

APPENDIX B
Site Photographs



Photo 1: Removal of clean overburden from site.



Photo 2: Removal of clean overburden soil in order to access contaminated soils.



Photo 3: Excavation of contaminated soils in vicinity of initial release.



Photo 4: Excavation of contaminated soils to south along pipeline right-of-way.



Photo 5: Excavation on north side of site along former pipeline right-of-way.



Photo 6: Removal of clean overburden to get to contaminated soils.



Photo 7: Removal of contaminated soils in center of site.



Photo 8: Removal of clean overburden in order to access contaminated soils.



Photo 9: Excavation of contaminated soils.



Photo 10: Contaminated soils at 30 feet below ground surface.



Photo 11: Contaminated soils and groundwater at 34 feet below ground surface.



Photo 12: Excavation of south side of the site.



Photo 13: Excavation of clean overburden in order to access contaminated soils.



Photo 14: Removal of contaminated soils from bottom of pit.



Photo 15: Drilling of soil boring C-1 to determine extent of contamination at site.



Photo 16: Drilling soil borings along GPM gas line located on southeast corner of site.



Photo 17: Backfilling soils on south side of site.



Photo 18: Drilling of soil boring C-2 along GPM gas line on east side of site.



Photo 19: Drilling of soil boring C-7 on north side of site.



Photo 20: Oil staining on bottom of pit at 33 feet below ground surface.



Photo 21: Excavation of contaminated soil at bottom of pit.



Photo 22: Groundwater along the east side of the pit.



Photo 23: Backfilling clean soils along west side of pit



Photo 24: Backfilling of site.



Photo 25: Backfilling of site.



Photo 26: Backfilling of site.



Photo 27: Backfilling of site.



Photo 28: Completed backfilling of site.



Photo 29: Completed backfilling of site.



Photo 30: Completed backfilling of site.

Appendix C
Laboratory Reports

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

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: Kyle Landman
(If different from above) Equisa Services
Project #: EQ-110 Project Name: Monmouth, New Mexico
Project Location: Monmouth, New Mexico Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE	DATE	TIME
179785	Northwall Central 28'	1	400	✓						✓		09/18/01	1500
810	Northwall Westside 28'	1	400	✓						✓		09/18/01	1510
87	Northwall Westside 28'	1	400	✓						✓		09/18/01	1530
88	Northwall Central 28'	1	400	✓						✓		09/18/01	1530

Relinquished by: Jeffrey Kindley Date: September 18, 2001 Time: 600
Received by: Helen Shelton Date: 9/18/01 Time: 800
Relinquished by: Helen Shelton Date: 9/18/01 Time: 1830
Received by: Jeffrey Kindley Date: 9-20-01 Time: 4:00 PM

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST
LAB Order ID #: AD1092108

ANALYSIS REQUEST (Circle or Specify Method No.)													
MTBE 8020/602	✓	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	
BTEX 8020/602	✓											GC/MS Vol. 8240/8260/624	
	✓											GC/MS Semi. Vol. 8270/625	
	✓											PCB's 8080/608	
	✓											Pest. 8080/608	
	✓											BOD, TSS, PH	
												TRA 8015m (D401680)	
												Turn Around Time if different from standard	
												Hold	

REMARKS:
LAB USE ONLY
Intact Y N N
Headspace Y N N
Temp 3 °
Log-in Review Yes
Normal
9/20

Page Number: 1 of 1
Monument, New Mexico

[illegible]

Analytical and Quality Control Report

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

Report Date: January 28, 2002

Order ID Number: A01092108

Project Number: EQ-110
Project Name: John Handrix
Project Location: Monument, 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
179785	Northwall Central 28'	Soil	9/18/01	15:00	9/20/01
179786	Northwall Westside 28'	Soil	9/18/01	15:10	9/20/01
179787	West Wall Northside 28'	Soil	9/18/01	15:20	9/20/01
179788	West Wall Central 28'	Soil	9/18/01	15:30	9/20/01

0

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.

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: 179785 - Northwall Central 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14178 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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		0.875	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.960	mg/Kg	10	0.10	96	70 - 130

Sample: 179785 - Northwall Central 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14367 Date Analyzed: 9/27/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12250 Date Prepared: 9/27/01

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

Sample: 179785 - Northwall Central 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14179 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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		0.718	mg/Kg	10	0.10	72	70 - 130
4-BFB		0.809	mg/Kg	10	0.10	81	70 - 130

Sample: 179786 - Northwall Westside 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14178 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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

Report Date: January 28, 2002
EQ-110

Order Number: A01092108
John Handrix

Page Number: 3 of 9
Monument, New Mexico

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.931	mg/Kg	10	0.10	93	70 - 130
4-BFB		1.03	mg/Kg	10	0.10	103	70 - 130

Sample: 179786 - Northwall Westside 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14367 Date Analyzed: 9/27/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12250 Date Prepared: 9/27/01

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

Sample: 179786 - Northwall Westside 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14179 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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		0.755	mg/Kg	10	0.10	76	70 - 130
4-BFB		0.862	mg/Kg	10	0.10	86	70 - 130

Sample: 179787 - West Wall Northside 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14178 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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		0.910	mg/Kg	10	0.10	91	70 - 130
4-BFB		1.00	mg/Kg	10	0.10	100	70 - 130

Sample: 179787 - West Wall Northside 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14367 Date Analyzed: 9/27/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12250 Date Prepared: 9/27/01

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

Report Date: January 28, 2002
EQ-110

Order Number: A01092108
John Handrix

Page Number: 4 of 9
Monument, New Mexico

Sample: 179787 - West Wall Northside 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14179 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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		0.755	mg/Kg	10	0.10	76	70 - 130
4-BFB		0.781	mg/Kg	10	0.10	78	70 - 130

Sample: 179788 - West Wall Central 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14178 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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	0.10	96	70 - 130
4-BFB		1.04	mg/Kg	10	0.10	104	70 - 130

Sample: 179788 - West Wall Central 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14367 Date Analyzed: 9/27/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12250 Date Prepared: 9/27/01

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

Sample: 179788 - West Wall Central 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14179 Date Analyzed: 9/22/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12092 Date Prepared: 9/22/01

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		0.786	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.881	mg/Kg	10	0.10	88	70 - 130

Quality Control Report Method Blank

Method Blank QCBatch: QC14178

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		0.375	mg/Kg	0.001
Total BTEX		0.375	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.982	mg/Kg	10	0.10	98	70 - 130
4-BFB		0.907	mg/Kg	10	0.10	91	70 - 130

Method Blank QCBatch: QC14179

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.825	mg/Kg	10	0.10	83	70 - 130
4-BFB		0.933	mg/Kg	10	0.10	93	70 - 130

Method Blank QCBatch: QC14367

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

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC14178

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.946	0.948	mg/Kg	10	0.10	<0.010	95	0	80 - 120	20
Benzene	0.922	0.956	mg/Kg	10	0.10	<0.010	92	4	80 - 120	20
Toluene	0.904	0.938	mg/Kg	10	0.10	<0.010	90	4	80 - 120	20

Continued ...

... Continued

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Ethylbenzene	0.869	0.897	mg/Kg	10	0.10	<0.010	87	3	80 - 120	20
M,P,O-Xylene	2.70	2.78	mg/Kg	10	0.30	0.375	78	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	0.927	1.01	mg/Kg	10	0.10	93	101	70 - 130
4-BFB	0.938	0.988	mg/Kg	10	0.10	94	99	70 - 130

Laboratory Control Spikes

QCBatch: QC14179

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	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	0.88	mg/Kg	10	0.10	107	88	70 - 130
4-BFB	0.896	0.854	mg/Kg	10	0.10	90	85	70 - 130

Laboratory Control Spikes

QCBatch: QC14367

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	248	269	mg/Kg	1	250	<50.0	99	8	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: QC14178

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.992	0.996	mg/Kg	10	0.10	<0.010	99	0	80 - 120	20
Toluene	1.05	1.06	mg/Kg	10	0.10	<0.010	105	1	80 - 120	20
Ethylbenzene	0.956	0.969	mg/Kg	10	0.10	<0.010	96	1	80 - 120	20
M,P,O-Xylene	2.86	2.91	mg/Kg	10	0.30	<0.010	95	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	1.02	1.01	mg/Kg	10	0.10	102	101	70 - 130
4-BFB	1.13	1.14	mg/Kg	10	0.10	113	114	70 - 130

Matrix Spikes QCBatch: QC14179

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	7.95	9.33	mg/Kg	10	1	<1	80	15	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	0.851	0.932	mg/Kg	10	0.10	85	93	70 - 130
4-BFB	0.854	0.885	mg/Kg	10	0.10	85	89	70 - 130

Matrix Spikes QCBatch: QC14367

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	241	234	mg/Kg	1	250	<50	96	2	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: QC14178

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	9/22/01
Benzene		mg/L	0.10	0.100	100	85 - 115	9/22/01
Toluene		mg/L	0.10	0.098	98	85 - 115	9/22/01
Ethylbenzene		mg/L	0.10	0.091	91	85 - 115	9/22/01
M,P,O-Xylene		mg/L	0.30	0.277	92	85 - 115	9/22/01

CCV (2) QCBatch: QC14178

Continued ...

... Continued

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
MTBE		mg/L	0.10	0.11	110	85 - 115	9/22/01
Benzene		mg/L	0.10	0.105	105	85 - 115	9/22/01
Toluene		mg/L	0.10	0.1	100	85 - 115	9/22/01
Ethylbenzene		mg/L	0.10	0.094	94	85 - 115	9/22/01
M,P,O-Xylene		mg/L	0.30	0.283	94	85 - 115	9/22/01

ICV (1) QCBatch: QC14178

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
MTBE		mg/L	0.10	0.104	104	85 - 115	9/22/01
Benzene		mg/L	0.10	0.093	93	85 - 115	9/22/01
Toluene		mg/L	0.10	0.095	95	85 - 115	9/22/01
Ethylbenzene		mg/L	0.10	0.092	92	85 - 115	9/22/01
M,P,O-Xylene		mg/L	0.30	0.285	95	85 - 115	9/22/01

CCV (1) QCBatch: QC14179

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
GRO		mg/Kg	1	0.917	91	75 - 125	9/22/01

CCV (2) QCBatch: QC14179

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
GRO		mg/Kg	1	0.995	99	75 - 125	9/22/01

ICV (1) QCBatch: QC14179

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
GRO		mg/Kg	1	1.07	107	75 - 125	9/22/01

CCV (1) QCBatch: QC14367

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	9/27/01

CCV (2) QCBatch: QC14367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	250	100	75 - 125	9/27/01

ICV (1) QCBatch: QC14367

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	9/27/01

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

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

Address: 306 West Wall Suite 1312 Midland, Tx 79701

Contact Person: Jeffrey Kindley Fax #: 915-684-7587

Invoice to: Kyle Landon au 915-685-1884

(If different from above) Equiso Services

Project #: EQ-110

Project Location: Monument New Mexico

Project Name: John Vondra

Sampler Signature: Jeffrey Kindley

Matrix: SLUDGE

Preservative Method: NONE

Matrix: AIR

Matrix: SOIL

Matrix: WATER

Volume/Amount: 1 4oz

CONTAINERS: 1

FIELD CODE: 180144 Northwest Corner 34' bottom

LAB # (LAB USE ONLY): 145 Southwest Corner 34' bottom

DATE: 09/21/01

TIME: 0800

DATE: 09/21/01

TIME: 0800

DATE: 09/21/01

TIME: 0800

DATE: 09/21/01

TIME: 0800

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TIME: 0800

DATE: 09/21/01

TIME: 0800

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # AD092505

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8020/602	✓	TPH 8015 M (EPA/602)	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
---------------	---	----------------------	----------	--------------------------------------	-------------------------------------	----------------	---------------------	-----	--------------------------	---------------------------	----------------	----------------	--------------	---	------

LAB USE ONLY

REMARKS:

Intact Y N
Headspace Y N
Temp 1 °
Log-in Review done

24 hr Turnaround

new 9/26/01
9/27/01

A 10356 10423

Report Date: January 28, 2002 Order Number: A01092505
EQ-110 John Handrix

Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: January 28, 2002

Order ID Number: A01092505

Project Number: EQ-110
Project Name: John Handrix
Project Location: Monument, New Mexico

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
180144	Northwest Corner 34' Bottom	Soil	9/21/01	:	9/25/01
180145	Southwest Corner 34' Bottom	Soil	9/21/01	:	9/25/01
180146	West Central 34' Bottom	Soil	9/21/01	:	9/25/01

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	BTEX					TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
180144 - Northwest Corner 34' Bottom	0.014	0.188	0.159	0.552	0.913	<50.0	3.05
180145 - Southwest Corner 34' Bottom	<0.010	0.133	0.14	0.378	0.651	<50.0	7.39
180146 - West Central 34' Bottom	<0.010	<0.010	0.141	0.374	0.515	<50.0	6.92

Analytical and Quality Control Report

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

Report Date: January 28, 2002

Order ID Number: A01092505

Project Number: EQ-110
Project Name: John Handrix
Project Location: Monument, 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
180144	Northwest Corner 34' Bottom	Soil	9/21/01	:	9/25/01
180145	Southwest Corner 34' Bottom	Soil	9/21/01	:	9/25/01
180146	West Central 34' Bottom	Soil	9/21/01	:	9/25/01

0

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.

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: 180144 - Northwest Corner 34' Bottom

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14321 Date Analyzed: 9/25/01
Analyst: RC Preparation Method: S 5035 Prep Batch: PB12208 Date Prepared: 9/25/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.014	mg/Kg	10	0.001
Toluene		0.188	mg/Kg	10	0.001
Ethylbenzene		0.159	mg/Kg	10	0.001
M,P,O-Xylene		0.552	mg/Kg	10	0.001
Total BTEX		0.913	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.01	mg/Kg	1	0.10	1010	70 - 130
4-BFB		1.03	mg/Kg	1	0.10	1030	70 - 130

Sample: 180144 - Northwest Corner 34' Bottom

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14282 Date Analyzed: 9/25/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12177 Date Prepared: 9/25/01

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-Octane		271	mg/Kg	1	250	108	70 - 130

Sample: 180144 - Northwest Corner 34' Bottom

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14732 Date Analyzed: 10/9/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12540 Date Prepared: 10/9/01

Param	Flag	Result	Units	Dilution	RDL
GRO		3.05	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹	0.526	mg/Kg	10	0.10	53	70 - 130
4-BFB	²	0.135	mg/Kg	10	0.10	14	70 - 130

Sample: 180145 - Southwest Corner 34' Bottom

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14321 Date Analyzed: 9/25/01
Analyst: RC Preparation Method: S 5035 Prep Batch: PB12208 Date Prepared: 9/25/01

¹Low surrogate recovery due to matrix difficulties.

²Low surrogate recovery due to matrix difficulties.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.133	mg/Kg	10	0.001
Ethylbenzene		0.14	mg/Kg	10	0.001
M,P,O-Xylene		0.378	mg/Kg	10	0.001
Total BTEX		0.651	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.15	mg/Kg	10	0.10	115	70 - 130
4-BFB		1.09	mg/Kg	10	0.10	109	70 - 130

Sample: 180145 - Southwest Corner 34' Bottom

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14282 Date Analyzed: 9/25/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12177 Date Prepared: 9/25/01

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-Octane		265	mg/Kg	1	250	106	70 - 130

Sample: 180145 - Southwest Corner 34' Bottom

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14322 Date Analyzed: 9/25/01
Analyst: RC Preparation Method: 5035 Prep Batch: PB12208 Date Prepared: 9/25/01

Param	Flag	Result	Units	Dilution	RDL
GRO		7.39	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³	0.497	mg/Kg	10	0.10	50	70 - 130
4-BFB	⁴	0.357	mg/Kg	10	0.10	36	70 - 130

Sample: 180146 - West Central 34' Bottom

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14321 Date Analyzed: 9/25/01
Analyst: RC Preparation Method: S 5035 Prep Batch: PB12208 Date Prepared: 9/25/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.141	mg/Kg	10	0.001
M,P,O-Xylene		0.374	mg/Kg	10	0.001
Total BTEX		0.515	mg/Kg	10	0.001

³Low surrogate recovery due to matrix difficulties.

⁴Low surrogate recovery due to matrix difficulties.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	10	0.10	104	70 - 130
4-BFB		1.03	mg/Kg	10	0.10	103	70 - 130

Sample: 180146 - West Central 34' Bottom

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14282 Date Analyzed: 9/25/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12177 Date Prepared: 9/25/01

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-Octane		268	mg/Kg	1	250	107	70 - 130

Sample: 180146 - West Central 34' Bottom

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14322 Date Analyzed: 9/25/01
Analyst: RC Preparation Method: 5035 Prep Batch: PB12208 Date Prepared: 9/25/01

Param	Flag	Result	Units	Dilution	RDL
GRO		6.92	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	⁵	0.605	mg/Kg	10	0.10	61	70 - 130
4-BFB	⁶	0.11	mg/Kg	10	0.10	11	70 - 130

⁵Low surrogate recovery due to matrix difficulties.

⁶Low surrogate recovery due to matrix difficulties.

Quality Control Report Method Blank

Method Blank

QCBatch: QC14282

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		270	mg/Kg	1	250	108	70 - 130

Method Blank

QCBatch: QC14321

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		0.983	mg/Kg	10	0.10	98	70 - 130
4-BFB		0.709	mg/Kg	10	0.10	71	70 - 130

Method Blank

QCBatch: QC14322

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

Method Blank

QCBatch: QC14732

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.996	mg/Kg	10	0.10	100	70 - 130
4-BFB		0.878	mg/Kg	10	0.10	88	70 - 130

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC14282

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	222	229	mg/Kg	1	250	<50.0	89	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-Octane	274	275	mg/Kg	1	250	110	110	70 - 130

Laboratory Control Spikes

QCBatch: QC14321

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.21	1.39	mg/Kg	10	0.10	<0.010	121	13	80 - 120	20
Benzene	1.12	1.23	mg/Kg	10	0.10	<0.010	112	9	80 - 120	20
Toluene	1.12	1.25	mg/Kg	10	0.10	<0.010	112	10	80 - 120	20
Ethylbenzene	1.13	1.26	mg/Kg	10	0.10	<0.010	113	10	80 - 120	20
M,P,O-Xylene	3.38	3.74	mg/Kg	10	0.30	<0.010	113	10	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	1.14	1.29	mg/Kg	10	0.10	114	129	70 - 130
4-BFB	1.11	1.21	mg/Kg	10	0.10	111	121	70 - 130

Laboratory Control Spikes

QCBatch: QC14322

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	1.10	1.07	mg/Kg	1	1	<1	110	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	0.106	0.122	mg/Kg	1	0.10	106	122	70 - 130
4-BFB	0.097	0.130	mg/Kg	1	0.10	97	130	70 - 130

Laboratory Control Spikes

QCBatch: QC14732

⁷High MTBE recovery on LCSD. MS/MSD show the method to be in control.

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.64	9.03	mg/Kg	10	1	<1	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	0.989	0.928	mg/Kg	10	0.10	99	93	70 - 130
4-BFB	0.94	0.979	mg/Kg	10	0.10	94	98	70 - 130

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC14282

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	251	243	mg/Kg	1	250	<50.0	100	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-Octane	275	273	mg/Kg	1	250	110	109	70 - 130

Matrix Spikes QCBatch: QC14321

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	1.07	1.07	mg/Kg	10	0.10	0.014	107	0	80 - 120	20
Toluene	1.18	1.19	mg/Kg	10	0.10	0.188	118	1	80 - 120	20
Ethylbenzene	1.11	1.09	mg/Kg	10	0.10	0.159	95	2	80 - 120	20
M,P,O-Xylene	3.3	3.25	mg/Kg	10	0.30	0.552	110	1	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	1.11	1.15	mg/Kg	10	0.10	111	115	70 - 130
4-BFB	1.12	1.13	mg/Kg	10	0.10	112	113	70 - 130

Matrix Spikes QCBatch: QC14322

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.5	6.69	mg/Kg	10	1	3.05	72	68	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	⁸ 0.293	⁹ 0.359	mg/Kg	10	0.10	29	35	70 - 130
4-BFB	¹⁰ 0.183	¹¹ 0.090	mg/Kg	10	0.10	18	10	70 - 130

Matrix Spikes QCBatch: QC14732

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.31	12	mg/Kg	10	1	<1	73	36	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	0.857	1.22	mg/Kg	10	0.10	86	122	70 - 130
4-BFB	0.905	0.908	mg/Kg	10	0.10	91	91	70 - 130

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC14282

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	254	102	75 - 125	9/25/01
n-Octane		mg/Kg	250	289	116	75 - 125	9/25/01

CCV (2) QCBatch: QC14282

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	253	101	75 - 125	9/25/01
n-Octane		mg/Kg	250	290	116	75 - 125	9/25/01

⁸ Low surrogate recovery due to matrix difficulties.

⁹ Low surrogate recovery due to matrix difficulties.

¹⁰ Low surrogate recovery due to matrix difficulties.

¹¹ Low surrogate recovery due to matrix difficulties.

ICV (1) QCBatch: QC14282

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	238	95	75 - 125	9/25/01
n-Octane		mg/Kg	250	286	114	75 - 125	9/25/01

CCV (1) QCBatch: QC14321

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.104	104	85 - 115	9/25/01
Benzene		mg/L	0.10	0.099	99	85 - 115	9/25/01
Toluene		mg/L	0.10	0.101	101	85 - 115	9/25/01
Ethylbenzene		mg/L	0.10	0.099	99	85 - 115	9/25/01
M,P,O-Xylene		mg/L	0.30	0.33	100	85 - 115	9/25/01

CCV (2) QCBatch: QC14321

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	9/25/01
Benzene		mg/L	0.10	0.1	100	85 - 115	9/25/01
Toluene		mg/L	0.10	0.104	104	85 - 115	9/25/01
Ethylbenzene		mg/L	0.10	0.1	100	85 - 115	9/25/01
M,P,O-Xylene		mg/L	0.30	0.34	102	85 - 115	9/25/01

ICV (1) QCBatch: QC14321

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	9/25/01
Benzene		mg/L	0.10	0.105	105	85 - 115	9/25/01
Toluene		mg/L	0.10	0.106	106	85 - 115	9/25/01
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	9/25/01
M,P,O-Xylene		mg/L	0.30	0.35	105	85 - 115	9/25/01

CCV (1) QCBatch: QC14322

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.995	99	75 - 125	9/25/01

CCV (2) QCBatch: QC14322

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.894	89	75 - 125	9/25/01

ICV (1) QCBatch: QC14322

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.17	117	75 - 125	9/25/01

CCV (1) QCBatch: QC14732

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.885	88	75 - 125	10/9/01

CCV (2) QCBatch: QC14732

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.18	118	75 - 125	10/9/01

ICV (1) QCBatch: QC14732

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.03	103	75 - 125	10/9/01

Page Number: 1 of 1
Monument, New Mexico

Sample - Field Code	BTEX					TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
184140 - North Bottom 34'	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
184141 - North Central Bottom 34'	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00

TRACE ANALYSIS, 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: November 20, 2001

Order ID Number: A01110807

Project: EQ-110
TA Job Code: John Handrix
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
184140	North Bottom 34'	Soil	11/5/01	8:30	11/8/01
184141	North Central Bottom 34'	Soil	11/5/01	8:45	11/8/01

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.

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: 184140 - North Bottom 34'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15835 Date Analyzed: 11/16/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13414 Date Prepared: 11/16/01

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		0.724	mg/Kg	10	0.10	72	72 - 128
4-BFB		0.776	mg/Kg	10	0.10	78	72 - 128

Sample: 184140 - North Bottom 34'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15661 Date Analyzed: 11/10/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13277 Date Prepared: 11/9/01

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: 184140 - North Bottom 34'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15836 Date Analyzed: 11/16/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13414 Date Prepared: 11/16/01

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		0.878	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.729	mg/Kg	10	0.10	73	70 - 130

Sample: 184141 - North Central Bottom 34'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15835 Date Analyzed: 11/16/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13414 Date Prepared: 11/16/01

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	0.644	mg/Kg	10	0.10	64	72 - 128
4-BFB	²	0.654	mg/Kg	10	0.10	65	72 - 128

Sample: 184141 - North Central Bottom 34'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15661 Date Analyzed: 11/10/01
 Analyst: MM Preparation Method: 3550 B Prep Batch: PB13277 Date Prepared: 11/9/01

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: 184141 - North Central Bottom 34'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15836 Date Analyzed: 11/16/01
 Analyst: CG Preparation Method: 5035 Prep Batch: PB13414 Date Prepared: 11/16/01

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		0.698	mg/Kg	10	0.10	70	70 - 130
4-BFB		0.763	mg/Kg	10	0.10	76	70 - 130

¹Low surrogate recovery due to matrix difficulties.

²Low surrogate recovery due to matrix difficulties.

Quality Control Report Method Blank

Method Blank QCBatch: QC15661

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		126	mg/Kg	1	150	84	70 - 130

Method Blank QCBatch: QC15836

Param	Flag	Results	Units	Reporting Limit
GRO		1.75<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.991	mg/Kg	10	0.10	99	70 - 130
4-BFB		0.820	mg/Kg	10	0.10	82	70 - 130

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC15661

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	239	267	mg/Kg	1	250	<50.0	95	11	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	131	mg/Kg	1	150	88	87	70 - 130

Laboratory Control Spikes QCBatch: QC15836

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.97	9.05	mg/Kg	10	1	1.75<1	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	0.928	0.893	mg/Kg	10	0.10	93	89	70 - 130
4-BFB	0.969	0.941	mg/Kg	10	0.10	97	94	70 - 130

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC15661

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	222	227	mg/Kg	1	250	<50.0	89	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	119	mg/Kg	1	150	79	79	70 - 130

Matrix Spikes QCBatch: QC15836

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	35.6	34.6	mg/Kg	10	1	29.8	48	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	0.992	0.984	mg/Kg	10	0.10	99	98	70 - 130
4-BFB	1.27	³ 1.33	mg/Kg	10	0.10	127	133	70 - 130

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC15661

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	240	96	75 - 125	11/10/01
n-Octane		mg/Kg	250	128	51	75 - 125	11/10/01

³High surrogate recovery due to peak interference.

CCV (2) QCBatch: QC15661

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	11/10/01
n-Octane		mg/Kg	250	145	58	75 - 125	11/10/01

CCV (3) QCBatch: QC15661

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	11/10/01
n-Octane		mg/Kg	250	123	49	75 - 125	11/10/01

ICV (1) QCBatch: QC15661

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	11/10/01
n-Octane		mg/Kg	250	126	50	75 - 125	11/10/01

CCV (1) QCBatch: QC15836

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.991	99	75 - 125	11/16/01

CCV (2) QCBatch: QC15836

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.918	91	75 - 125	11/16/01

ICV (1) QCBatch: QC15836

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.959	95	75 - 125	11/16/01

TraceAnalysis, Inc.

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Report Date: October 8, 2001
EQ-110Order Number: A01100216
John HandrixPage Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: October 8, 2001

Order ID Number: A01100216

Project: EQ-110
TA Job Code: John Handrix
Casualty Code: Monument, New Mexico
Project Location: EQ-110
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
180871	B-1 (34') Botttom	Soil	9/27/01	16:00	10/2/01
180872	B-2 (34') Botttom	Soil	9/28/01	16:00	10/2/01

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	BTEX						TPH DRO	TPH GRO
	MTBE (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
180871 - B-1 (34') Botttom	<0.010	<0.010	<0.010	<0.010	0.017	0.017	<50.0	3.37
180872 - B-2 (34') Botttom	<0.010	<0.010	0.01	<0.010	<0.010	0.01	<50.0	<1.00

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

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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: October 8, 2001

Order ID Number: A01100216

Project: EQ-110
TA Job Code: John Handrix
Casualty Code: Monument, New Mexico
Project Location: EQ-110
Project Address:
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
180871	B-1 (34') Bottom	Soil	9/27/01	16:00	10/2/01
180872	B-2 (34') Bottom	Soil	9/28/01	16:00	10/2/01

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.

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: 180871 - B-1 (34') Bottom

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14562 Date Analyzed: 10/2/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB12415 Date Prepared: 10/2/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.017	mg/Kg	10	0.001
Total BTEX		0.017	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.83	mg/Kg	10	0.10	83	72 - 128
4-BFB		0.827	mg/Kg	10	0.10	83	72 - 128

Sample: 180871 - B-1 (34') Bottom

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14542 Date Analyzed: 10/3/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12403 Date Prepared: 10/3/01

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

Sample: 180871 - B-1 (34') Bottom

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14563 Date Analyzed: 10/2/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12415 Date Prepared: 10/2/01

Param	Flag	Result	Units	Dilution	RDL
GRO		3.37	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.915	mg/Kg	10	0.10	92	70 - 130
4-BFB		0.866	mg/Kg	10	0.10	87	70 - 130

Sample: 180872 - B-2 (34') Bottom

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC14562 Date Analyzed: 10/2/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB12415 Date Prepared: 10/2/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.01	mg/Kg	10	0.001

Continued ...

... Continued Sample: 180872 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		0.01	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.885	mg/Kg	10	0.10	89	72 - 128
4-BFB		0.923	mg/Kg	10	0.10	92	72 - 128

Sample: 180872 - B-2 (34') Bottom

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC14542 Date Analyzed: 10/3/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12403 Date Prepared: 10/3/01

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

Sample: 180872 - B-2 (34') Bottom

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC14563 Date Analyzed: 10/2/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12415 Date Prepared: 10/2/01

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		0.820	mg/Kg	10	0.10	82	70 - 130

Quality Control Report Method Blank

Method Blank QCBatch: QC14542

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

Method Blank QCBatch: QC14562

Param	Flag	Results	Units	Reporting Limit
MTBE		<0.010	mg/Kg	0.001
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	mg/Kg	10	0.10	100	72 - 128
4-BFB		0.862	mg/Kg	10	0.10	86	72 - 128

Method Blank QCBatch: QC14563

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.898	mg/Kg	10	0.10	90	70 - 130
4-BFB		0.804	mg/Kg	10	0.10	80	70 - 130

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC14542

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	277	274	mg/Kg	1	250	<50.0	111	1	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: QC14562

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.03	0.989	mg/Kg	10	0.10	<0.010	103	4	80 - 120	20
Benzene	1	1.01	mg/Kg	10	0.10	<0.010	100	0	80 - 120	20
Toluene	1	1.01	mg/Kg	10	0.10	<0.010	100	0	80 - 120	20
Ethylbenzene	1.01	1.02	mg/Kg	10	0.10	<0.010	101	0	80 - 120	20
M,P,O-Xylene	3.14	3.15	mg/Kg	10	0.30	<0.010	105	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	0.995	1.01	mg/Kg	10	0.10	100	101	72 - 128
4-BFB	1.01	1.01	mg/Kg	10	0.10	101	101	72 - 128

Laboratory Control Spikes QCBatch: QC14563

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.99	10.7	mg/Kg	10	1	<1	100	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	0.894	0.945	mg/Kg	10	0.10	89	95	70 - 130
4-BFB	0.997	0.981	mg/Kg	10	0.10	100	98	70 - 130

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC14542

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	346	394	mg/Kg	1	250	64.8	138	13	70 - 130	20

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

Matrix Spikes QCBatch: QC14563

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.43	8.34	mg/Kg	10	1	<1.00	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	0.748	0.729	mg/Kg	10	0.10	75	73	70 - 130
4-BFB	0.913	0.903	mg/Kg	10	0.10	91	90	70 - 130

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC14542

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	270	108	75 - 125	10/3/01

CCV (2) QCBatch: QC14542

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	10/3/01

CCV (3) QCBatch: QC14542

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	10/3/01

ICV (1) QCBatch: QC14542

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	282	112	75 - 125	10/3/01

CCV (1) QCBatch: QC14562

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.105	105	85 - 115	10/2/01
Benzene		mg/Kg	0.10	0.1	100	85 - 115	10/2/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/Kg	0.10	0.099	99	85 - 115	10/2/01
Ethylbenzene		mg/Kg	0.10	0.099	99	85 - 115	10/2/01
M,P,O-Xylene		mg/Kg	0.30	0.306	102	85 - 115	10/2/01

ICV (1) QCBatch: QC14562

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.097	97	85 - 115	10/2/01
Benzene		mg/Kg	0.10	0.089	89	85 - 115	10/2/01
Toluene		mg/Kg	0.10	0.091	91	85 - 115	10/2/01
Ethylbenzene		mg/Kg	0.10	0.091	91	85 - 115	10/2/01
M,P,O-Xylene		mg/Kg	0.30	0.283	94	85 - 115	10/2/01

CCV (1) QCBatch: QC14563

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.975	97	75 - 125	10/2/01

CCV (2) QCBatch: QC14563

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.985	98	75 - 125	10/2/01

ICV (1) QCBatch: QC14563

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.953	95	75 - 125	10/2/01

Report Date: October 22, 2001 Order Number: A01101914
EQ-110 John Handrix

Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: October 22, 2001

Order ID Number: A01101914

Project: EQ-110
TA Job Code: John Handrix
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
182316	B-3 (34')	Soil	10/17/01	:	10/19/01
182317	South Bottom (34')	Soil	10/17/01	:	10/19/01
182318	Southwall Central (28')	Soil	10/17/01	:	10/19/01
182319	West Wall South (28')	Soil	10/17/01	:	10/19/01

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.

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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: October 22, 2001

Order ID Number: A01101914

Project: EQ-110
TA Job Code: John Handrix
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
182316	B-3 (34')	Soil	10/17/01	:	10/19/01
182317	South Bottom (34')	Soil	10/17/01	:	10/19/01
182318	Southwall Central (28')	Soil	10/17/01	:	10/19/01
182319	West Wall South (28')	Soil	10/17/01	:	10/19/01

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.

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: 182316 - B-3 (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15027 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

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		0.023	mg/Kg	10	0.001
Total BTEX		0.023	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	10	0.10	104	72 - 128
4-BFB		1.03	mg/Kg	10	0.10	103	72 - 128

Sample: 182316 - B-3 (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15022 Date Analyzed: 10/19/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12773 Date Prepared: 10/19/01

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

Sample: 182316 - B-3 (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15028 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

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		0.91	mg/Kg	10	0.10	91	70 - 130
4-BFB		0.905	mg/Kg	10	0.10	91	70 - 130

Sample: 182317 - South Bottom (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15027 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

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 ...

... Continued Sample: 182317 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		0.918	mg/Kg	10	0.10	92	72 - 128
4-BFB		0.904	mg/Kg	10	0.10	90	72 - 128

Sample: 182317 - South Bottom (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15022 Date Analyzed: 10/19/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12773 Date Prepared: 10/19/01

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

Sample: 182317 - South Bottom (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15028 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

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		0.973	mg/Kg	10	0.10	97	70 - 130
4-BFB		0.881	mg/Kg	10	0.10	88	70 - 130

Sample: 182318 - Southwall Central (28')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15027 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.037	mg/Kg	10	0.001
M,P,O-Xylene		0.069	mg/Kg	10	0.001
Total BTEX		0.106	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.819	mg/Kg	10	0.10	82	72 - 128
4-BFB		1.09	mg/Kg	10	0.10	109	72 - 128

Sample: 182318 - Southwall Central (28')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15022 Date Analyzed: 10/19/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12773 Date Prepared: 10/19/01

Param	Flag	Result	Units	Dilution	RDL
DRO		156	mg/Kg	1	50

Sample: 182318 - Southwall Central (28')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15028 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

Param	Flag	Result	Units	Dilution	RDL
GRO		20.6	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.838	mg/Kg	10	0.10	84	70 - 130
4-BFB	1	2.31	mg/Kg	10	0.10	231	70 - 130

Sample: 182319 - West Wall South (28')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15027 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

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		0.801	mg/Kg	10	0.10	80	72 - 128
4-BFB		0.805	mg/Kg	10	0.10	80	72 - 128

Sample: 182319 - West Wall South (28')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15022 Date Analyzed: 10/19/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB12773 Date Prepared: 10/19/01

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

Sample: 182319 - West Wall South (28')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15028 Date Analyzed: 10/20/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB12783 Date Prepared: 10/20/01

¹High surrogate recovery due to peak interference.

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		1.13	mg/Kg	10	0.10	113	70 - 130
4-BFB		0.788	mg/Kg	10	0.10	79	70 - 130

Quality Control Report
Method Blank

Method Blank QCBatch: QC15022

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

Method Blank QCBatch: QC15027

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		1.04	mg/Kg	10	0.10	104	72 - 128
4-BFB		0.960	mg/Kg	10	0.10	96	72 - 128

Method Blank QCBatch: QC15028

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

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC15022

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	239	259	mg/Kg	1	250	<50.0	96	8	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: QC15027

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.846	0.876	mg/Kg	10	0.10	<0.010	82	3	80 - 120	20
Benzene	0.956	0.970	mg/Kg	10	0.10	<0.010	96	1	80 - 120	20
Toluene	0.965	0.975	mg/Kg	10	0.10	<0.010	96	1	80 - 120	20
Ethylbenzene	0.975	0.985	mg/Kg	10	0.10	<0.010	98	1	80 - 120	20
M,P,O-Xylene	3.08	3.11	mg/Kg	10	0.30	<0.010	103	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	1.04	mg/Kg	10	0.10	101	104	72 - 128
4-BFB	1.01	1.03	mg/Kg	10	0.10	101	103	72 - 128

Laboratory Control Spikes

QCBatch: QC15028

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.81	10.3	mg/Kg	10	1	<1	98	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	1.03	1.09	mg/Kg	10	0.10	103	109	70 - 130
4-BFB	1.01	1.01	mg/Kg	10	0.10	101	101	70 - 130

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC15022

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	270	288	mg/Kg	1	250	<50.0	108	6	70 - 130	20

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

Matrix Spikes

QCBatch: QC15027

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.604	0.118	mg/Kg	10	0.10	<0.010	60	135	80 - 120	20
Toluene	0.629	0.127	mg/Kg	10	0.10	<0.010	63	133	80 - 120	20
Ethylbenzene	0.645	0.124	mg/Kg	10	0.10	<0.010	64	136	80 - 120	20
M,P,O-Xylene	2.09	0.418	mg/Kg	10	0.30	0.023	70	133	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	0.893	0.0725	mg/Kg	10	0.10	89	7	72 - 128
4-BFB	0.886	0.0765	mg/Kg	10	0.10	89	8	72 - 128

Matrix Spikes QCBatch: QC15028

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.1	9.91	mg/Kg	10	1	<1	101	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	1.07	0.988	mg/Kg	10	0.10	107	99	70 - 130
4-BFB	0.918	0.86	mg/Kg	10	0.10	92	86	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC15022

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	273	109	75 - 125	10/19/01
n-Octane		mg/Kg	250	153	61	75 - 125	10/19/01

ICV (1) QCBatch: QC15022

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	10/19/01
n-Octane		mg/Kg	250	152	60	75 - 125	10/19/01

CCV (1) QCBatch: QC15027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.0859	63	85 - 115	10/20/01
Benzene		mg/Kg	0.10	0.0982	98	85 - 115	10/20/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/Kg	0.10	0.0993	99	85 - 115	10/20/01
Ethylbenzene		mg/Kg	0.10	0.0995	100	85 - 115	10/20/01
M,P,O-Xylene		mg/Kg	0.30	0.315	105	85 - 115	10/20/01

CCV (2) QCBatch: QC15027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.0985	98	85 - 115	10/20/01
Benzene		mg/Kg	0.10	0.0982	98	85 - 115	10/20/01
Toluene		mg/Kg	0.10	0.0991	99	85 - 115	10/20/01
Ethylbenzene		mg/Kg	0.10	0.0997	99	85 - 115	10/20/01
M,P,O-Xylene		mg/Kg	0.30	0.3155	105	85 - 115	10/20/01

ICV (1) QCBatch: QC15027

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.0881	65	85 - 115	10/20/01
Benzene		mg/Kg	0.10	0.097	97	85 - 115	10/20/01
Toluene		mg/Kg	0.10	0.0977	98	85 - 115	10/20/01
Ethylbenzene		mg/Kg	0.10	0.0994	99	85 - 115	10/20/01
M,P,O-Xylene		mg/Kg	0.30	0.316	105	85 - 115	10/20/01

CCV (1) QCBatch: QC15028

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.09	109	75 - 125	10/20/01

ICV (1) QCBatch: QC15028

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.976	97	75 - 125	10/20/01

AQ110503

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

FAX #: 915-684-7587

Everon Solutions Inc 306 West Wall Suite 1312 Midland Tx 79701

Project Name :

John Hendrix

Sampler Signature:

Yours kindly

Turn around # of days	Fax ASAP	Hold
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REMARKS

Allen Sheltan 11/02/01 1700

Received by: _____ Date: _____ Time: _____

Received at Laboratory by:	Date:	Time:
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24 hr
Turnover
ASAP

verbals
11/7

[illegible]

Report Date: November 9, 2001 Order Number: A01110503
EQ-110 John Handrix

Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: November 9, 2001

Order ID Number: A01110503

Project: EQ-110
TA Job Code: John Handrix
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
183809	Southeast Wall 28'	Soil	10/31/01	8:30	11/3/01
183810	Eastwall Southside 28'	Soil	10/31/01	8:30	11/3/01
183811	Eastwall Central 28'	Soil	10/31/01	8:35	11/3/01
183812	Eastwall Northside 28'	Soil	10/31/01	8:35	11/3/01
183813	Northwall Eastside 28'	Soil	10/31/01	8:50	11/3/01
183814	South Central 34' (Bottom)	Soil	11/1/01	16:00	11/3/01
183815	B-4 (34')	Soil	11/1/01	16:30	11/3/01

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	BTEX						TPH DRO	TPH GRO
	MTBE	Benzene	Toluene	Ethylbenzene	M,P,O-Xylene	Total BTEX	DRO	GRO
	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
183809 - Southeast Wall 28'	<0.010	<0.010	<0.010	<0.010	0.449	0.449	<50.0	<1
183810 - Eastwall Southside 28'	<0.020	<0.020	<0.020	0.370	<0.020	0.370	67.2	17.5
183811 - Eastwall Central 28'	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	124	23.7
183812 - Eastwall Northside 28'	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
183813 - Northwall Eastside 28'	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
183814 - South Central 34' (Bottom)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
183815 - B-4 (34')	<0.010	0.072	<0.010	<0.010	<0.010	0.072	<50.0	<1

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

TRACE ANALYSIS, 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: November 8, 2001

Order ID Number: A01110503

Project: EQ-110
TA Job Code: John Handrix
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
183809	Southeast Wall 28'	Soil	10/31/01	8:30	11/3/01
183810	Eastwall Southside 28'	Soil	10/31/01	8:30	11/3/01
183811	Eastwall Central 28'	Soil	10/31/01	8:35	11/3/01
183812	Eastwall Northside 28'	Soil	10/31/01	8:35	11/3/01
183813	Northwall Eastside 28'	Soil	10/31/01	8:50	11/3/01
183814	South Central 34' (Bottom)	Soil	11/1/01	16:00	11/3/01
183815	B-4 (34')	Soil	11/1/01	16:30	11/3/01

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.

This report consists of a total of 12 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: 183809 - Southeast Wall 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.449	mg/Kg	10	0.001
Total BTEX		0.449	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.849	mg/Kg	10	0.10	85	72 - 128
4-BFB		0.808	mg/Kg	10	0.10	81	72 - 128

Sample: 183809 - Southeast Wall 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183809 - Southeast Wall 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.804	mg/Kg	10	0.10	80	70 - 130
4-BFB		0.707	mg/Kg	10	0.10	71	70 - 130

Sample: 183810 - Eastwall Southside 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.020	mg/Kg	20	0.001
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001

Continued ...

... Continued Sample: 183810 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		0.370	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		0.370	mg/Kg	20	0.001
Test Comments	1	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	2	0.933	mg/Kg	20	0.10	47	72 - 128
4-BFB	3	1.16	mg/Kg	20	0.10	58	72 - 128

Sample: 183810 - Eastwall Southside 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
DRO		67.2	mg/Kg	1	50

Sample: 183810 - Eastwall Southside 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
GRO		17.5	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	4	0.914	mg/Kg	20	0.10	46	70 - 130
4-BFB	5	1.37	mg/Kg	20	0.10	69	70 - 130

Sample: 183811 - Eastwall Central 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.050	mg/Kg	50	0.001
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	6	*	mg/Kg	1	

¹Sample ran at a dilution due to significant hydrocarbon content beyond xylene.

²Low surrogate recovery due to matrix difficulties.

³Low surrogate recovery due to matrix difficulties.

⁴Low surrogate recovery due to matrix difficulties.

⁵Low surrogate recovery due to matrix difficulties.

⁶Sample ran at a dilution due to significant hydrocarbon content beyond xylene.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	7	0.980	mg/Kg	50	0.10	20	72 - 128
4-BFB	8	1.48	mg/Kg	50	0.10	30	72 - 128

Sample: 183811 - Eastwall Central 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
DRO		124	mg/Kg	1	50

Sample: 183811 - Eastwall Central 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
GRO		23.7	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	9	1.09	mg/Kg	50	0.10	22	70 - 130
4-BFB	10	2.86	mg/Kg	50	0.10	57	70 - 130

Sample: 183812 - Eastwall Northside 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.809	mg/Kg	10	0.10	81	72 - 128
4-BFB		0.789	mg/Kg	10	0.10	79	72 - 128

⁷Low surrogate recovery due to matrix difficulties.

⁸Low surrogate recovery due to matrix difficulties.

⁹Low surrogate recovery due to matrix difficulties.

¹⁰Low surrogate recovery due to matrix difficulties.

Sample: 183812 - Eastwall Northside 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183812 - Eastwall Northside 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.748	mg/Kg	10	0.10	75	70 - 130
4-BFB	11	0.691	mg/Kg	10	0.10	69	70 - 130

Sample: 183813 - Northwall Eastside 28'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.785	mg/Kg	10	0.10	78	72 - 128
4-BFB		0.758	mg/Kg	10	0.10	76	72 - 128

Sample: 183813 - Northwall Eastside 28'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

¹¹Low surrogate recovery due to instrument reading difficulties. Quality control shows the method to be in control.

Sample: 183813 - Northwall Eastside 28'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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	12	0.683	mg/Kg	10	0.10	68	70 - 130
4-BFB		0.712	mg/Kg	10	0.10	71	70 - 130

Sample: 183814 - South Central 34' (Bottom)

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.819	mg/Kg	10	0.10	82	72 - 128
4-BFB		0.815	mg/Kg	10	0.10	82	72 - 128

Sample: 183814 - South Central 34' (Bottom)

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183814 - South Central 34' (Bottom)

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.708	mg/Kg	10	0.10	71	70 - 130

Continued ...

¹²Low surrogate recovery due to instrument reading difficulties. Quality control shows the method to be in control.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		0.762	mg/Kg	10	0.10	76	70 - 130

Sample: 183815 - B-4 (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
Benzene		0.072	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		0.072	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.817	mg/Kg	10	0.10	82	72 - 128
4-BFB		0.766	mg/Kg	10	0.10	77	72 - 128

Sample: 183815 - B-4 (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183815 - B-4 (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.742	mg/Kg	10	0.10	74	70 - 130
4-BFB	¹³	0.657	mg/Kg	10	0.10	66	70 - 130

¹³Low surrogate recovery due to instrument reading difficulties. Quality control shows the method to be in control.

Quality Control Report
Method Blank

Method Blank QCBatch: QC15430

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.000	mg/Kg	10	0.10	97	72 - 128
4-BFB		0.000	mg/Kg	10	0.10	77	72 - 128

Method Blank QCBatch: QC15431

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0075	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.0013	mg/Kg	10	0.10	89	70 - 130

Method Blank QCBatch: QC15465

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

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC15430

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.988	0.996	mg/Kg	10	0.10	<0.001	99	1	80 - 120	20
Benzene	1.01	0.991	mg/Kg	10	0.10	<0.001	101	2	80 - 120	20

Continued ...

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Toluene	0.941	0.935	mg/Kg	10	0.10	<0.001	94	1	80 - 120	20
Ethylbenzene	0.940	0.936	mg/Kg	10	0.10	<0.001	94	0	80 - 120	20
M,P,O-Xylene	2.84	2.81	mg/Kg	10	0.30	<0.001	95	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	1.04	1.01	mg/Kg	10	0.10	104	101	72 - 128
4-BFB	0.940	0.930	mg/Kg	10	0.10	94	93	72 - 128

Laboratory Control Spikes

QCBatch: QC15431

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.8	11.2	mg/Kg	10	1	<1	108	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	0.923	0.945	mg/Kg	10	0.10	92	94	70 - 130
4-BFB	0.847	0.826	mg/Kg	10	0.10	85	83	70 - 130

Laboratory Control Spikes

QCBatch: QC15465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	230	233	mg/Kg	1	250	<50.0	92	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
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC15430

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.973	0.931	mg/Kg	10	0.10	<0.010	97	0	80 - 120	20
Benzene	0.884	0.849	mg/Kg	10	0.10	<0.010	88	0	80 - 120	20
Toluene	0.878	.85	mg/Kg	10	0.10	<0.010	88	0	80 - 120	20
Ethylbenzene	0.823	0.788	mg/Kg	10	0.10	<0.010	82	0	80 - 120	20
M,P,O-Xylene	2.42	2.32	mg/Kg	10	0.30	<0.010	81	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	0.908	0.861	mg/Kg	10	0.10	91	86	72 - 128
4-BFB	0.914	0.887	mg/Kg	10	0.10	91	89	72 - 128

Matrix Spikes QCBatch: QC15431

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.37	8.44	mg/Kg	10	1	<1	94	159	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	0.8	0.752	mg/Kg	10	0.10	80	75	70 - 130
4-BFB	0.745	¹⁴ 0.692	mg/Kg	10	0.10	75	69	70 - 130

Matrix Spikes QCBatch: QC15465

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	242	226	mg/Kg	1	250	<50.0	97	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: QC15430

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	11/5/01
Benzene		mg/L	0.10	0.1	100	85 - 115	11/5/01
Toluene		mg/L	0.10	0.097	97	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.096	96	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.285	95	85 - 115	11/5/01

CCV (2) QCBatch: QC15430

¹⁴Low surrogate recovery on MSD. LCS/LCSD show the method to be in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.11	110	85 - 115	11/5/01
Benzene		mg/L	0.10	0.107	107	85 - 115	11/5/01
Toluene		mg/L	0.10	0.105	105	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.3	100	85 - 115	11/5/01

ICV (1) QCBatch: QC15430

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	11/5/01
Benzene		mg/L	0.10	0.099	99	85 - 115	11/5/01
Toluene		mg/L	0.10	0.0964	96	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.0944	94	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	11/5/01

CCV (1) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.897	89	75 - 125	11/5/01

CCV (2) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.861	86	75 - 125	11/5/01

ICV (1) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.883	88	75 - 125	11/5/01

CCV (1) QCBatch: QC15465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	238	95	75 - 125	11/6/01
n-Octane		mg/Kg	250	124	49	75 - 125	11/6/01

CCV (2) QCBatch: QC15465

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	11/6/01
n-Octane		mg/Kg	250	135	54	75 - 125	11/6/01

CCV (3) QCBatch: QC15465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	255	102	75 - 125	11/6/01
n-Octane		mg/Kg	250	132	52	75 - 125	11/6/01

ICV (1) QCBatch: QC15465

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	11/6/01
n-Octane		mg/Kg	250	126	50	75 - 125	11/6/01

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Analytical and Quality Control Report

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

Report Date: December 3, 2001

Order ID Number: A01113013

Project: EQ-110
TA Job Code: John Handrix
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
185801	B-7 (34')	Soil	11/26/01	12:45	11/30/01

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.

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: 185801 - B-7 (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16162 Date Analyzed: 11/30/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13687 Date Prepared: 11/30/01

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		0.859	mg/Kg	10	0.10	86	72 - 128
4-BFB		0.886	mg/Kg	10	0.10	89	72 - 128

Sample: 185801 - B-7 (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC16164 Date Analyzed: 12/2/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13688 Date Prepared: 11/30/01

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: 185801 - B-7 (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC16163 Date Analyzed: 11/30/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13687 Date Prepared: 11/30/01

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		0.843	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.878	mg/Kg	10	0.10	88	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC16162

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		0.956	mg/Kg	10	0.10	96	72 - 128
4-BFB		0.883	mg/Kg	10	0.10	88	72 - 128

Method Blank

QCBatch: QC16163

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	10	0.10	104	70 - 130
4-BFB		0.858	mg/Kg	10	0.10	86	70 - 130

Method Blank

QCBatch: QC16164

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: QC16162

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.986	0.988	mg/Kg	10	0.10	<0.010	99	0	80 - 120	20
Benzene	0.986	0.973	mg/Kg	10	0.10	<0.010	99	1	80 - 120	20
Toluene	0.984	0.976	mg/Kg	10	0.10	<0.010	98	0	80 - 120	20
Ethylbenzene	0.983	0.972	mg/Kg	10	0.10	<0.010	98	1	80 - 120	20
M,P,O-Xylene	2.95	2.92	mg/Kg	10	0.30	<0.010	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	0.934	0.938	mg/Kg	10	0.10	93	94	72 - 128
4-BFB	0.989	0.985	mg/Kg	10	0.10	99	98	72 - 128

Laboratory Control Spikes

QCBatch: QC16163

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.67	9.66	mg/Kg	10	1	<1	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	1.04	1.05	mg/Kg	10	0.10	104	105	70 - 130
4-BFB	0.994	1	mg/Kg	10	0.10	99	100	70 - 130

Laboratory Control Spikes

QCBatch: QC16164

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	216	211	mg/Kg	1	250	<50.0	86	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	125	123	mg/Kg	1	150	83	82	70 - 130

Quality Control Report

Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC16162

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.763	0.77	mg/Kg	10	0.10	<0.010	76	0	80 - 120	20

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Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Toluene	0.78	0.789	mg/Kg	10	0.10	<0.010	78	1	80 - 120	20
Ethylbenzene	0.777	0.788	mg/Kg	10	0.10	<0.010	78	1	80 - 120	20
M,P,O-Xylene	2.35	2.38	mg/Kg	10	0.30	<0.010	78	1	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	0.794	0.796	mg/Kg	10	0.10	79	80	72 - 128
4-BFB	0.853	0.861	mg/Kg	10	0.10	85	86	72 - 128

Matrix Spikes QCBatch: QC16163

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.81	8.8	mg/Kg	10	1	<1	88	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
TFT	0.963	0.959	mg/Kg	10	0.10	96	96	70 - 130
4-BFB	0.852	0.847	mg/Kg	10	0.10	85	85	70 - 130

Matrix Spikes QCBatch: QC16164

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	201	203	mg/Kg	1	250	<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	116	119	mg/Kg	1	150	77	79	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC16162

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	11/30/01
Benzene		mg/L	0.10	0.098	98	85 - 115	11/30/01
Toluene		mg/L	0.10	0.098	98	85 - 115	11/30/01
Ethylbenzene		mg/L	0.10	0.097	97	85 - 115	11/30/01
M,P,O-Xylene		mg/L	0.30	0.293	97	85 - 115	11/30/01

ICV (1) QCBatch: QC16162

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	11/30/01
Benzene		mg/L	0.10	0.097	97	85 - 115	11/30/01
Toluene		mg/L	0.10	0.097	97	85 - 115	11/30/01
Ethylbenzene		mg/L	0.10	0.097	97	85 - 115	11/30/01
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	11/30/01

CCV (1) QCBatch: QC16163

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.94	94	75 - 125	11/30/01

ICV (1) QCBatch: QC16163

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.957	95	75 - 125	11/30/01

CCV (1) QCBatch: QC16164

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	211	-53	75 - 125	12/2/01
n-Octane		mg/Kg	250	121	48	75 - 125	12/2/01

ICV (1) QCBatch: QC16164

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	208	-56	75 - 125	12/2/01
n-Octane		mg/Kg	250	121	48	75 - 125	12/2/01

Report Date: November 27, 2001 Order Number: A01112306
EQ-110 John Handrix

Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: November 27, 2001

Order ID Number: A01112306

Project: EQ-110
TA Job Code: John Handrix
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
185540	B-6 (34')	Soil	11/19/01	:	11/23/01
185541	NE Corner (34')	Soil	11/19/01	:	11/23/01
185542	SE Corner (34')	Soil	11/20/01	:	11/23/01
185543	East Central (34')	Soil	11/20/01	:	11/23/01

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.

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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: November 27, 2001

Order ID Number: A01112306

Project: EQ-110
TA Job Code: John Handrix
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
185540	B-6 (34')	Soil	11/19/01	:	11/23/01
185541	NE Corner (34')	Soil	11/19/01	:	11/23/01
185542	SE Corner (34')	Soil	11/20/01	:	11/23/01
185543	East Central (34')	Soil	11/20/01	:	11/23/01

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.

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: 185540 - B-6 (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15948 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.774	mg/Kg	10	0.10	77	72 - 128
4-BFB		0.81	mg/Kg	10	0.10	81	72 - 128

Sample: 185540 - B-6 (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15986 Date Analyzed: 11/26/01
Analyst: MM Preparation Method: N/A Prep Batch: PB13540 Date Prepared: 11/26/01

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: 185540 - B-6 (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15949 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.768	mg/Kg	10	0.10	77	70 - 130
4-BFB		0.763	mg/Kg	10	0.10	76	70 - 130

Sample: 185541 - NE Corner (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15948 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.836	mg/Kg	10	0.10	84	72 - 128
4-BFB		0.872	mg/Kg	10	0.10	87	72 - 128

Sample: 185541 - NE Corner (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15986 Date Analyzed: 11/26/01
Analyst: MM Preparation Method: N/A Prep Batch: PB13540 Date Prepared: 11/26/01

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		113	mg/Kg	1	150	75	70 - 130

Sample: 185541 - NE Corner (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15949 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.815	mg/Kg	10	0.10	82	70 - 130
4-BFB		0.809	mg/Kg	10	0.10	81	70 - 130

Sample: 185542 - SE Corner (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15948 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.781	mg/Kg	10	0.10	78	72 - 128
4-BFB		0.797	mg/Kg	10	0.10	80	72 - 128

Sample: 185542 - SE Corner (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15986 Date Analyzed: 11/26/01
Analyst: MM Preparation Method: N/A Prep Batch: PB13540 Date Prepared: 11/26/01

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		115	mg/Kg	1	150	77	70 - 130

Sample: 185542 - SE Corner (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15949 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.736	mg/Kg	10	0.10	74	70 - 130
4-BFB		0.755	mg/Kg	10	0.10	76	70 - 130

Sample: 185543 - East Central (34')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15948 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.799	mg/Kg	10	0.10	80	72 - 128
4-BFB		0.818	mg/Kg	10	0.10	82	72 - 128

Sample: 185543 - East Central (34')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15986 Date Analyzed: 11/26/01
Analyst: MM Preparation Method: N/A Prep Batch: PB13540 Date Prepared: 11/26/01

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		112	mg/Kg	1	150	75	70 - 130

Sample: 185543 - East Central (34')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15949 Date Analyzed: 11/23/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13509 Date Prepared: 11/23/01

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		0.771	mg/Kg	10	0.10	77	70 - 130
4-BFB		0.794	mg/Kg	10	0.10	79	70 - 130

Quality Control Report Method Blank

Method Blank QCBatch: QC15948

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		0.999	mg/Kg	10	0.10	100	72 - 128
4-BFB		0.866	mg/Kg	10	0.10	87	72 - 128

Method Blank QCBatch: QC15949

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		0.832	mg/Kg	10	0.10	83	70 - 130

Method Blank QCBatch: QC15986

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		23.1	mg/Kg	1	150	78	70 - 130

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC15948\

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.903	0.955	mg/Kg	10	0.10	<0.010	90	5	80 - 120	20
Benzene	0.972	0.8	mg/Kg	10	0.10	<0.010	97	19	80 - 120	20
Toluene	0.974	0.8	mg/Kg	10	0.10	<0.010	97	19	80 - 120	20
Ethylbenzene	0.974	0.808	mg/Kg	10	0.10	<0.010	97	18	80 - 120	20
M,P,O-Xylene	2.92	2.44	mg/Kg	10	0.30	<0.010	97	16	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	0.984	0.9	mg/Kg	10	0.10	98	90	72 - 128
4-BFB	1.01	0.828	mg/Kg	10	0.10	101	83	72 - 128

Laboratory Control Spikes

QCBatch: QC15949

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.92	9.93	mg/Kg	10	1	<1	99	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	0.98	0.956	mg/Kg	10	0.10	98	96	70 - 130
4-BFB	0.998	0.986	mg/Kg	10	0.10	100	99	70 - 130

Laboratory Control Spikes

QCBatch: QC15986

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	238	234	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	113	114	mg/Kg	1	150	75	76	70 - 130

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC15948

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.804	0.786	mg/Kg	10	0.10	<0.010	80	2	80 - 120	20

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Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Toluene	0.814	0.81	mg/Kg	10	0.10	<0.010	81	0	80 - 120	20
Ethylbenzene	0.816	0.811	mg/Kg	10	0.10	<0.010	82	0	80 - 120	20
M,P,O-Xylene	2.46	2.42	mg/Kg	10	0.30	<0.010	82	1	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	0.863	0.875	mg/Kg	10	0.10	86	88	72 - 128
4-BFB	0.849	0.89	mg/Kg	10	0.10	85	89	72 - 128

Matrix Spikes QCBatch: QC15949

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.49	8.85	mg/Kg	10	1	<1	84	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
TFT	0.918	0.954	mg/Kg	10	0.10	92	95	70 - 130
4-BFB	0.807	0.851	mg/Kg	10	0.10	81	85	70 - 130

Matrix Spikes QCBatch: QC15986

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	226	228	mg/Kg	1	250	<50.0	90	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	109	110	mg/Kg	1	150	73	73	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC15948

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	11/23/01
Benzene		mg/L	0.10	0.100	100	85 - 115	11/23/01
Toluene		mg/L	0.10	0.100	100	85 - 115	11/23/01
Ethylbenzene		mg/L	0.10	0.0992	99	85 - 115	11/23/01
M,P,O-Xylene		mg/L	0.30	0.300	100	85 - 115	11/23/01

CCV (2) QCBatch: QC15948

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	11/23/01
Benzene		mg/L	0.10	0.1	100	85 - 115	11/23/01
Toluene		mg/L	0.10	0.102	102	85 - 115	11/23/01
Ethylbenzene		mg/L	0.10	0.099	99	85 - 115	11/23/01
M,P,O-Xylene		mg/L	0.30	0.301	100	85 - 115	11/23/01

ICV (1) QCBatch: QC15948

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	11/23/01
Benzene		mg/L	0.10	0.0968	97	85 - 115	11/23/01
Toluene		mg/L	0.10	0.0994	99	85 - 115	11/23/01
Ethylbenzene		mg/L	0.10	0.0986	99	85 - 115	11/23/01
M,P,O-Xylene		mg/L	0.30	0.303	101	85 - 115	11/23/01

CCV (1) QCBatch: QC15949

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.926	92	75 - 125	11/23/01

ICV (1) QCBatch: QC15949

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.921	92	75 - 125	11/23/01

CCV (1) QCBatch: QC15986

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	215	86	75 - 125	11/26/01
n-Octane		mg/Kg	150	111	74	75 - 125	11/26/01

CCV (2) QCBatch: QC15986

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	215	86	75 - 125	11/26/01
n-Octane		mg/Kg	150	111	74	75 - 125	11/26/01

ICV (1) QCBatch: QC15986

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	11/26/01
n-Octane		mg/Kg	150	112	74	75 - 125	11/26/01

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Monument, New Mexico

Sample - Field Code	BTEX					TPH DRO	TPH GRO
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
184868 - B-5 (34') Bottom	<0.010	<0.010	0.014	<0.010	0.014	<50.0	7.1
184869 - Eastwall Central (28')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00

Sample: 184868 - B-5 (34') Bottom

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15736 Date Analyzed: 11/14/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13331 Date Prepared: 11/14/01

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		<0.010	mg/Kg	10	0.001
Total BTEX		0.014	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.732	mg/Kg	10	0.10	73	70 - 130
4-BFB		0.848	mg/Kg	10	0.10	85	70 - 130

Sample: 184868 - B-5 (34') Bottom

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15789 Date Analyzed: 11/15/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13368 Date Prepared: 11/15/01

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: 184868 - B-5 (34') Bottom

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15737 Date Analyzed: 11/14/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13331 Date Prepared: 11/14/01

Param	Flag	Result	Units	Dilution	RDL
GRO		7.1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.854	mg/Kg	10	0.10	85	70 - 130
4-BFB		1.07	mg/Kg	10	0.10	107	70 - 130

Sample: 184869 - Eastwall Central (28')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15736 Date Analyzed: 11/14/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13331 Date Prepared: 11/14/01

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

... Continued Sample: 184869 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		0.797	mg/Kg	10	0.10	80	70 - 130
4-BFB		0.821	mg/Kg	10	0.10	82	70 - 130

Sample: 184869 - Eastwall Central (28')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15789 Date Analyzed: 11/15/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13368 Date Prepared: 11/15/01

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: 184869 - Eastwall Central (28')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15737 Date Analyzed: 11/14/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13331 Date Prepared: 11/14/01

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		1.27	mg/Kg	10	0.10	127	70 - 130
4-BFB		0.765	mg/Kg	10	0.10	76	70 - 130

Method Blank QCBatch: QC15736

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	mg/Kg	10	0.10	100	70 - 130
4-BFB		0.915	mg/Kg	10	0.10	92	70 - 130

Method Blank QCBatch: QC15737

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.989	mg/Kg	10	0.10	99	70 - 130
4-BFB		0.832	mg/Kg	10	0.10	83	70 - 130

Method Blank QCBatch: QC15789

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		121	mg/Kg	1	150	80	70 - 130

Laboratory Control Spikes QCBatch: QC15736

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.05	1.03	mg/Kg	10	0.10	<0.010	105	1	80 - 120	20
Benzene	1.02	1.02	mg/Kg	10	0.10	<0.010	102	0	80 - 120	20
Toluene	1.03	1.03	mg/Kg	10	0.10	<0.010	103	0	80 - 120	20
Ethylbenzene	1.02	1.03	mg/Kg	10	0.10	<0.010	102	0	80 - 120	20
M,P,O-Xylene	3.06	3.1	mg/Kg	10	0.30	<0.010	102	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	0.997	0.996	mg/Kg	10	0.10	100	100	70 - 130
4-BFB	1.02	1.02	mg/Kg	10	0.10	102	102	70 - 130

Laboratory Control Spikes

QCBatch: QC15737

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.1	9.85	mg/Kg	10	1	<1	101	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	1.01	1	mg/Kg	10	0.10	101	100	70 - 130
4-BFB	0.983	0.981	mg/Kg	10	0.10	98	98	70 - 130

Laboratory Control Spikes

QCBatch: QC15789

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	223	240	mg/Kg	1	250	<50.0	89	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
n-Triacontane	118	120	mg/Kg	1	150	79	80	70 - 130

Matrix Spikes

QCBatch: QC15737

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.25	12.0	mg/Kg	10	1	<1.00	92	26	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	1.03	1.21	mg/Kg	10	0.10	103	121	70 - 130
4-BFB	0.904	0.986	mg/Kg	10	0.10	90	99	70 - 130

Matrix Spikes

QCBatch: QC15789

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	219	225	mg/Kg	1	250	<50.0	88	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	111	112	mg/Kg	1	150	74	75	70 - 130

CCV (1) QCBatch: QC15736

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	11/14/01
Benzene		mg/L	0.10	0.1	100	85 - 115	11/14/01
Toluene		mg/L	0.10	0.101	101	85 - 115	11/14/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	11/14/01
M,P,O-Xylene		mg/L	0.30	0.304	101	85 - 115	11/14/01

ICV (1) QCBatch: QC15736

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	11/14/01
Benzene		mg/L	0.10	0.1	100	85 - 115	11/14/01
Toluene		mg/L	0.10	0.102	102	85 - 115	11/14/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	11/14/01
M,P,O-Xylene		mg/L	0.30	0.312	104	85 - 115	11/14/01

CCV (1) QCBatch: QC15737

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.99	99	75 - 125	11/14/01

CCV (2) QCBatch: QC15737

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.981	98	75 - 125	11/14/01

ICV (1) QCBatch: QC15737

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.07	107	75 - 125	11/14/01

CCV (1) QCBatch: QC15789

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	236	94	75 - 125	11/15/01
n-Octane		mg/L	250	119	47	75 - 125	11/15/01

CCV (2) QCBatch: QC15789

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	229	91	75 - 125	11/15/01
n-Octane		mg/L	250	118	47	75 - 125	11/15/01

CCV (3) QCBatch: QC15789

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	248	99	75 - 125	11/15/01
n-Octane		mg/L	250	121	48	75 - 125	11/15/01

ICV (1) QCBatch: QC15789

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	256	102	75 - 125	11/15/01
n-Octane		mg/L	250	126	50	75 - 125	11/15/01

AD110504

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

FAX #: 915-684-7587

306 West Wall Suite 1312 Midland, TX 79701

Project Name :

John Handvine

Sampler Signature:

John Knolly

Sampler Signature:

Date: _____ Time: _____

1102/01 1700

Received by: _____ Date: _____ Time: _____

Received at Laboratory by: _____ Date: _____ Time: _____

Temp
24 hr
Turn around
ASAP
11/14
11/14
number

[illegible]

REMARKS

TRACE ANALYSIS, 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: November 14, 2001

Order ID Number: A01110504

Project: EQ-110
TA Job Code: John Handrix
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
183816	C-1 (13-15')	Soil	11/1/01	8:00	11/3/01
183817	C-1 (33-35')	Soil	11/1/01	8:20	11/3/01
183818	C-2 (13-15')	Soil	11/1/01	9:00	11/3/01
183819	C-2 (33-35')	Soil	11/1/01	9:20	11/3/01
183820	C-3 (13-15')	Soil	11/1/01	9:40	11/3/01
183821	C-3 (33-35')	Soil	11/1/01	10:00	11/3/01
183822	C-4 (28-30')	Soil	11/1/01	10:20	11/3/01
183823	C-4 (33-35')	Soil	11/1/01	10:50	11/3/01
183824	C-5 (28-30')	Soil	11/1/01	12:10	11/3/01
183825	C-5 (33-35')	Soil	11/1/01	12:20	11/3/01

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.

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: 183816 - C-1 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.942	mg/Kg	10	0.10	94	72 - 128
4-BFB		0.894	mg/Kg	10	0.10	89	72 - 128

Sample: 183816 - C-1 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183816 - C-1 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.795	mg/Kg	10	0.10	80	70 - 130
4-BFB		0.800	mg/Kg	10	0.10	80	70 - 130

Sample: 183817 - C-1 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15655 Date Analyzed: 11/9/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13272 Date Prepared: 11/9/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		0.274	mg/Kg	10	0.001
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001

Continued ...

... Continued Sample: 183817 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.029	mg/Kg	10	0.001
Total BTEX		0.029	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.817	mg/Kg	10	0.10	82	72 - 128
4-BFB		0.876	mg/Kg	10	0.10	88	72 - 128

Sample: 183817 - C-1 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183817 - C-1 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15656 Date Analyzed: 11/9/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13272 Date Prepared: 11/9/01

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		0.928	mg/Kg	10	0.10	93	70 - 130
4-BFB		0.934	mg/Kg	10	0.10	93	70 - 130

Sample: 183818 - C-2 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15655 Date Analyzed: 11/9/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13272 Date Prepared: 11/9/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.836	mg/Kg	10	0.10	84	72 - 128
4-BFB		0.876	mg/Kg	10	0.10	88	72 - 128

Sample: 183818 - C-2 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183818 - C-2 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15656 Date Analyzed: 11/9/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13272 Date Prepared: 11/9/01

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		0.87	mg/Kg	10	0.10	87	70 - 130
4-BFB		0.942	mg/Kg	10	0.10	94	70 - 130

Sample: 183819 - C-2 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.933	mg/Kg	10	0.10	93	72 - 128
4-BFB		0.884	mg/Kg	10	0.10	88	72 - 128

Sample: 183819 - C-2 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183819 - C-2 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Report Date: November 14, 2001
EQ-110

Order Number: A01110504
John Handrix

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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		0.789	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.803	mg/Kg	10	0.10	80	70 - 130

Sample: 183820 - C-3 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.916	mg/Kg	10	0.10	92	72 - 128
4-BFB		0.864	mg/Kg	10	0.10	86	72 - 128

Sample: 183820 - C-3 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183820 - C-3 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.784	mg/Kg	10	0.10	78	70 - 130
4-BFB		0.803	mg/Kg	10	0.10	80	70 - 130

Sample: 183821 - C-3 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.971	mg/Kg	10	0.10	97	72 - 128
4-BFB		0.910	mg/Kg	10	0.10	91	72 - 128

Sample: 183821 - C-3 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183821 - C-3 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.834	mg/Kg	10	0.10	83	70 - 130
4-BFB		0.845	mg/Kg	10	0.10	84	70 - 130

Sample: 183822 - C-4 (28-30')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.216	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		0.216	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.940	mg/Kg	10	0.10	94	72 - 128
4-BFB		1.16	mg/Kg	10	0.10	116	72 - 128

Sample: 183822 - C-4 (28-30')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RD
DRO		162	mg/Kg	1	50

Sample: 183822 - C-4 (28-30')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RD
GRO		16	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.805	mg/Kg	10	0.10	80	70 - 130
4-BFB		1.28	mg/Kg	10	0.10	128	70 - 130

Sample: 183823 - C-4 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15655 Date Analyzed: 11/9/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13272 Date Prepared: 11/9/01

Param	Flag	Result	Units	Dilution	RD
MTBE		<0.010	mg/Kg	10	0.001
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		0.852	mg/Kg	10	0.10	85	72 - 128
4-BFB		0.890	mg/Kg	10	0.10	89	72 - 128

Sample: 183823 - C-4 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15466 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13122 Date Prepared: 11/5/01

Continued ...

... Continued Sample: 183823 Analysis: TPH DRO

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

Sample: 183823 - C-4 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15656 Date Analyzed: 11/9/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13272 Date Prepared: 11/9/01

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		0.879	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.958	mg/Kg	10	0.10	96	70 - 130

Sample: 183824 - C-5 (28-30')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.913	mg/Kg	10	0.10	91	72 - 128
4-BFB		0.877	mg/Kg	10	0.10	88	72 - 128

Sample: 183824 - C-5 (28-30')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15466 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13122 Date Prepared: 11/5/01

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

Sample: 183824 - C-5 (28-30')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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Param	Flag	Result	Units	Dilution	RDL
GRO		2.6	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.772	mg/Kg	10	0.10	77	70 - 130
4-BFB		0.747	mg/Kg	10	0.10	75	70 - 130

Sample: 183825 - C-5 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.980	mg/Kg	10	0.10	98	72 - 128
4-BFB		0.970	mg/Kg	10	0.10	97	72 - 128

Sample: 183825 - C-5 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15466 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13122 Date Prepared: 11/5/01

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

Sample: 183825 - C-5 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
GRO		2.11	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.926	mg/Kg	10	0.10	93	70 - 130
4-BFB		0.759	mg/Kg	10	0.10	76	70 - 130

Quality Control Report Method Blank

Method Blank QCBatch: QC15430

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.000	mg/Kg	10	0.10	97	72 - 128
4-BFB		0.000	mg/Kg	10	0.10	77	72 - 128

Method Blank QCBatch: QC15431

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0075	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.0013	mg/Kg	10	0.10	89	70 - 130

Method Blank QCBatch: QC15465

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

Method Blank QCBatch: QC15466

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

Method Blank QCBatch: QC15655

Param	Flag	Results	Units	Reporting Limit
MTBE		<0.010	mg/Kg	0.001
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		0.912	mg/Kg	10	0.10	91	72 - 128
4-BFB		0.827	mg/Kg	10	0.10	83	72 - 128

Method Blank QCBatch: QC15656

Param	Flag	Results	Units	Reporting Limit
GRO		<1.00	mg/Kg	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		0.883	mg/Kg	10	0.10	88	70 - 130

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC15430

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.988	0.996	mg/Kg	10	0.10	<0.001	99	1	80 - 120	20
Benzene	1.01	0.991	mg/Kg	10	0.10	<0.001	101	2	80 - 120	20
Toluene	0.941	0.935	mg/Kg	10	0.10	<0.001	94	1	80 - 120	20
Ethylbenzene	0.940	0.936	mg/Kg	10	0.10	<0.001	94	0	80 - 120	20
M,P,O-Xylene	2.84	2.81	mg/Kg	10	0.30	<0.001	95	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	1.04	1.01	mg/Kg	10	0.10	104	101	72 - 128
4-BFB	0.940	0.930	mg/Kg	10	0.10	94	93	72 - 128

Laboratory Control Spikes QCBatch: QC15431

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.8	11.2	mg/Kg	10	1	<1	108	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	0.923	0.945	mg/Kg	10	0.10	92	94	70 - 130
4-BFB	0.847	0.826	mg/Kg	10	0.10	85	83	70 - 130

Laboratory Control Spikes QCBatch: QC15465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	230	233	mg/Kg	1	250	<50.0	92	1	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: QC15466

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	241	234	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.

Laboratory Control Spikes QCBatch: QC15655

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.745	0.746	mg/Kg	10	0.10	<0.010	74	0	80 - 120	20
Benzene	0.834	0.835	mg/Kg	10	0.10	<0.010	83	0	80 - 120	20
Toluene	0.833	0.834	mg/Kg	10	0.10	<0.010	83	0	80 - 120	20
Ethylbenzene	0.834	0.832	mg/Kg	10	0.10	<0.010	83	0	80 - 120	20
M,P,O-Xylene	2.48	2.48	mg/Kg	10	0.30	<0.010	83	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	0.900	0.924	mg/Kg	10	0.10	90	92	72 - 128
4-BFB	0.974	0.968	mg/Kg	10	0.10	97	97	72 - 128

Laboratory Control Spikes QCBatch: QC15656

Continued ...

... Continued

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.59	9.50	mg/Kg	10	1	<1.00	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	1.14	1.04	mg/Kg	10	0.10	114	104	70 - 130
4-BFB	1.05	1.06	mg/Kg	10	0.10	105	106	70 - 130

Quality Control Report Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC15430

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.973	0.931	mg/Kg	10	0.10	<0.010	97	0	80 - 120	20
Benzene	0.884	0.849	mg/Kg	10	0.10	<0.010	88	0	80 - 120	20
Toluene	0.878	.85	mg/Kg	10	0.10	<0.010	88	0	80 - 120	20
Ethylbenzene	0.823	0.788	mg/Kg	10	0.10	<0.010	82	0	80 - 120	20
M,P,O-Xylene	2.42	2.32	mg/Kg	10	0.30	<0.010	81	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	0.908	0.861	mg/Kg	10	0.10	91	86	72 - 128
4-BFB	0.914	0.887	mg/Kg	10	0.10	91	89	72 - 128

Matrix Spikes QCBatch: QC15431

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.37	8.44	mg/Kg	10	1	<1	94	159	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	0.8	0.752	mg/Kg	10	0.10	80	75	70 - 130

Continued ...

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
4-BFB	0.745	¹ 0.692	mg/Kg	10	0.10	75	69	70 - 130

Matrix Spikes QCBatch: QC15465

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	242	226	mg/Kg	1	250	<50.0	97	7	70 - 130	20

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

Matrix Spikes QCBatch: QC15466

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	213	230	mg/Kg	1	250	<50.0	85	8	70 - 130	20

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

Matrix Spikes QCBatch: QC15655

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.256	0.288	mg/Kg	10	0.10	<0.010	26	12	80 - 120	20
Benzene	0.160	0.184	mg/Kg	10	0.10	<0.010	16	14	80 - 120	20
Toluene	0.574	0.625	mg/Kg	10	0.10	<0.010	57	8	80 - 120	20
Ethylbenzene	0.123	0.148	mg/Kg	10	0.10	<0.010	12	18	80 - 120	20
M,P,O-Xylene	0.607	0.643	mg/Kg	10	0.30	<0.010	20	6	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	0.852	0.918	mg/Kg	10	0.10	85	92	72 - 128
4-BFB	0.773	0.769	mg/Kg	10	0.10	77	77	72 - 128

Matrix Spikes QCBatch: QC15656

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.24	8.37	mg/Kg	10	1	<1.00	82	1	70 - 130	20

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

¹Low surrogate recovery on MSD. LCS/LCSD show the method to be in control.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.838	0.835	mg/Kg	10	0.10	84	84	70 - 130
4-BFB	0.877	0.879	mg/Kg	10	0.10	88	88	70 - 130

Quality Control Report Continuing Calibration Verification Standards

CCV (1) QCBatch: QC15430

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	11/5/01
Benzene		mg/L	0.10	0.1	100	85 - 115	11/5/01
Toluene		mg/L	0.10	0.097	97	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.096	96	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.285	95	85 - 115	11/5/01

CCV (2) QCBatch: QC15430

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	11/5/01
Benzene		mg/L	0.10	0.107	107	85 - 115	11/5/01
Toluene		mg/L	0.10	0.105	105	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.3	100	85 - 115	11/5/01

ICV (1) QCBatch: QC15430

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	11/5/01
Benzene		mg/L	0.10	0.099	99	85 - 115	11/5/01
Toluene		mg/L	0.10	0.0964	96	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.0944	94	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	11/5/01

CCV (1) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.897	89	75 - 125	11/5/01

CCV (2) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.861	86	75 - 125	11/5/01

ICV (1) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.883	88	75 - 125	11/5/01

CCV (1) QCBatch: QC15465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	238	95	75 - 125	11/6/01
n-Octane		mg/Kg	250	124	49	75 - 125	11/6/01

CCV (2) QCBatch: QC15465

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	11/6/01
n-Octane		mg/Kg	250	135	54	75 - 125	11/6/01

CCV (3) QCBatch: QC15465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	255	102	75 - 125	11/6/01
n-Octane		mg/Kg	250	132	52	75 - 125	11/6/01

ICV (1) QCBatch: QC15465

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	11/6/01
n-Octane		mg/Kg	250	126	50	75 - 125	11/6/01

CCV (1) QCBatch: QC15466

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	11/6/01
n-Octane		mg/Kg	250	127	50	75 - 125	11/6/01

ICV (1) QCBatch: QC15466

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	249	100	75 - 125	11/6/01
n-Octane		mg/Kg	250	131	52	75 - 125	11/6/01

CCV (1) QCBatch: QC15655

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0773	77	85 - 115	11/9/01
Benzene		mg/L	0.10	0.084	84	85 - 115	11/9/01
Toluene		mg/L	0.10	0.0847	85	85 - 115	11/9/01
Ethylbenzene		mg/L	0.10	0.085	85	85 - 115	11/9/01
M,P,O-Xylene		mg/L	0.30	0.253	84	85 - 115	11/9/01

ICV (1) QCBatch: QC15655

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0768	77	85 - 115	11/9/01
Benzene		mg/L	0.10	0.084	84	85 - 115	11/9/01
Toluene		mg/L	0.10	0.084	84	85 - 115	11/9/01
Ethylbenzene		mg/L	0.10	0.0836	84	85 - 115	11/9/01
M,P,O-Xylene		mg/L	0.30	0.249	83	85 - 115	11/9/01

CCV (1) QCBatch: QC15656

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.905	90	75 - 125	11/9/01

CCV (2) QCBatch: QC15656

Report Date: November 14, 2001
EQ-110

Order Number: A01110504
John Handrix

Page Number: 18 of 18
Monument, New Mexico

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.876	87	75 - 125	11/9/01

ICV (1) QCBatch: QC15656

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.993	99	75 - 125	11/9/01

Report Date: November 9, 2001 Order Number: A01110502
EQ-110 John Handrix

Page Number: 1 of 1
Monument, New Mexico

Summary Report

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

Report Date: November 9, 2001

Order ID Number: A01110502

Project: EQ-110
TA Job Code: John Handrix
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
183803	C-6 (13-15')	Soil	11/1/01	13:00	11/3/01
183804	C-6 (33-35')	Soil	11/1/01	13:20	11/3/01
183805	C-7 (13-15')	Soil	11/1/01	8:10	11/3/01
183806	C-7 (33-35')	Soil	11/1/01	14:10	11/3/01
183807	C-8 (13-15')	Soil	11/1/01	14:50	11/3/01
183808	C-8 (33-35')	Soil	11/1/01	8:30	11/3/01

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	BTEX						TPH DRO	TPH GRO
	MTBE (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
183803 - C-6 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
183804 - C-6 (33-35')	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
183805 - C-7 (13-15')	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<50.0	<2.00
183806 - C-7 (33-35')	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
183807 - C-8 (13-15')	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<50.0	<2.00
183808 - C-8 (33-35')	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1

TRACE ANALYSIS, 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: November 8, 2001

Order ID Number: A01110502

Project: EQ-110
TA Job Code: John Handrix
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
183803	C-6 (13-15')	Soil	11/1/01	13:00	11/3/01
183804	C-6 (33-35')	Soil	11/1/01	13:20	11/3/01
183805	C-7 (13-15')	Soil	11/1/01	8:10	11/3/01
183806	C-7 (33-35')	Soil	11/1/01	14:10	11/3/01
183807	C-8 (13-15')	Soil	11/1/01	14:50	11/3/01
183808	C-8 (33-35')	Soil	11/1/01	8:30	11/3/01

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.

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: 183803 - C-6 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.983	mg/Kg	10	0.10	98	72 - 128
4-BFB		0.898	mg/Kg	10	0.10	90	72 - 128

Sample: 183803 - C-6 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183803 - C-6 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.850	mg/Kg	10	0.10	85	70 - 130
4-BFB		0.779	mg/Kg	10	0.10	78	70 - 130

Sample: 183804 - C-6 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001

Continued ...

... Continued Sample: 183804 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
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		0.955	mg/Kg	10	0.10	96	72 - 128
4-BFB		0.896	mg/Kg	10	0.10	90	72 - 128

Sample: 183804 - C-6 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183804 - C-6 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.814	mg/Kg	10	0.10	81	70 - 130
4-BFB		0.807	mg/Kg	10	0.10	81	70 - 130

Sample: 183805 - C-7 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.020	mg/Kg	20	0.001
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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	¹	1.03	mg/Kg	20	0.10	52	72 - 128

Continued ...

¹Low surrogate recovery due to matrix difficulties.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB	2	0.951	mg/Kg	20	0.10	48	72 - 128

Sample: 183805 - C-7 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183805 - C-7 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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	3	1.02	mg/Kg	20	0.10	51	70 - 130
4-BFB	4	1.09	mg/Kg	20	0.10	55	70 - 130

Sample: 183806 - C-7 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		1.04	mg/Kg	10	0.10	104	72 - 128
4-BFB		0.986	mg/Kg	10	0.10	99	72 - 128

Sample: 183806 - C-7 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

²Low surrogate recovery due to matrix difficulties.

³Low surrogate recovery due to matrix difficulties.

⁴Low surrogate recovery due to matrix difficulties.

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

Sample: 183806 - C-7 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.875	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.895	mg/Kg	10	0.10	90	70 - 130

Sample: 183807 - C-8 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.020	mg/Kg	20	0.001
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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	⁵	1.06	mg/Kg	20	0.10	53	72 - 128
4-BFB	⁶	0.936	mg/Kg	10	0.10	94	72 - 128

Sample: 183807 - C-8 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183807 - C-8 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

⁵Low surrogate recovery due to matrix difficulties.⁶Low surrogate recovery due to matrix difficulties.

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	7	0.902	mg/Kg	20	0.10	45	70 - 130
4-BFB	8	0.991	mg/Kg	20	0.10	50	70 - 130

Sample: 183808 - C-8 (33-35')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC15430 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: S 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.010	mg/Kg	10	0.001
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		0.972	mg/Kg	10	0.10	97	72 - 128
4-BFB		0.909	mg/Kg	10	0.10	91	72 - 128

Sample: 183808 - C-8 (33-35')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC15465 Date Analyzed: 11/6/01
Analyst: MM Preparation Method: 3550 B Prep Batch: PB13121 Date Prepared: 11/5/01

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

Sample: 183808 - C-8 (33-35')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC15431 Date Analyzed: 11/5/01
Analyst: CG Preparation Method: 5035 Prep Batch: PB13104 Date Prepared: 11/5/01

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		0.831	mg/Kg	10	0.10	83	70 - 130
4-BFB		0.855	mg/Kg	10	0.10	86	70 - 130

⁷Low surrogate recovery due to matrix difficulties.⁸Low surrogate recovery due to matrix difficulties.

Quality Control Report Method Blank

Method Blank QCBatch: QC15430

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.000	mg/Kg	10	0.10	97	72 - 128
4-BFB		0.000	mg/Kg	10	0.10	77	72 - 128

Method Blank QCBatch: QC15431

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0075	mg/Kg	10	0.10	88	70 - 130
4-BFB		0.0013	mg/Kg	10	0.10	89	70 - 130

Method Blank QCBatch: QC15465

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

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC15430

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.988	0.996	mg/Kg	10	0.10	<0.001	99	1	80 - 120	20
Benzene	1.01	0.991	mg/Kg	10	0.10	<0.001	101	2	80 - 120	20

Continued ...

... Continued

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Toluene	0.941	0.935	mg/Kg	10	0.10	<0.001	94	1	80 - 120	20
Ethylbenzene	0.940	0.936	mg/Kg	10	0.10	<0.001	94	0	80 - 120	20
M,P,O-Xylene	2.84	2.81	mg/Kg	10	0.30	<0.001	95	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	1.04	1.01	mg/Kg	10	0.10	104	101	72 - 128
4-BFB	0.940	0.930	mg/Kg	10	0.10	94	93	72 - 128

Laboratory Control Spikes

QCBatch: QC15431

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.8	11.2	mg/Kg	10	1	<1	108	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	0.923	0.945	mg/Kg	10	0.10	92	94	70 - 130
4-BFB	0.847	0.826	mg/Kg	10	0.10	85	83	70 - 130

Laboratory Control Spikes

QCBatch: QC15465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	230	233	mg/Kg	1	250	<50.0	92	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
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC15430

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.973	0.931	mg/Kg	10	0.10	<0.010	97	0	80 - 120	20
Benzene	0.884	0.849	mg/Kg	10	0.10	<0.010	88	0	80 - 120	20
Toluene	0.878	.85	mg/Kg	10	0.10	<0.010	88	0	80 - 120	20
Ethylbenzene	0.823	0.788	mg/Kg	10	0.10	<0.010	82	0	80 - 120	20
M,P,O-Xylene	2.42	2.32	mg/Kg	10	0.30	<0.010	81	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	0.908	0.861	mg/Kg	10	0.10	91	86	72 - 128
4-BFB	0.914	0.887	mg/Kg	10	0.10	91	89	72 - 128

Matrix Spikes QCBatch: QC15431

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.37	8.44	mg/Kg	10	1	<1	94	159	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	0.8	0.752	mg/Kg	10	0.10	80	75	70 - 130
4-BFB	0.745	⁹ 0.692	mg/Kg	10	0.10	75	69	70 - 130

Matrix Spikes QCBatch: QC15465

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	242	226	mg/Kg	1	250	<50.0	97	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: QC15430

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	11/5/01
Benzene		mg/L	0.10	0.1	100	85 - 115	11/5/01
Toluene		mg/L	0.10	0.097	97	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.096	96	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.285	95	85 - 115	11/5/01

CCV (2) QCBatch: QC15430

⁹Low surrogate recovery on MSD. LCS/LCSD show the method to be in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.11	110	85 - 115	11/5/01
Benzene		mg/L	0.10	0.107	107	85 - 115	11/5/01
Toluene		mg/L	0.10	0.105	105	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.3	100	85 - 115	11/5/01

ICV (1) QCBatch: QC15430

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	11/5/01
Benzene		mg/L	0.10	0.099	99	85 - 115	11/5/01
Toluene		mg/L	0.10	0.0964	96	85 - 115	11/5/01
Ethylbenzene		mg/L	0.10	0.0944	94	85 - 115	11/5/01
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	11/5/01

CCV (1) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.897	89	75 - 125	11/5/01

CCV (2) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.861	86	75 - 125	11/5/01

ICV (1) QCBatch: QC15431

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.883	88	75 - 125	11/5/01

CCV (1) QCBatch: QC15465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	238	95	75 - 125	11/6/01
n-Octane		mg/Kg	250	124	49	75 - 125	11/6/01

CCV (2) QCBatch: QC15465

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	11/6/01
n-Octane		mg/Kg	250	135	54	75 - 125	11/6/01

CCV (3) QCBatch: QC15465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	255	102	75 - 125	11/6/01
n-Octane		mg/Kg	250	132	52	75 - 125	11/6/01

ICV (1) QCBatch: QC15465

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	11/6/01
n-Octane		mg/Kg	250	126	50	75 - 125	11/6/01

Report Date: August 31, 2001 Order Number: A01082106
EQ-110 John Handrix

Page Number: 1 of 1
Lea County, New Mexico

Summary Report

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

Report Date: August 31, 2001

Order ID Number: A01082106

Project: EQ-110
TA Job Code: John Handrix
Casualty Code: Lea County, New Mexico
Project Location: EQ-110
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
177467	Comp #1	Soil	8/17/01	16:30	8/21/01
177468	Comp #2	Soil	8/17/01	16:38	8/21/01
177469	Comp #3	Soil	8/17/01	16:45	8/21/01
177470	Comp #4	Soil	8/17/01	16:55	8/21/01
177471	Comp #5	Soil	8/17/01	17:11	8/21/01

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	BTEX					TPH TRPHC
	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	
177467 - Comp #1	<0.010	<0.01	0.17	0.171	0.341	2610
177468 - Comp #2	<0.010	<0.01	0.117	0.172	0.289	3800
177469 - Comp #3	<0.010	0.088	0.177	0.21	0.289	3050
177470 - Comp #4	<0.010	0.191	0.271	0.258	0.72	2740
177471 - Comp #5	<0.010	0.044	0.268	0.378	0.69	3600

TRACE ANALYSIS, 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: August 31, 2001

Order ID Number: A01082106

Project: EQ-110
TA Job Code: John Handrix
Casualty Code: Lea County, New Mexico
Project Location: EQ-110
Project Address:
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
177467	Comp #1	Soil	8/17/01	16:30	8/21/01
177468	Comp #2	Soil	8/17/01	16:38	8/21/01
177469	Comp #3	Soil	8/17/01	16:45	8/21/01
177470	Comp #4	Soil	8/17/01	16:55	8/21/01
177471	Comp #5	Soil	8/17/01	17:11	8/21/01

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.

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 Trace Analysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 177467 - Comp #1

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC13546 Date Analyzed: 8/22/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB11548 Date Prepared: 8/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.01	mg/Kg	10	0.001
Ethylbenzene		0.17	mg/Kg	10	0.001
M,P,O-Xylene		0.171	mg/Kg	10	0.001
Total BTEX		0.341	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	1	1.5	mg/Kg	10	0.10	152	72 - 128
4-BFB	2	1.8	mg/Kg	10	0.10	153	72 - 128

Sample: 177467 - Comp #1

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC13699 Date Analyzed: 8/30/01
Analyst: JJ Preparation Method: E 3550B Prep Batch: PB11694 Date Prepared: 8/23/01

Param	Flag	Result	Units	Dilution	RDL
TRPHC		2610	mg/Kg	1	10

Sample: 177468 - Comp #2

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC13546 Date Analyzed: 8/22/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB11548 Date Prepared: 8/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.01	mg/Kg	10	0.001
Ethylbenzene		0.117	mg/Kg	10	0.001
M,P,O-Xylene		0.172	mg/Kg	10	0.001
Total BTEX		0.289	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.9	mg/Kg	10	0.10	93	72 - 128
4-BFB		2	mg/Kg	10	0.10	89	72 - 128

Sample: 177468 - Comp #2

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC13699 Date Analyzed: 8/30/01
Analyst: JJ Preparation Method: E 3550B Prep Batch: PB11694 Date Prepared: 8/23/01

¹High surrogate recovery due to peak interference.²High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
TRPHC		3800	mg/Kg	1	10

Sample: 177469 - Comp #3

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC13546 Date Analyzed: 8/22/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB11548 Date Prepared: 8/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.088	mg/Kg	10	0.001
Ethylbenzene		0.177	mg/Kg	10	0.001
M,P,O-Xylene		0.21	mg/Kg	10	0.001
Total BTEX		0.289	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	³	1.5	mg/Kg	10	0.10	152	72 - 128
4-BFB	⁴	1.8	mg/Kg	10	0.10	149	72 - 128

Sample: 177469 - Comp #3

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC13699 Date Analyzed: 8/30/01
Analyst: JJ Preparation Method: E 3550B Prep Batch: PB11694 Date Prepared: 8/23/01

Param	Flag	Result	Units	Dilution	RDL
TRPHC		3050	mg/Kg	1	10

Sample: 177470 - Comp #4

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC13546 Date Analyzed: 8/22/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB11548 Date Prepared: 8/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.191	mg/Kg	10	0.001
Ethylbenzene		0.271	mg/Kg	10	0.001
M,P,O-Xylene		0.258	mg/Kg	10	0.001
Total BTEX		0.72	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		2.0	mg/Kg	10	0.10	79	72 - 128
4-BFB		2	mg/Kg	10	0.10	99	72 - 128

Sample: 177470 - Comp #4

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC13699 Date Analyzed: 8/30/01
Analyst: JJ Preparation Method: E 3550B Prep Batch: PB11694 Date Prepared: 8/23/01

³High surrogate recovery due to peak interference.

⁴High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
TRPHC		2740	mg/Kg	1	10

Sample: 177471 - Comp #5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC13546 Date Analyzed: 8/22/01
Analyst: CG Preparation Method: E 5035 Prep Batch: PB11548 Date Prepared: 8/22/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.044	mg/Kg	10	0.001
Ethylbenzene		0.268	mg/Kg	10	0.001
M,P,O-Xylene		0.378	mg/Kg	10	0.001
Total BTEX		0.69	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	⁵	1.5	mg/Kg	10	0.10	153	72 - 128
4-BFB	⁶	2.4	mg/Kg	10	0.10	197	72 - 128

Sample: 177471 - Comp #5

Analysis: TPH Analytical Method: E 418.1 QC Batch: QC13699 Date Analyzed: 8/30/01
Analyst: JJ Preparation Method: E 3550B Prep Batch: PB11694 Date Prepared: 8/23/01

Param	Flag	Result	Units	Dilution	RDL
TRPHC		3600	mg/Kg	1	10

⁵High surrogate recovery due to peak interference.

⁶High surrogate recovery due to peak interference.

Quality Control Report Method Blank

Method Blank QCBatch: QC13546

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		0.802	mg/Kg	10	0.10	80	72 - 128
4-BFB		0.770	mg/Kg	10	0.10	77	72 - 128

Method Blank QCBatch: QC13699

Param	Flag	Results	Units	Reporting Limit
TRPHC		<10.0	mg/Kg	10

Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC13546

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.934	0.935	mg/Kg	10	0.10	<0.010	93	0	80 - 120	20
Benzene	0.827	0.848	mg/Kg	10	0.10	<0.010	82	2	80 - 120	20
Toluene	0.832	0.846	mg/Kg	10	0.10	<0.010	83	2	80 - 120	20
Ethylbenzene	0.827	0.848	mg/Kg	10	0.10	<0.010	83	2	80 - 120	20
M,P,O-Xylene	2.27	2.33	mg/Kg	10	0.30	<0.010	75	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	0.861	0.915	mg/Kg	10	0.10	86	91	72 - 128
4-BFB	0.746	0.804	mg/Kg	10	0.10	74	80	72 - 128

Laboratory Control Spikes QCBatch: QC13699

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
TRPHC	214	212	mg/Kg	1	250	<10.0	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: QC13546

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	2.26	2.27	mg/Kg	20	0.10	<0.020	113	0	80 - 120	20
Toluene	3.21	4.07	mg/Kg	20	0.10	0.447	138	26	80 - 120	20
Ethylbenzene	3.61	3.65	mg/Kg	20	0.10	0.992	131	1	80 - 120	20
M,P,O-Xylene	11.39	10.4	mg/Kg	20	0.30	2.75	144	12	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	2.37	2.26	mg/Kg	20	0.10	119	113	72 - 128
4-BFB	3.03	3.01	mg/Kg	20	0.10	152	151	72 - 128

Matrix Spikes QCBatch: QC13699

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
TRPHC	211	217	mg/Kg	1	250	<10.0	84	2	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: QC13546

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.1	100	85 - 115	8/22/01
Benzene		mg/Kg	0.10	0.088	88	85 - 115	8/22/01
Toluene		mg/Kg	0.10	0.090	90	85 - 115	8/22/01
Ethylbenzene		mg/Kg	0.10	0.089	89	85 - 115	8/22/01
M,P,O-Xylene		mg/Kg	0.30	0.247	82	85 - 115	8/22/01

CCV (2) QCBatch: QC13546

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.105	105	85 - 115	8/22/01
Benzene		mg/Kg	0.10	0.093	93	85 - 115	8/22/01
Toluene		mg/Kg	0.10	0.093	93	85 - 115	8/22/01
Ethylbenzene		mg/Kg	0.10	0.092	92	85 - 115	8/22/01
M,P,O-Xylene		mg/Kg	0.30	0.255	85	85 - 115	8/22/01.

ICV (1) QCBatch: QC13546

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.100	100	85 - 115	8/22/01
Benzene		mg/Kg	0.10	0.108	108	85 - 115	8/22/01
Toluene		mg/Kg	0.10	0.107	107	85 - 115	8/22/01
Ethylbenzene		mg/Kg	0.10	0.106	106	85 - 115	8/22/01
M,P,O-Xylene		mg/Kg	0.30	0.305	101	85 - 115	8/22/01

CCV (1) QCBatch: QC13699

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	104	104	75 - 125	8/30/01

CCV (2) QCBatch: QC13699

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	107	107	75 - 125	8/30/01

ICV (1) QCBatch: QC13699

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	106	106	75 - 125	8/30/01