AP - 17

STAGE 2 WORKPLANS

Date: 10-17-13

Hansen, Edward J., EMNRD

From: Camille Bryant <cbryant@novatraining.cc>
Sent: Thursday, October 17, 2013 2:08 PM
To: Hansen, Edward J., EMNRD
Cc: jpdann@paalp.com
Subject: Plains TNM 97-17 Release Site (AP-017)
Attachments: 10813 Report.pdf

Mr. Hansen,

As per our phone conversation on October 7, 2013, regarding soil activities to be conducted at the Plains TNM 97-17 Release Site (AP-017), Nova Safety & Environmental, on behalf of Plains, purposes to apply three (3) feet of soil from the surrounding area to the surface of the previously backfilled excavation. The native sand dunes surrounding the site will be utilized to apply the additional three (3) feet of cover to the excavated area. A soil sample (Background) was collected from the native soil and submitted to TraceAnalysis, Inc. for TPH analysis. Laboratory analytical results indicated the soil sample exhibited a TPH concentration of 52.6 mg/Kg. The laboratory report is attached. NOVA will commence with the described activities on Monday, October 21. On completion of soil activities the disturbed areas will be re-vegetated with a seed mixture approved by the landowner. Please contact me with any questions.

Thank you,

Camille Bryant
Nova Safety & Environmental
2057 Commerce
Midland, Texas
432.520.7720 (Office)
432.520.7701 (Fax)
575.605.7210 (Cell)

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Camille Bryant
Nova Safety & Environmental
2057 Commerce St.
Midland, TX, 79703

Report Date: October 17, 2013

Work Order: 13100921 [redacted]

Project Location: Eunice, NM
Project Name: 97-17
Project Number: TNM 97-17
SRS #: TNM 97-17

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
343545	Background	soil	2013-10-08	11:00	2013-10-09

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.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Report Contents

Case Narrative

Samples for project 97-17 were received by TraceAnalysis, Inc. on 2013-10-09 and assigned to work order 13100921. Samples for work order 13100921 were received intact at a temperature of 5.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
TPH DRO - NEW	S 8015 D	89771	2013-10-15 at 12:00	105994	2013-10-16 at 11:21
TPH GRO	S 8015 D	89670	2013-10-11 at 08:40	105913	2013-10-11 at 06:15

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 13100921 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 343545 - Background

Laboratory:	Midland				
Analysis:	TPH DRO - NEW	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	105994	Date Analyzed:	2013-10-16	Analyzed By:	KC
Prep Batch:	89771	Sample Preparation:	2013-10-15	Prepared By:	KC

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
DRO	B	1	**52.6**		mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			118	mg/Kg	1	100	118	76.3 - 192.6

Sample: 343545 - Background

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	105913	Date Analyzed:	2013-10-11	Analyzed By:	AK
Prep Batch:	89670	Sample Preparation:	2013-10-11	Prepared By:	AK

Parameter	Flag	Cert	Result	RL Result	Units	Dilution	RL
GRO	U	1	<4.00		mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.63	mg/Kg	1	2.00	82	70 - 130
4-Bromofluorobenzene (4-BFB)			2.53	mg/Kg	1	2.00	126	70 - 130

Method Blanks

Method Blank (1) QC Batch: 105913

QC Batch: 105913 | Date Analyzed: 2013-10-11 | Analyzed By: AK
Prep Batch: 89670 | QC Preparation: 2013-10-11 | Prepared By: AK

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	<2.32	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.01	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			2.31	mg/Kg	1	2.00	116	70 - 130

Method Blank (1) QC Batch: 105994

QC Batch: 105994 | Date Analyzed: 2013-10-16 | Analyzed By: KC
Prep Batch: 89771 | QC Preparation: 2013-10-15 | Prepared By: KC

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		1	10.4	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			95.2	mg/Kg	1	100	95	64.1 - 164.4

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 105913 | Date Analyzed: 2013-10-11 | Analyzed By: AK
Prep Batch: 89670 | QC Preparation: 2013-10-11 | Prepared By: AK

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	19.6	mg/Kg	1	20.0	<2.32	98	70 - 130

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	18.6	mg/Kg	1	20.0	<2.32	93	70 - 130	5	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	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.03	1.92	mg/Kg	1	2.00	102	96	70 - 130
4-Bromofluorobenzene (4-BFB)	2.14	2.28	mg/Kg	1	2.00	107	114	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 105994 | Date Analyzed: 2013-10-16 | Analyzed By: KC
Prep Batch: 89771 | QC Preparation: 2013-10-15 | Prepared By: KC

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	267	mg/Kg	1	250	10.4	103	53.8 - 129

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

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	280	mg/Kg	1	250	10.4	108	53.8 - 129	5	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	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	107	107	mg/Kg	1	100	107	107	61.3 - 170.4

Matrix Spike (MS-1) Spiked Sample:

QC Batch: 105913 | Date Analyzed: 2013-10-11 | Analyzed By: AK
Prep Batch: 89670 | QC Preparation: 2013-10-11 | Prepared By: AK

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	19.4	mg/Kg	1	20.0	<2.32	97	70 - 130

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	20.4	mg/Kg	1	20.0	<2.32	102	70 - 130	5	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	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.31	2.04	mg/Kg	1	2	116	102	70 - 130
4-Bromofluorobenzene (4-BFB)	2.55	2.24	mg/Kg	1	2	128	112	70 - 130

Matrix Spike (MS-1) Spiked Sample: 343545

QC Batch: 105994 | Date Analyzed: 2013-10-16 | Analyzed By: KC
Prep Batch: 89771 | QC Preparation: 2013-10-15 | Prepared By: KC

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		1	304	mg/Kg	1	250	52.6	100	29 - 168.5

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

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		1	284	mg/Kg	1	250	52.6	92	29 - 168.5	7	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	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	116	112	mg/Kg	1	100	116	112	59.5 - 168.9

Calibration Standards

Standard (CCV-1)

QC Batch: 105913 | Date Analyzed: 2013-10-11 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.02	102	80 - 120	2013-10-11

Standard (CCV-2)

QC Batch: 105913 | Date Analyzed: 2013-10-11 | Analyzed By: AK

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.955	96	80 - 120	2013-10-11

Standard (CCV-1)

QC Batch: 105994 | Date Analyzed: 2013-10-16 | Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	268	107	80 - 120	2013-10-16

Standard (CCV-2)

QC Batch: 105994 | Date Analyzed: 2013-10-16 | Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	276	110	80 - 120	2013-10-16

Standard (CCV-3)

QC Batch: 105994 | Date Analyzed: 2013-10-16 | Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	277	111	80 - 120	2013-10-16

Standard (CCV-4)

QC Batch: 105994 | Date Analyzed: 2013-10-16 | Analyzed By: KC

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		1	mg/Kg	250	285	114	80 - 120	2013-10-16

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704392-12-4	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
MI1	Split peak or shoulder peak
MI2	Instrument software did not integrate
MI3	Instrument software misidentified the peak
MI4	Instrument software integrated improperly
MI5	Baseline correction
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

LAB Order ID # 13100921

Page 1 of 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

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1 (888) 588-3443

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Flora Safety & Env. Phone #: 432-520-7720

Address: (Street, City, Zip) 2057 Commerce, Midland Fax #: 432-520-7701

Contact Person: Camille Bryant E-mail:

Invoice to: (If different from above) Plains

Project #: TDM 97-17 Project Name: TDM 97-17

Project Location (including state): Lea Co, NM Sampler Signature: Camille Bryant

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	(TPH 8015 GRO / DRO / TVHC)	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content	Cl, F, SO_4, NO_3-N, NO_2-N, PO_4-P, Alkalinity	Na, Ca, Mg, K, TDS, EC						Turn Around Time if different from standard	Hold
343545	Background	1	4oz		X							X		10/8	11:00			X	X																						

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
Camille Bryant	Flora	10/9/13	1:24	[illegible]	NOVA	10/9/13	13:24	INST ____ °C
								OBS ____ °C
								COR ____ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
[illegible]	NOVA	10/9/13	13:45	[illegible]	TA	10.9.13	1345	INST ____ °C
								OBS ____ °C
								COR ____ °C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
								INST ____ °C
								OBS ____ °C
								COR ____ °C

LAB USE ONLY

Intact (Y) N

Headspace Y/N/NA

5°C

Log-in-Review ____

REMARKS:

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

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

Carrier # ____

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