NM2-0004

Annual Report

Date: January 13 2005



BENSON-MONTIN-GREER DRILLING CORP.

January 13, 2005

BMG

Ms. Martyne J. Kieling NMOCD Environmental Bureau 1220 S. St. Francis Drive Santa Fe, NM 87505



Re: Annual Report for Benson-Montin-Greer Drilling Corp. Centralized Surface Waste Management Facility (Permit No. NM-02-0004) located in NW/4 Section 20, Township 25 North, Range 1 East, NMPM, Rio Arriba County, New Mexico

Dear Ms. Kieling:

Benson-Montin-Greer Drilling Corp. (BMG) submits the following Annual Report for the BMG Centralized Surface Waste Management Facility located in the NW/4 of Section 20, Township 25 North, Range 1 East, NMPM, Rio Arriba County, New Mexico. This Annual Report is to be submitted before March 1, 2005 as required by Permit No. NM-02-0004.

- 1. Attachment I is treatment zone monitoring results.
- 2. Attachment II is Monthly Inspection of leak detection system.
- 3. Attachment III is evaporation pond water analysis.
- 4. There are no below grade sumps to monitor.
- 5. There were no spills of record at the facility in the past year.
- 6. BMG continues to maintain records at the facility with internal forms.
- 7. There were no new structures installed at the facility in the past year.

Should you have any questions or require additional information, please contact me at the letterhead address and telephone number.

Sincerely,

Wellunon

Mike Dimond Vice-President

MD/tlp

cc: Mr. Denny Foust, NMOCD with attachments MD, BG, file

4900 College Boulevard, Farmington, NM 87402 (505) 325-8874 Fax (505) 327-9207

ATTACHMENT I 2004 Treatment Zone Sample Analysis Results

Animas Environmental Services, LLC

624 E. Comanche • Farmington, NM 87401 TEL 505-564-2281 • FAX 505-324-2022

August 12, 2004

Mike Dimond Benson-Montin-Greer Drilling Corporation 4900 College Blvd Farmington, New Mexico 87402

RE: Results of June, 2004, Treatment Zone Monitoring at BMG's Centralized Surface Waste Management Facility, Rio Arriba County, New Mexico

Dear Mr. Dimond:

On June 21, 2004, Animas Environmental Services, LLC (AES) completed the quarterly treatment zone monitoring and sampling of the Benson-Montin-Greer Drilling Corporation (BMG) Centralized Surface Waste Management Facility, located near the Canada Ojitos Unit (COU) Gas Plant in Rio Arriba County, New Mexico.

Sampling Procedures

As required by the New Mexico Oil Conservation Division (NMOCD) permit for this facility, one random soil sample was collected from each of the four treatment cells. Sample collection depth for each treatment cell ranged from 2 feet to 2.58 feet below surface grade. A stainless steel hand auger, which was decontaminated between each sampling point to prevent cross-contamination, was used to collect the samples. Once collected, each sample container was labeled with the date, sample location, sample type and sampler's initials. The containers were placed in a chilled, insulated cooler at 4°C until delivered to the analytical laboratory, Pinnacle Laboratories, Albuquerque, New Mexico. A Chain of Custody was completed at the time the samples were delivered to the laboratory.

Laboratory Analytical Methods

Each soil sample was analyzed for total petroleum hydrocarbons (TPH) per EPA Method 418.1 and benzene, toluene, ethylbenzene and xylene (BTEX) per EPA Method 8021. Samples collected for BTEX analysis were field-preserved with methanol at the time of collection with materials and equipment supplied by the laboratory.

Treatment Zone Monitoring Results

Based on AES's observations of the treatment cells at the time of sample collection, it is apparent that treatment cells #1, #2, and #3 are being tilled on a frequent basis. Soils within these cells were very loose, and no weeds or other vegetation, which would indicate infrequent tilling, were observed. No hydrocarbon stained soils were observed on the surface of any of the cells, and no hydrocarbon odors were noted during sample

collection. Treatment cell #4 appears to have not been in use for quite some time, and grasses and small herbaceous plants were observed across the entire cell.

Laboratory analysis results for all samples collected were below the method detection limit. The sample location for each treatment cell, as well as the associated analytical results, are presented on Figure 1. Laboratory analytical reports have also attached.

The next monitoring and sampling event is scheduled to be completed during the week of September 20, 2004. During this event, in addition to TPH and BTEX samples, samples will also be collected for analysis of major cations/anions and RCRA 8 metals, as required by the NMOCD permit for the facility.

If you have any questions regarding the sampling procedures or results, please do not hesitate to contact me or Ross Kennemer at (505) 564-2281.

Sincerely,

Elizabeth D. Mandaly Elizabeth McNally, PE

Attachments: Figure 1 Treatment Zone Monitoring Locations Pinnacle Laboratory Analytical Reports

Files/2004/BMG/Landfarm Sampling/gcbmg081204.doc



LANDFARM WITH TREATMENT ZONE MONITORING LOCATIONS JUNE, 2004

BMG CENTRALIZED SURFACE WASTE MANAGEMENT FACILITY NW1/4, NW1/4, SEC. 20, T25N, R1E, RIO ARRIBA, CO., NM

Drn. By:	MRK	Date:	08/11/04	
Rev. By:		Date:		
file:bmg/land	dfarm/sp.dwg			



Animas Environmental Services, LLC

LEGEND

SAMPLE COLLECTION POINT

NOTE: BTEX ANALYZED PER EPA METHOD 8021 AND TPH ANALYZED PER EPA METHOD 418.1. ALL RESULTS REPORTED AS MG/KG OR PPM.





Pinnacle Lab ID number July 06, 2004 406083

ANIMAS ENVIRONMENTAL SERVICES 624 EAST COMMANCHE FARMINGTON, NM 87401

Project Name Project Number BMG LANDFARM SAMPLING 040605

Attention: ROSS KENNEMER

On 06/22/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

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

MR: jt

Enclosure



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

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6/21/04
6/21/04
6/21/04



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GENERAL CHEMISTRY RESULTS EPA 418.1

CLIENT : ANIMAS E PROJECT # : 040605 PROJECT NAME : BMG LAN			ENVIRONMENTAL	SERVICES	PINNACLE I. DATE RECE ANALYST	: 406083 : 06/22/04 : BP	
SAMPLE	in the second			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	CELL #1 @ 2	28" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1
02	CELL #2 @ 3	1" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1
03	CELL #3 @ 2	6" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1
PARAME	TER	DET. LIMIT	UNITS	CELL #1 @ 28" BGS	CELL #2 @ 31" BGS	CELL #3 @ 26" BGS	
PETROLE	PETROLEUM HYDROCARBONS		20	MG/KG	< 20	< 20	< 20

CHEMIST NOTES: N/A



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GENERAL CHEMISTRY RESULTS EPA 418.1

CLIENT : ANIMAS PROJECT # : 040605			VIRONMENTAL	SERVICES	PINNACLE I.D DATE RECEIN). /ED	: 406083 : 06/22/04	
PROJECT NAME : BMG LAN			ARM SAMPLIN	G	ANALYST		: BP	
SAMPLE	Le West Arris		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	DATE	DATE	DATE	DIL.	
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
04	CELL #4 @ 24	" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1	
PARAMETER			DET. LIMIT	UNITS	CELL #4 @ 24" BGS			
PETROLEUM HYDROCARBONS			20	MG/KG	< 20	1.52 2.5. 5	Constant of the	

CHEMIST NOTES: N/A



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GENERAL CHEMISTRY - REAGENT BLANK EPA 418.1

CLIENT PROJECT # PROJECT NAME	: ANIMA : 040605 : BMG L	S ENVIRONMEN 5 ANDFARM SAMP	TAL SERVICE		PINNACLE I.D. SAMPLE MATRIX UNITS	: 406083 : NON-AC : MG/KG	
	20-	REAGENT	SAMPLE	DATE			The Part of the
PARAMETER		BLANK I.D.	RESULT	ANALYZED	ANALYST		
PETROLEUM HYDROCARBONS		063004	<20	06/30/04	BP		

CHEMIST NOTES: N/A



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GENERAL CHEMISTRY - QUALITY CONTROL LCS/LCSD

TEST	: EPA 418.1								
LCS/LCSD #	: 063004				PINNACLE	I.D.		406083	
CLIENT	: ANIMAS EN	/IRONMEN	TAL SERVICES	5	DATE EXTR	RACTED		06/30/04	
PROJECT #	: 040605			DATE ANALYZED		.:	06/30/04		
PROJECT NAME	BMG LANDFARM SAMPLING				SAMPLE MATRIX			NON-AQ	
							1.	MG/KG	1.1.1
	SAMPLE	CONC	SPIKED	%	DUP	DUP	20-20-	REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
PETROLEUM HYDROCARBONS	s <20	254	254	100	244	96	4	(75 - 125)	20

CHEMIST NOTES: N/A

(Spike Sample Result - Sample Result)

X 100

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

Average Result

X 100



20 (75 - 125)

20

GENERAL CHEMISTRY - QUALITY CONTROL MS/MSD

TEST	: EPA 418.1								
MSMSD #	: 406083-04				PINNACLE	I.D.	:	406083	
CLIENT	: ANIMAS EN	IRONMEN'	TAL SERVICES	3	DATE EXTRACTED :			06/30/04	
PROJECT #	: 040605		DATE ANALYZED :		:	06/30/04			
PROJECT NAME	PROJECT NAME : BMG LANDFARM SAMPLING					ATRIX	: : :	NON-AQ	
	In the second second				UNITS		100	MG/KG	Ser and
8 5 cm 10 7 55	SAMPLE	CONC	SPIKED	%	DUP	DUP	A CAR	REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS

76

192

CHEMIST NOTES: N/A

(Spike Sample Result - Sample Result)

<20

254

% Recovery =

----- X 100

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

PETROLEUM HYDROCARBONS

Average Result

X 100

235

93



GAS CHROMATOGRAPHY RESULTS

TEST		: EPA 8021B MO	DIFIED - ME	THANOL PRI	ESERVATION			
CLIENT		: ANIMAS ENVIR	ONMENTAL	1	PINNACLE I.D. : 406083			
PROJECT #		: 040605				ANALYST	: BP	
PROJECT N	IAME	: BMG LANDFAR	M SAMPLIN	G	and the second	the state of the state of		
SAMPLE			A Second Second	DATE	DATE	DATE	DIL.	E.
ID. #	CLIENT I.D.	Hiller links	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
01	CELL #1 @ 28"	BGS	NON-AQ	06/21/04	N/A	06/25/04	1	
02	CELL #2 @ 31"	BGS	NON-AQ	06/21/04	N/A	06/25/04	1	
03	CELL #3 @ 26"	BGS	NON-AQ	06/21/04	N/A	06/25/04	1	
PARAMETE	R	DET. LIMIT	UN	IITS	CELL #1 @ 28" BGS	CELL #2 @ 31" BGS	CELL #3 @ 26" BGS	
BENZENE	W. Held Control	0.025	MG	6/KG	< 0.025	< 0.025	< 0.025	
TOLUENE		0.025	MG	/KG	< 0.025	< 0.025	< 0.025	
ETHYLBENZ	ZENE	0.025	MG	/KG	< 0.025	< 0.025	< 0.025	
TOTAL XYLI	ENES	0.050	MG	6/KG	< 0.050	< 0.050	< 0.050	
SURROGAT	Е:							
BROMOFLU	OROBENZENE	(%)			99	95	99	
SURROGATE LIMITS DRY WEIGHT (%)		(80 - 120)			80	93	82	

CHEMIST NOTES: N/A



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GAS CHROMATOGRAPHY RESULTS

TEST		: EPA 8021B MODIFIED - METHANOL PRESERVATION								
CLIENT		: ANIMAS ENVIR	ONMENTAL	P	PINNACLE I.D. : 406083					
PROJECT #	#	: 040605			ANALYST :	BP				
PROJECT	NAME	: BMG LANDFAR	M SAMPLIN		States in	AL MARKEN AND AND AND AND AND AND AND AND AND AN				
SAMPLE		and the second second	Ex. Jan	DATE	DATE	DATE	DIL.			
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR			
04	CELL #4 @ 24	" BGS	NON-AQ	06/21/04	N/A	06/25/04	1			
PARAMETER		DET. LIMIT	UNITS		CELL #4 @ 24" BGS					
BENZENE		0.025	MG/KG		< 0.025					
TOLUENE		0.025	MG/KG		< 0.025					
ETHYLBEN	ZENE	0.025	MG/KG		< 0.025					
TOTAL XYL	ENES	0.050	MG	S/KG	< 0.050					
SURROGA	TE:									
BROMOFLU	JOROBENZENE	: (%)			98					
SURROGA"	TE LIMITS	(80 - 120)								
DRY WEIGH	HT (%)				93					

CHEMIST NOTES: N/A



N/A

CHEMIST NOTES:

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GAS CHROMATOGRAPHY RESULTS REAGENT BLANK

TEST BLANK I. D. CLIENT PROJECT # PROJECT NAME	: EPA 8021B MODIFIED : 062504 : ANIMAS ENVIRONMENTAL SERVICES : 040605 : BMG LANDEARM SAMPLING	PINNACLE I.D. DATE EXTRACTED DATE ANALYZED SAMPLE MATRIX	: 406083 : N/A : 06/25/04 : FP
PARAMETER	UNITS	ANALISI	. DF
BENZENE	MG/KG	<0.025	
TOLUENE	MG/KG	<0.025	
ETHYLBENZENE	MG/KG	<0.025	
TOTAL XYLENES	MG/KG	<0.050	
SURROGATE:			
BROMOFLUOROBENZENE (%) SURROGATE LIMITS:		99	





GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST BATCH # CLIENT PROJECT #	: EPA 8021B MODIFIED : 062504 : ANIMAS ENVIRONMENTAL SERVICES : 040605 : BMG LANDEARM SAMPLING				PINNACLE DATE EXR DATE ANA SAMPLE M	I.D. ACTED LYZED ATRIX	: 406083 : N/A : 06/25/04 : FP		
PROJECT NAME	: BMG LANDF	ARM SAMP	LING		UNITS	14 A 14 A 14	11	MG/KG	1941
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	< 0.025	1.00	1.02	102	1.01	101	1	(80 - 120)	20
TOLUENE	<0.025	1.00	1.02	102	1.00	100	2	(80 - 120)	20
ETHYLBENZENE	< 0.025	1.00	1.06	106	1.05	105	1	(80 - 120)	20
TOTAL XYLENES	<0.050	3.00	3.09	103	3.06	102	1	(80 - 120)	20

CHEMIST NOTES: N/A

(Spike Sample Result - Sample Result)

% Recovery =

l.

Spike Concentration X 100

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

Average Result

X 100



GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST MS/MSD # CLIENT PROJECT # PROJECT NAME	: EPA 8021B M : 406083-03 : ANIMAS EN\ : 040605 : BMG LANDF	IODIFIED /IRONMEN [*] ARM SAMP	TAL SERVICES	3	PINNACLE DATE EXRA DATE ANAL SAMPLE MA UNITS	I.D. ACTED .YZED ATRIX		406083 N/A 06/25/04 FP MG/KG	
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1:00	1.22	122	1.20	120	2	(80 - 120)	20
TOLUENE	<0.025	1.00	1.04	104	1.05	105	1	(80 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.06	106	1.08	108	2	(80 - 120)	20
TOTAL XYLENES	<0.050	3.00	3.13	104	3.18	106	2	(80 - 120)	20

CHEMIST NOTES: N/A

% Recovery =

(Spike Sample Result - Sample Result)

------ X 100

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

Average Result

X 100

PROJECT MANAGER: Ross Kennemer	3	1193		5.01	550				1.17.1	(P.4)	1315		ີ່ສຸດິມ	1	р		47				12.024	194
COMPANY: Animes Environmente/ ADDRESS: 624 E. Commente/ Farmington, MM 87400 PHONE: 564-2211 FAX: 324-2022 BILL TO: AES COMPANY: ADDRESS: SAMPLE D. DATE MALE MALLER	etroletim Hvdrocarbons (418.1) TBPH	MOD.8015) Diesel/Direct Inject	//8015) Gas/Purge & Trap	021 (BTEX)/8015 (Gasoline) MTBE		021 (TCL) 021 (EDX)	021 (HALO)	021 (CUST)	04.1 EDB □/DBCP □	260 (TCL) Volatile Organics	260 (Full) Volatile Organics DPBMS	260 (CUST) Volatile Organics	260 (Landfill) Volatile Organics	erbicides (615/8151)	se/Neutral/Acid Compounds GC/MS (625/8270)	lynuclear Aromatics (610/8310/8270-SIMS)	eneral Chemistry:	iority Pollutant Metals (13)	trget Analyte List Metals (23)	CRA Metals (8)	CRA Metals by TCLP (Method1311)	etals:
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(ell #2 2 31" B65 622-04 1128 Soil	AND V				X							-		-	-		1			-	-	
(=11 #3226" B65 6-21-04 1157 Soil	-oz x				ÿ				-			+	-		-			+	-	+	+	-
2ell #4 @ 24"BLS 6-2404 1226 5.:1	-01 X				×		t															
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Animas Environmental Services, LLC

624 E. Comanche • Farmington, NM 87401 TEL 505-564-2281 • FAX 505-324-2022

August 12, 2004

Mike Dimond Benson-Montin-Greer Drilling Corporation 4900 College Blvd Farmington, New Mexico 87402

RE: Results of June, 2004, Treatment Zone Monitoring at BMG's Centralized Surface Waste Management Facility, Rio Arriba County, New Mexico

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The next monitoring and sampling event is scheduled to be completed during the week of September 20, 2004. During this event, in addition to TPH and BTEX samples, samples will also be collected for analysis of major cations/anions and RCRA 8 metals, as required by the NMOCD permit for the facility.

If you have any questions regarding the sampling procedures or results, please do not hesitate to contact me or Ross Kennemer at (505) 564-2281.

Sincerely,

Elizabeth D. Mardly Elizabeth McNally, PE

Attachments: Figure 1 Treatment Zone Monitoring Locations Pinnacle Laboratory Analytical Reports

Files/2004/BMG/Landfarm Sampling/gcbmg081204.doc



AIR STRIP



SUMMARY OF QUARTERLY TREATMENT ZONE MONITORING JUNE, 2004

LANDFARM	SAMPLE	SAMPLE LOCATION	SAMPLE	SAMPLE DEPTH (FT)	BENZENE (MG/KG)	TOLUENE (MG/KG)	ETHYL- BENZENE (MG/KG)	XYLENE (MG/KG)	TPH (MG/KG)
Cell #1	#1	N 36° 23.366' W 106° 52.028'	6/21/2004	2.3	<0.025	<0.025	<0.025	< 0.050	<20
Cell #2	#1	N 36° 23.401' W 106° 51.992'	6/21/2004	2.58	<0.025	<0.025	<0.025	<0.050	<20
Cell #3	#1	N 36° 23.327' W 106° 51.856'	6/21/2004	2.2	< 0.025	<0.025	<0.025	< 0.050	<20
Cell #4	#1	N 36° 23.354' W 106° 51.777'	6/21/2004	2	<0.025	<0.025	<0.025	<0.050	<20

LANDFARM WITH TREATMENT ZONE MONITORING LOCATIONS JUNE, 2004

BMG CENTRALIZED SURFACE WASTE MANAGEMENT FACILITY NW1/4, NW1/4, SEC. 20, T25N, R1E, RIO ARRIBA, CO., NM

Drn. By: MRK	Date: 08/11/04
Rev. By:	Date:
file:bmg/landfarm/sp	.dwg



Animas Environmental Services, LLC



SAMPLE COLLECTION POINT

NOTE: BTEX ANALYZED PER EPA METHOD 8021 AND TPH ANALYZED PER EPA METHOD 418.1. ALL RESULTS REPORTED AS MG/KG OR PPM.





Pinnacle Lab ID number July 06, 2004 406083

ANIMAS ENVIRONMENTAL SERVICES 624 EAST COMMANCHE FARMINGTON, NM 87401

Project Name Project Number BMG LANDFARM SAMPLING 040605

Attention: ROSS KENNEMER

On 06/22/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

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

MR: jt

Enclosure



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

LIENT	: ANIMAS ENVIRONMENTAL SERVICES	PINNACLE ID	: 406083
ROJECT #	: 040605	DATE RECEIVED	: 06/22/04
ROJECT NAME	: BMG LANDFARM SAMPLING	REPORT DATE	: 07/06/04
INNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
D6083 - 01	CELL #1 @ 28" BGS	NON-AQ	06/21/04
06083 - 02	CELL #2 @ 31" BGS	NON-AQ	06/21/04
06083 - 03	CELL #3 @ 26" BGS	NON-AQ	06/21/04
06083 - 04	CELL #4 @ 24" BGS	NON-AQ	06/21/04



GENERAL CHEMISTRY RESULTS EPA 418.1

LIENT ROJECT # ROJECT NAME		: ANIMAS : 040605 : BMG LAN	ENVIRONMENTAL	SERVICES G	PINNACLE I. DATE RECE ANALYST	D. IVED	: 406083 : 06/22/04 : BP
AMPLE			- F- 1.24	DATE	DATE	DATE	DIL.
). #	CLIENT I.D.	L. Starter in	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
	CELL #1 @	28" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1
2	CELL #2 @	31" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1
3	CELL #3 @	26" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1
ARAME	TER		DET. LIMIT	UNITS	CELL #1 @ 28" BGS	CELL #2 @ 31" BGS	CELL #3 @ 26" BGS
ETROL	EUM HYDROCA	RBONS	20	MG/KG	< 20	< 20	< 20

HEMIST NOTES:

35



GENERAL CHEMISTRY RESULTS EPA 418.1

LIENT ROJEC 'ROJEC	T # T NAME	: ANIMAS : 040605 : BMG LAN	ENVIRONMENTAL	SERVICES	PINNACLE I.D DATE RECEIN ANALYST). /ED	: 406083 : 06/22/04 : BP
AMPLE	States Landar St	and the state	100 A. C. A.	DATE	DATE	DATE	DIL.
D. #	CLIENT I.D		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
4	CELL #4 @	24" BGS	NON-AQ	06/21/04	06/30/04	06/30/04	1
ARAME	TER	Storage Pro	DET. LIMIT	UNITS	CELL #4 @ 24" BGS		
ETROL	EUM HYDROC	ARBONS	20	MG/KG	< 20		ALC: NO.

HEMIST NOTES:



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

GENERAL CHEMISTRY - REAGENT BLANK EPA 418.1

LIENT ROJECT # ROJECT NAME	: ANIMA : 040605 : BMG L	S ENVIRONMEN ANDFARM SAMP	TAL SERVICE	S		PINNACLE I.D. SAMPLE MATRIX UNITS	: 406083 : NON-AQ : MG/KG
	100 100	REAGENT	SAMPLE	DATE		and the second second	
ARAMETER		BLANK I.D.	RESULT	ANALYZED	ANALYST		
ETROLEUM HYDROC	ARBONS	063004	<20	06/30/04	BP		

HEMIST NOTES:



GENERAL CHEMISTRY - QUALITY CONTROL LCS/LCSD

EST	EPA 418.1								
S/LCSD #	063004				PINNACLE	I.D.	:	406083	
LIENT	ANIMAS EN	IRONMEN'	TAL SERVICES	6	DATE EXTR	RACTED	:	06/30/04	
ROJECT #	040605				DATE ANAL	YZED	: 5	06/30/04	
ROJECT NAME	BMG LANDF	ARM SAMP	LING		SAMPLE M	ATRIX	:	NON-AQ	
					UNITS	1	: 2	MG/KG	1.191.5
	SAMPLE	CONC	SPIKED	%	DUP	DUP	S PACE	REC	RPD
RAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
FTROLELIM HYDROCARBONS	<20	254	254	100	244	96	Λ	(75 . 125)	20

HEMIST NOTES:

9

(Spike Sample Result - Sample Result) X 100

Spike Concentration

(Sample Result - Duplicate Result)

X 100

PD (Relative Percent Difference) =

Average Result



GENERAL CHEMISTRY - QUALITY CONTROL MS/MSD

TEST	: EPA 418.1								
ISMSD #	: 406083-04				PINNACLE	I.D.	:	406083	
LIENT	: ANIMAS ENV	/IRONMEN	TAL SERVICES	3	DATE EXTR	RACTED	1.00	06/30/04	
PROJECT #	: 040605				DATE ANAL	YZED	:	06/30/04	
ROJECT NAME	: BMG LANDF	ARM SAMP	LING		SAMPLE M	ATRIX	:	NON-AQ	
		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			UNITS		:	MG/KG	
And the second second second	SAMPLE	CONC	SPIKED	%	DUP	DUP	1.0	REC	RPD
ARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
ETROLEUM HYDROCARBONS	6 <20	254	192	76	235	93	20	(75 - 125)	20

HEMIST NOTES:

I/A

1

% Recovery =

(Spike Sample Result - Sample Result)

Spike Concentration

(Sample Result - Duplicate Result)

--- X 100

RPD (Relative Percent Difference) =

Average Result

X 100



GAS CHROMATOGRAPHY RESULTS

EST LIENT ROJEC	: : : : : : : : : : : : : : : : : : :	EPA 8021B MO ANIMAS ENVIR 040605 BMG LANDEAE	DIFIED - ME CONMENTAL	THANOL PRI SERVICES	ESERVATION	PINNACLE I.D. : 406083 ANALYST : BP		
AMPLE		DIVIG LANDFAR	IN SAMPLIN	DATE	DATE	DATE	DII	
. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
	CELL #1 @ 28" E CELL #2 @ 31" E CELL #3 @ 26" E	BGS BGS	NON-AQ NON-AQ	06/21/04 06/21/04	N/A N/A	06/25/04 06/25/04	1	
ARAME	ARAMETER DET. LIMIT		UN-AQ	NITS	CELL #1 @ 28" BGS	CELL #2 @ 31" BGS	CELL #3 @ 26* BGS	
ENZENI	E	0.025	MO	6/KG	< 0.025	< 0.025	< 0.025	
PLUEN	E	0.025	MG	G/KG	< 0.025	< 0.025	< 0.025	
THYLBE	ENZENE	0.025	MG	6/KG	< 0.025	< 0.025	< 0.025	
OTAL X	YLENES	0.050	MG	6/KG	< 0.050	< 0.050	< 0.050	
JRROG ROMOF JRROG	ATE: FLUOROBENZENE (ATE LIMITS	%) (80 - 120)			99	95	99	
RY WEI	GHT (%)				80	93	82	

HEMIST NOTES:

.



GAS CHROMATOGRAPHY RESULTS

TEST CLIENT PROJECT PROJECT	# NAME	: EPA 8021B MO : ANIMAS ENVIR : 040605 : BMG LANDFAR	INNACLE I.D. : ANALYST :	: 406083 : BP			
SAMPLE	and the second	R STORE	1 . A. C.	DATE	DATE	DATE	DIL.
D. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
)4	CELL #4 @ 24	"BGS	NON-AQ	06/21/04	N/A	06/25/04	1
ARAMET	ER	DET. LIMIT	UN	IITS	CELL #4 @ 24" BGS		
BENZENE		0.025	MO	6/KG	< 0.025		
OLUENE		0.025	MG	S/KG	< 0.025		
THYLBEN	ZENE	0.025	MG	6/KG	< 0.025		
OTAL XYI	LENES	0.050	MG	S/KG	< 0.050		
URROGA	TE:						
ROMOFL	UOROBENZENE	Ξ (%)			98		学业教育 网络金属金属
URROGA	TE LIMITS	(80 - 120)					
RY WEIG	HT (%)				93		

HEMIST NOTES:



GAS CHROMATOGRAPHY RESULTS REAGENT BLANK

EST LANK I. D. LIENT ROJECT # ROJECT NAME	: EPA 8021B MODIFIED : 062504 : ANIMAS ENVIRONMENTAL SERVICES : 040605 : BMG LANDFARM SAMPLING	PINNACLE I.D. DATE EXTRACTED DATE ANALYZED SAMPLE MATRIX ANALYST	 406083 N/A 06/25/04 FP BP
ARAMETER	UNITS	AN ALE AND THE A	
ENZENE	, MG/KG	<0.025	
DLUENE	MG/KG	<0.025	
THYLBENZENE	MG/KG	<0.025	
DTAL XYLENES	MG/KG	<0.050	
URROGATE:			
ROMOFLUOROBENZENE (%) JRROGATE LIMITS: HEMIST NOTES:		99	



GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

EST ATCH # LIENT ROJECT # ROJECT NAME	: EPA 8021B N : 062504 : ANIMAS ENV : 040605 : BMG LANDF	IODIFIED IRONMEN	TAL SERVICES	5	PINNACLE I DATE EXRA DATE ANAL SAMPLE MA UNITS	.D. ACTED YZED ATRIX		406083 N/A 06/25/04 FP MG/KG	
ARAMETER	SAMPLE RESULT	SAMPLE CONC S RESULT SPIKE S		% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ENZENE	<0.025	1:00	1.02	102	1.01	101	1	(80 - 120)	20
OLUENE	<0.025	1.00	1.02	102	1.00	100	2	(80-120)	20
THYLBENZENE	<0.025	1.00	1.06	106	1.05	105	1	(80 - 120)	20
DTAL XYLENES	<0.050	3.00	3.09	103	3.06	102	1	(80 - 120)	20

HEMIST NOTES:

(Spike Sample Result - Sample Result)

Recovery =

Spike Concentration

(Sample Result - Duplicate Result)

----- X 100

PD (Relative Percent Difference) =

Average Result

X 100



GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

EST IS/MSD # CLIENT PROJECT # ROJECT NAME	: EPA 8021B M : 406083-03 : ANIMAS ENV : 040605 : BMG LANDF	IODIFIED IRONMEN ARM SAMP	TAL SERVICES	8	PINNACLE DATE EXRA DATE ANAL SAMPLE MA UNITS	I.D. ACTED .YZED ATRIX		406083 N/A 06/25/04 FP MG/KG	
ARAMETER	SAMPLE CONC SPIKED % RESULT SPIKE SAMPLE REC		% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS	
ENZENE	<0.025	1:00	1.22	122	1.20	120	2	(80 - 120)	20
OLUENE	<0.025	1.00	1.04	104	1.05	105	1	(80 - 120)	20
THYLBENZENE	<0.025	1.00	1.06	106	1.08	108	2	(80 - 120)	20
OTAL XYLENES	<0.050	3.00	3.13	104	3.18	106	2	(80 - 120)	20

HEMIST NOTES:

/A

1

(Spike Sample Result - Sample Result)

Recovery =

Spike Concentration

(Sample Result - Duplicate Result)

X 100

- X 100

PD (Relative Percent Difference) =

Average Result

A			
PNNAGLE	D:	Talandania	T
LABORATORES	Pinnacie	Laboratories	inc.

Pinnacle Laboratories Inc.		C	HA	IN 22-	0	F		US		OF T	Y	Source 1985	PLI	Ac	ces	5(0)	NE	0	tal	58	15						
COMPANY: Animas Environmental	Hda			3E	PCE No.		12/	9.5¥			JAL	WS SW	SHE	EG		ST	8270)			0.44			11)				
ADDRESS: 624 E. Commone Farmington, MM 8740/ PHONE: 564-2211 FAX: 324-2022 BILL TO: AES COMPANY: ADDRESS: SAMPLEID DATE TIME MATRIX LABIO	Petroleum Hydrocarbons (418.1) T	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purde & Trap	8021 (BTEX)/8015 (Gasoline) MTB	8021 (BTEX) DMTBE DTMB DP	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB 🗆/DBCP 🗆	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics DPB	3260 (CUST) Volatile Organics	3260 (Landfill) Volatile Organics	^D esticides/PCB (608/8081/8082)	Herbicides (615/8151)	3ase/Neutral/Acid Compounds GC/MS (625/8	olynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Farget Analyte List Metals (23)	3CRA Metals (8)	3CRA Metals by TCLP (Method131	Aetals:			
Cell #1 2 28" 865 6-21-04 1055 50:1 01	X	T		1	Y	-			8	4)	6	8	8	8	<u>а</u>	-	8	٩	0	a.	F	Œ	Œ	2			
Cell # 2 2 31" B65 62204 1128 Soil 302	X				Ŷ		-			1			1			-	-			-							
(=11 #3226" B65 6-21-04 1157 Soil 202	X				X						7	14					12										
Cell #4 2 24" BLS 6-24-04 1226 5.1	X				×							:+!			-												
		139					1												700 L	1							
																-					1						
						100					6									-27-	1			-			
WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEAS	SE IN	QUIE	BE																		1						
PROJECT INFORMATION PRIOR AUTHORIZATION IS RI PROJ. NO.: 0 40605 (RUSH) 24hr* 24hr* 272hr* NOT AVAILABLE ON ALL ANALYSES	iEQU		D FOR WEEK	RUS	SH P (ROJ	EC MAL	TS A	1 10 10 10 10 10 10 10 10 10 10 10 10 10	RELI		SHE	DB	Ý: Tim	e:	7	组。 1/	- F Siç	RELING	auis	HEC) BY	Fime:	entre resit			
P.O. NO .: CERTIFICATION REQUIRED INM	ME	J SD					SOL	R .VED		Printed	Name	ten	Date:			1	Printed Name: Date:										
SHIPPED VIA: Bus COMMENTS:			0	2					0	Compa	ny:	0 /5-		alau				Co	mpany	i de	1			1			
NO CONTAINERS	0/	2	80	nd	1				1 14 V	REC	EIVE re:	D(B)		Tim	ə) 8247.) 0:		1.3	20		YEP	BY	Ľ	AB) Ime:	2 7 30			
RECEIVED INTROT									F	Printed	Name	6		Date	Ð;		1	E ST	M	hel	5	- C	Date:	2701			
BLUEICE/ICE							Company:														Pinnacle Laboratories Inc.						

July, 2003 PLI Inc.: Pinnacle I aboratories Inc. + 2709-D Pan American France VIII + Albury Strong New Maying 27107 - (SOC) 244 2777 - Env (SOC) 244 2477 - Env (SOC) 244 24777 - Env (SOC) 244 2477 - Env (SOC) 247 2477 -

Animas Environmental Services, LLC

624 E. Comanche • Farmington, NM 87401 TEL 505-564-2281 • FAX 505-324-2022

November 30, 2004

Mike Dimond Benson-Montin-Greer Drilling Corporation 4900 College Blvd Farmington, New Mexico 87402

RE: Results of September, 2004, Treatment Zone Monitoring at BMG's Centralized Surface Waste Management Facility, Rio Arriba County, New Mexico

Dear Mr. Dimond:

On September 30, 2004, Animas Environmental Services, LLC (AES) completed the quarterly treatment zone monitoring and sampling of the Benson-Montin-Greer Drilling Corporation (BMG) Centralized Surface Waste Management Facility, located near the Canada Ojitos Unit (COU) Gas Plant in Rio Arriba County, New Mexico.

Sampling Procedures

As required by the New Mexico Oil Conservation Division (NMOCD) permit for this facility, one random soil sample was collected from each of the four treatment cells. Sample collection depth for each treatment cell ranged from 2.5 feet to 3 feet below surface grade. A stainless steel hand auger, which was decontaminated between each sampling point to prevent cross-contamination, was used to collect the samples. Once collected, each sample container was labeled with the date, sample location, sample type and sampler's initials. The containers were placed in a chilled, insulated cooler at 4°C until delivered to the analytical laboratory, Pinnacle Laboratories, Albuquerque, New Mexico. A Chain of Custody was completed at the time the samples were delivered to the laboratory.

Laboratory Analytical Methods

Each soil sample was analyzed for total petroleum hydrocarbons (TPH) per EPA Method 418.1 and benzene, toluene, ethylbenzene and xylene (BTEX) per EPA Method 8021. Samples collected for BTEX analysis were field-preserved with methanol at the time of collection with materials and equipment supplied by the laboratory. Additionally, as required annually, one sample was also collected from each location for analysis of major cations and anions. These analyses included: 1) pH per EPA Method 9045C; 2) CO₂ and Forms of Alkalinity per EPA Method 4500D; 3) alkalinity as CaCO₃ per EPA Method 2320B; 4) specific conductance per EPA Method 9050A; 5) chloride per EPA Method 9251; 6) sulfate as SO₄ per EPA Method 3.75.4-EXT; 7) fluoride per EPA Method 340.2-EXT; and 8) metals per EPA Method 6010B.
Treatment Zone Monitoring Results

Based on AES's observations of the treatment cells at the time of sample collection, it is apparent that treatment cells #1, #2, and #3 are being tilled on a frequent basis. Soils within these cells were very loose, and no weeds or other vegetation, which would indicate infrequent tilling, were observed. No hydrocarbon stained soils were observed on the surface of any of the cells, and no hydrocarbon odors were noted during sample collection. Treatment cell #4 continues to appear to be not in use, and grasses and small herbaceous plants were observed across the entire cell.

Laboratory analytical results for all samples collected were below the method detection limits for hydrocarbons, except for the sample collected from Cell #2, which had a TPH concentration of 92 mg/kg. The sample location for each treatment cell, as well as the associated analytical results, are presented on Figure 1 and in Tables 1 and 2. Laboratory analytical reports have also attached.

The next monitoring and sampling event is scheduled to be completed during the week of December 6, 2004. If you have any questions regarding the sampling procedures or results, please do not hesitate to contact me or Ross Kennemer at (505) 564-2281.

Sincerely,

Elizabeth McNally, PE

Attachments: Figure 1. Treatment Zone Monitoring Locations Table 1 and 2. Laboratory Analytical Results Pinnacle Laboratory Analytical Reports

Files/2004/BMG/Landfarm Sampling/gcbmg113004

Table 2. Summary of Major Cations/Anions Annual Treatment Zone Monitoring September, 2004

LANDFARM	SAMPLE	SAMPLE	SAMPLE DEPTH (ft)	pН	Bicarbonate (MG/KG)	Free CO ₂ (MG/KG)	Carbonate (MG/KG)	Hydroxide (MG/KG)	Total CO ₂ (MG/KG)	Alkalinity as CaCO ₃ (MG/KG)	Specific Conductance (umhos/cm)	Chloride (MG/KG)	Sulfate as SO ₄ (MG/KG)	Flouride (MG/KG)	Calcium (MG/KG)	Magnesium (MG/KG)	Sodium (MG/KG)
Cell #1	#1	9/30/2004	3.0	7.4	360	79	<20	<20	400	360	51	<47	170	11	5,700	3,300	<99
Cell #2	#1	9/30/2004	2.5	7.1	<20	<20	<20	<20	<20	<25	13	<49	<120	<4.9	6,200	3,100	<110
Cell #3	#1	9/30/2004	2.8	7.0	550	120	<20	<20	610	550	36	<45	<110	5	3,000	2,000	<88
Cell #4	#1	9/30/2004	2.5	6.9	33	130	<20	<20	160	33	6.1	<44	<110	<4.4	3,700	2,600	<97



SUMMARY OF QUARTERLY TREATMENT ZONE MONITORING SEPTEMBER, 2004

LANDFARM I.D.	SAMPLE	SAMPLE LOCATION	SAMPLE	SAMPLE DEPTH (FT)	BENZENE (MG/KG)	TOLUENE (MG/KG)	ETHYL- BENZENE (MG/KG)	XYLENE (MG/KG)	TPH (MG/KG)
Cell #1	#1	N 36° 23.338' W 106° 51.955'	9/30/2004	3	< 0.025	<0.025	<0.025	< 0.050	<20
Cell #2	#1	N 36° 23.400' W 106° 51.923'	9/30/2004	2.5	<0.025	<0.025	<0.025	< 0.050	92
Cell #3	#1	N 36° 23.348' W 106° 51.872'	9/30/2004	2.8	< 0.025	<0.025	< 0.025	< 0.050	<20
Cell #4	#1	N 36° 23.354' W 106° 51.777'	9/30/2004	2.5	<0.025	<0.025	<0.025	< 0.050	<20

LANDFARM WITH TREATMENT ZONE MONITORING LOCATIONS SEPTEMBER, 2004

BMG CENTRALIZED SURFACE WASTE MANAGEMENT FACILITY NW1/4, NW1/4, SEC. 20, T25N, R1E, RIO ARRIBA, CO., NM

Drn. By: MRK	Date:	11/22/04
Rev. By:	Date:	
file:bmg/landfarm/sp.dwg	15/	



Animas Environmental Services, LLC





SAMPLE COLLECTION POINT

NOTE: BTEX ANALYZED PER EPA METHOD 8021 AND TPH ANALYZED PER EPA METHOD 418.1. ALL RESULTS REPORTED AS MG/KG OR PPM.

MAJOR CATIONS / ANIONS AND METALS ARE SUMMARIZED IN TABLE 2.



entered prinacti Labs 11-1-24 CR

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



Pinnacle Lab ID number October 26, 2004 410014

ANIMAS ENVIRONMENTAL SERVICES 624 EAST COMMANCHE FARMINGTON, NM 87401

Project Name Project Number BMG LANDFARM SAMPLING 040605

Attention: ROSS KENNEMER

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

EPA method 418.1 and 8015 analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

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

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

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

MR: jt

Enclosure

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



CLIENT	: ANIMAS ENVIRONMENTAL SERVICES	PINNACLE ID	: 410014
PROJECT #	: 040605	DATE RECEIVED	: 10/01/2004
PROJECT NAME	: BMG LANDFARM SAMPLING	REPORT DATE	: 10/26/2004
PINNACLE	LAP BUT ALL AND A REAL AND A REAL		DATE
ID#	CLIENT DESCRIPTION	MATRIX	COLLECTED
410014 - 01	Cell #1 Sample #1 @ 3' BGS	NON-AQ	09/30/2004
410014 - 02	Cell #2 Sample #1 @ 2.5' BGS	NON-AQ	09/30/2004
410014 - 03	Cell #3 Sample #1 @ 2.8' BGS	NON-AQ	09/30/2004
410014 - 04	Cell #4 Sample #1 @ 2.5' BGS	NON-AQ	09/30/2004



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GENERAL CHEMISTRY RESULTS 418.1

CLIENT PROJEC PROJEC	: ANIMAS EN T # : 040605 T NAME : BMG LANDI	VIRONMENTAL	SERVICES	PINNACLE I.I DATE RECEI ANALYST	D. VED	: 410014 : 10/01/2004 : BP
SAMPLE		- 17.	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	Cell #1 Sample #1 @ 3' BGS	NON-AQ	09/30/2004	10/12/2004	10/12/2004	1
02	Cell #2 Sample #1 @ 2.5' BG	S NON-AQ	09/30/2004	10/12/2004	10/12/2004	1
03	Cell #3 Sample #1 @ 2.8' BG	S NON-AQ	09/30/2004	10/12/2004	10/12/2004	1
PARAME	TER	DET. LIMIT	UNITS	Cell #1 Sample #1 @ 3' BGS	Cell #2 Sample #1 @ 2.5' BGS	Cell #3 Sample #1 @ 2.8' BGS
PETROL	EUM HYDROCARBONS	20	MG/KG	< 20	92	< 20

CHEMIST NOTES:

N/A



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GENERAL CHEMISTRY RESULTS 418.1

CLIENT : ANIMAS ENV PROJECT # : 040605 PROJECT NAME : BMG LANDF/		RONMENTAL	SERVICES G	PINNACLE I.D DATE RECEIV ANALYST). /ED	: 410014 : 10/01/2004 : BP	
SAMPLE		1.1.1	DATE	DATE	DATE	DIL.	
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
04	Cell #4 Sample #1 @ 2.5' BGS	NON-AQ	09/30/2004	10/12/2004	10/12/2004	1	
PARAME	TER	DET. LIMIT	UNITS	Cell #4 Sample #1 @ 2.5' BGS			
PETROLE	UM HYDROCARBONS	20	MG/KG	< 20			

CHEMIST NOTES:



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GENERAL CHEMISTRY - REAGENT BLANK 418.1

CLIENT : PROJECT # : PROJECT NAME :	ANIMAS ENVIRONMEN 040605 BMG LANDFARM SAM	ITAL SERVICI	ES		PINNACLE I.D. SAMPLE MATRIX UNITS	: 410014 : NON-AQ : MG/KG
	REAGENT	SAMPLE	DATE			
PARAMETER	BLANK I.D.	RESULT	ANALYZED	ANALYST		
PETROLEUM HYDROCARBO	ONS 101204	<20	10/12/04	BP	Constant Property	

CHEMIST NOTES: N/A

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GENERAL CHEMISTRY - QUALITY CONTROL LCS/LCSD

IEST LCS/LCSD #	: 418.1 : 101204			9	PINNACLE DATE EXTR	I.D. RACTED		410014 10/12/2004 10/12/2004	
ROJECT # ROJECT NAME	: 040605 : BMG LANDF	ARM SAMF		0	SAMPLE M UNITS	ATRIX		NON-AQ MG/KG	10 2 4
	SAMPLE	CONC	SPIKED	%	DUP	DUP	N. A.	REC	RPD
ARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
ETROLEUM HYDROCARBONS	S <10	254	207	81	243	96	16	(75 - 125)	20

HEMIST NOTES:

PD (Relative Percent Difference) =

.

(Spike Sample Result - Sample Result)

Recovery =

Spike Concentration

(Sample Result - Duplicate Result)

----- X 100

X 100

Average Result





GENERAL CHEMISTRY - QUALITY CONTROL MS/MSD

EST	: 418.1								
ISMSD #	: 410014-01				PINNACLE	I.D.		410014	
CLIENT	: ANIMAS EN	VIRONMEN	TAL SERVICE	S	DATE EXTR	RACTED	:	10/12/2004	
PROJECT #	: 040605				DATE ANA	LYZED	:	10/12/2004	
ROJECT NAME	: BMG LANDF	ARM SAMP	PLING		SAMPLE M	ATRIX	:	NON-AQ	
		and the second		可以而自己	UNITS		1	MG/KG	
	SAMPLE	CONC	SPIKED	%	DUP	DUP	- VII	REC	RPD
ARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
PETROLEUM HYDROCARBONS	s <10	254	221	87	211	83	5	(75 - 125)	20

HEMIST NOTES:

6 Recovery =

(Spike Sample Result - Sample Result)

Spike Concentration

(Sample Result - Duplicate Result)

--- X 100

X 100

RPD (Relative Percent Difference) =

Average Result



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GAS CHROMATOGRAPHY RESULTS

	TEST	:	EPA 8021B - M	ETHANOL P	RESERVATION				
	CLIENT	and the states	ANIMAS ENVIR	RONMENTAL	SERVICES	in the second	PINNACLE I.D.	: 410014	4
	PROJECT #		040605				ANALYST	: BP	
-	PROJECT N	IAME :	BMG LANDFAF	RM SAMPLIN	IG	A. S. S.	The second	C.S.a.	
	SAMPLE				DATE	DATE	DATE	DIL	
-	ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACT	OR
-	01	Cell #1 Sample #1	@ 3' BGS	NON-AQ	09/30/2004	NA	10/06/2004	1	
	02	Cell #2 Sample #1	@ 2.5' BGS	NON-AQ	09/30/2004	NA	10/06/2004	1	
_	03	Cell #3 Sample #1	@ 2.8' BGS	NON-AQ	09/30/2004	NA	10/06/2004	1	Sec.
	PARAMETE	R	DET. LIMIT		UNITS	Cell #1 Sample #1 @ 3' BGS	Cell #2 Sample #1 @ 2.5' BGS	Cell #3 Sa #1 @ 2.8'	BGS
	BENZENE	「「「「「「「「「」」」	0.025	N	AG/KG	< 0.025	< 0.025	< 0.025	1
	TOLUENE		0.025	N	/IG/KG	< 0.025	< 0.025	< 0.025	
	ETHYLBENZ	ZENE	0.025	N	AG/KG	< 0.025	< 0.025	< 0.025	
	TOTAL XYL	ENES	0.050	N	/IG/KG	< 0.050	< 0.050	< 0.050	
	SURROGAT	Е:	5 m					War (
-	BROMOFLU	OROBENZENE (%	(80 - 120)			99	97	106	
	DRY WEIGH	IT (%)	(00 120)			83	85	88	

CHEMIST NOTES: N/A



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GAS CHROMATOGRAPHY RESULTS

TEST		: EPA 8021B - M	ETHANOL PR	RESERVATION			
CLIENT		ANIMAS ENVIE	RONMENTAL	SERVICES	P	INNACLE I.D.	410014
PROJECT	#	040605				ANALYST :	BP
PROJECT	NAME	BMG LANDFAF	RM SAMPLIN	G	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
SAMPLE	A BARRANCE PARTY	1.1	al a second	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	and the state of the	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	Cell #4 Sample #1	@ 2.5' BGS	NON-AQ	09/30/2004	NA	10/06/2004	1
PARAMETI	ER	DET. LIMIT	C C	JNITS	Cell #4 Sample #1 @ 2.5' BGS		1. J. J. J. J.
BENZENE	The second second	0.025	M	IG/KG	< 0.025	用人的关系的	
TOLUENE		0.025	M	IG/KG	< 0.025		
ETHYLBEN	VZENE	0.025	M	IG/KG	< 0.025		
TOTAL XYI	LENES	0.050	M	IG/KG	< 0.050		
SURROGA	TE:						
BROMOFL	UOROBENZENE (%	b)			98		
DRY WEIG	HT (%)	(80 - 120)			90		
4							

CHEMIST NOTES: N/A

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GAS CHROMATOGRAPHY RESULTS REAGENT BLANK

TEST BLANK I.D. CLIENT PROJECT # PROJECT NAME	: EPA 8021B : 100504B : ANIMAS ENVIRONMENTAL SERVICES : 040605 : BMG LANDFARM SAMPLING	PINNACLE I.D. DATE EXTRACTED DATE ANALYZED SAMPLE MATRIX ANALYST	: 410014 : N/A : 10/06/2004 : NON-AQ : BP
PARAMETER	UNITS		
BENZENE	MG/KG	<0.025	
OLUENE	MG/KG	<0.025	
THYLBENZENE	MG/KG	<0.025	
TOTAL XYLENES	MG/KG	<0.050	
SURROGATE:			
ROMOFLUOROBENZ	ENE (%) (80 - 120)	101	

HEMIST NOTES:

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GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD A 8021B PINNACLE I.D.

IESI	: EPA 8021B				PINNACLE	I.D.	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	410014	
BATCH #	: 100504B				DATE EXTR	RACTED	:	N/A	
CLIENT	: ANIMAS EN	VIRONMEN	TAL SERVICE	S	DATE ANAL	YZED	:	10/06/2004	
PROJECT #	: 040605				SAMPLE M	ATRIX	:	FP	
PROJECT NAME	: BMG LAND	ARM SAMP	PLING		UNITS	Sall line	1	MG/KG	Star S. P.
has a straight de la realight t	SAMPLE	CONC	SPIKED	%	DUP	DUP	1.1	REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
BENZENE	<0.025	1.00	1.02	102	1.02	102	0	(80 - 120)	20
TOLUENE	<0.025	1.00	0.982	98	0.985	99	0	(80 - 120)	20
ETHYLBENZENE	<0.025	1.00	0.984	98	0.987	99	0	(80 - 120)	20
TOTAL XYLENES	<0.050	3.00	2.93	98	2.93	98	0	(80 - 120)	20

- X 100

CHEMIST NOTES:

N/A

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(Spike Sample Result - Sample Result)

% Recovery =

Spike Concentration

(Sample Result - Duplicate Result)

-X 100

RPD (Relative Percent Difference) =

Average Result





GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST MSMSD # CLIENT PROJECT # PROJECT NAME	: EPA 8021B : 410014-04 : ANIMAS EN\ : 040605 : BMG LANDF	/IRONMEN	TAL SERVICE	s	PINNACLE DATE EXTR DATE ANAL SAMPLE M UNITS	I.D. RACTED LYZED ATRIX		410014 N/A 10/06/2004 FP MG/KG	
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	< 0.025	1.00	1.05	105	1.05	105	0	(80 - 120)	20
TOLUENE	<0.025	1.00	1.00	100	0.998	100	0	(80-120)	20
ETHYLBENZENE	< 0.025	1.00	0.997	100	0.998	100	0	(80 - 120)	20
TOTAL XYLENES	<0.050	3.00	2.96	99	2.97	99	0	(80 - 120)	20

- X 100

CHEMIST NOTES:

N/A

% Recovery =

(Spike Sample Result - Sample Result)

Spike Concentration

RPD (Relative Percent Difference) =

Average Result

(Sample Result - Duplicate Result)

----- X 100



Analytical Report

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

> Order Number: C410119 SDG Number: Client Project ID: Project: 410014-AES/BMG LANDFARM SAMPLING Report Date: 10/20/2004 Sampled By: Client Sample Received Date: 10/05/2004 Requisition Number: Purchase Order:

Marty Edwards, Project Manager medwards@stl-inc.com

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.



Sample Summary

Order: C410119 Date Received: 10/05/2004 Client: Pinnacle Laboratories Project: 410014-AES/BMG LANDFARM SAMPLING

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
CELL #1 #1 @ 3'BGS/410014-01	C410119*1	Solid	09/30/2004 10:30
CELL #2 #1 @ 2.5' BGS/410014-02	C410119*2	Solid	09/30/2004 11:01
CELL #3 #1 @ 2.8' BGS/410014-03	C410119*3	Solid	09/30/2004 11:28
CELL #4 #1 @ 2.5' BGS/410014-04	C410119*4	Solid	. 09/30/2004 11:57



			Analytic	al Data Report				
Lab Sample I	D Description				Matrix	Date Receive	l Date Sampled	SDG#
10119-1	CELL #1 #1	@ 3'BGS/410014-0	1	- 36 e 3	Solid	10/05/04	09/30/04 10:30	
10119-2	CELL #2 #1	@ 2.5' BGS/410014	4-02		Solid	10/05/04	09/30/04 11:01	
10119-3	CELL #3 #1 (2.8' BGS/41001	4-03		Solid	10/05/04	09/30/04 11:28	
10119-4	CELL #4 #1	2.5' BGS/410014	4-04		Solid	10/05/04	09/30/04 11:57	
Net Calk G			Lab	Sample TDs				
Parameter		Units	10119-1	10119-2	1011	9-3 103	19-4	
рН (904	5C)			The P	25		1.2	
nH		units	7.4	7.1	7.0	6.9		
Dilution Fac	tor	unics	1	1	1	1		
Pren Date			10/05/04	10/05/04	10/0	5/04 10/	05/04	
Analysis Date			10/05/04	10/05/04	10/0	5/04 10/	05/04	
Ratch TD			PHX171	PHX171	PHX1	71 PHD	171	
Pren Method			9045C	9045C	90450	904	SC	
Analyst			GK	GK	GK	GK		
CO2 and	Forms of Alka	linity (4500D)						
Bicarbonate	(2320/4500)	mg/kg dw	360	<20	550	33		
Carbon Dioxid	de, Free	mg/kg dw	79	<20	120	130		
Carbonate (2)	320/4500)	mg/kg dw	<20	<20	<20	<20		
Hydroxide		mg/kg dw	<20	<20	<20	<20		
Carbon Dioxid	de, Total	mg/kg dw	400	<20	610	160		
Dilution Fact	tor		20	20	20	20	to graver a star	
Analysis Date	•		10/06/04	10/06/04	10/06	5/04 10/	06/04	
Batch ID			AES002	AES002	AESOC	2 AES	002	
Analyst			ST	ST	ST	ST		
Alkalini	ity (to pH 4.5)	as CaCO3 (2320B)					
Alkalinity (1	to pH 4.5) as							
CaCO3		mg/kg dw	360	<25	550	33		
Dilution Fact	or		20	20	20	20		
Analysis Date			10/06/04	10/06/04	10/06	5/04 10/	06/04	
Batch ID			AES002	AES002	AESOC	2 AES	002	
Analyst			ST	ST	ST	ST		



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			Analytic	al Data Report				
Lab Sample ID	Description	n - *			Matrix	Date Receiv	ved Date SampTed	SDG#
10119-1	CELL #1 #1	@ 3'BGS/410014-01	- 12 - 11 - 11	7.14.42	Solid	10/05/04	09/30/04 10:30	1.1
10119-2	CELL #2 #1	@ 2.5' BGS/410014	-02		Solid	10/05/04	09/30/04 11:01	
10119-3	CELL #3 #1	@ 2.8' BGS/410014	-03		Solid	10/05/04	09/30/04 11:28	
10119-4	CELL #4 #1	@ 2.5' BGS/410014	-04		Solid	10/05/04	09/30/04 11:57	
			Lab S	Sample IDs				
Parameter		Units	10119-1	10119-2	1011	9-3 1	10119-4	
Specific	Conductance	(9050A)						
Specific Condu	ctance	umhos/cm	51	13	36	. 6	5.1	
Dilution Facto	r		1	1	1	1		
Prep Date			10/16/04	10/16/04	10/1	6/04 1	10/16/04	
Analysis Date			10/06/04	10/06/04	10/0	6/04]	LO/06/04	
Batch ID			CDW021	CDW021	CDWO	21 (DW021	
Prep Method			9050A	9050A	9050	A 9	9050A	
Analyst			ST	ST	ST	S	ন	
Chloride	(9251)							
Chloride		mg/kg dw	<47	<49	<45		:44	
Dilution Facto	r		20	20	20	. 2	20	
Prep Date			10/12/04	10/12/04	10/1	2/04 1	0/12/04	
Analysis Date			10/12/04	10/12/04	10/1	2/04 1	0/12/04	
Batch ID			CKS078	CKS078	CKSO	78 0	KS078	
Prep Method			SOP 885	SOP 885	SOP	385 S	SOP 885	
Analyst			CR	CR	CR	C	R	
Sulfate as	s SO4 (375.4	I-EXT)						
Sulfate as SO4		mg/kg dw	170	<120	<110	<	110	
Dilution Factor	r		20	20	20	2	:0	
Prep Date			10/12/04	10/12/04	10/1	2/04 1	.0/12/04	
Analysis Date			10/12/04	10/12/04	10/1	2/04 1	.0/12/04	
Batch ID			SES068	SES068	SESO	58 S	ESO68	
Prep Method			SOP819	SOP819	SOP8:	L9 S	OP819	
Analyst			CR	CR	CR	C	R	



			Analytic	al Data Report				
Lab Sample ID	Description				Matrix	Date Receiv	ved Date Samplied	SDG#
10119-1	CELL #1 #1 @ 3	BGS/410014-0	1		Solid	10/05/04	09/30/04 10:30	
10119-2	CELL #2 #1 @ 2	.5' BGS/410014	4-02		Solid	10/05/04	09/30/04 11:01	
10119-3	CELL #3 #1 @ 2	.8' BGS/410014	4-03		Solid	10/05/04	09/30/04 11:28	
10119-4	CELL #4 #1 @ 2	.5' BGS/410014	4-04		Solid	10/05/04	09/30/04 11:57	
			Lab S	Sample IDs				
Parameter		Units	10119-1	10119-2	1011	9-3 1	0119-4	E hee
Fluoride	(340.2-EXT)							
Fluoride		mg/kg dw	11	<4.9	5.0	<	4.4	
Dilution Facto	r		20	20	20	2	0	
Prep Date			10/09/04	10/09/04	10/0	9/04 1	0/09/04	
Analysis Date			10/09/04	10/09/04	10/0	9/04 1	0/09/04	
Batch ID			FLS011	FLS011	FLS0	11 F	LS011	
Prep Method			SOP 832	SOP 832	SOP	832 S	OP 832	
Analyst			ST	ST	ST	S	T Contractor of	
Metals (6	010B)							and the second
Calcium		mg/kg dw	5700	6200	3000	3	700	
Magnesium		mg/kg dw	3300	3100	2000	2	600	
Potassium		mg/kg dw	2800	1500	1300	3	300	
Sodium		mg/kg dw	<99	<110	<88	<	97	
Dilution Facto	r		1	1	1	1		
Prep Date			10/08/04	10/08/04	10/0	8/04 1	0/08/04	
Analysis Date			10/09/04	10/09/04	10/0	9/04 1	0/09/04	
Batch ID			PS190	PS190	PS19	0 P	S190	
Prep Method			3050B	3050B	3050	B 3	050B	
Analyst			GSP	GSP	GSP	G	SP	
Quantitation F	actor		98.86	106.4	88.4	7 9	6.62	



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			Analych	ai bata Neport	6 21			
Lab Sample ID	Description		1. 14		Matrix	Date Re	ceived Date !	Samplied SDG#
10119-5	Method Blan	k		The second	Solid	10/05/0	4	
10119-6	Lab Control	Standard % Recov	very		Solid	10/05/0	4	
10119-7	LCS Accuracy	y Control Limit ((%R)		Solid	10/05/0	4	
10119-8	Precision (9	KRPD) MS/MSD			Solid	10/05/0	4	
10119-9	MS Precision	n Advisory Limit	(%RPD)		Solid	10/05/0	4	
			Lab	Sample IDs				
Parameter		Units	10119-5	10119-6	1011	9-7	10119-8	10119-9
CO2 and F	orms of Alkal	linity (4500D)			an gr	a ja		
Bicarbonate (2	320/4500)	mg/kg dw	N/A	N/A	N/A		N/A	N/A
Alkalinit	y (to pH 4.5)	as CaCO3 (2320B	0					
Alkalinity (to	pH 4.5) as							
CaC03	Margar de	mg/kg dw	<20	100 %	90-1	10	1	20
Dilution Facto	r		20					
Analysis Date			10/06/04					
Batch ID			AES002	AES002			AES002	
Analyst			ST					
Specific (Conductance (9050A)						
Specific Conduc	ctance	umhos/cm	<1.0	101 %	98-12	20	N/A	N/A
Dilution Factor			1					
Prep Date			10/16/04					
Analysis Date			10/06/04					
Batch ID			CDW021	CDW021				
Prep Method			9050A					
Analyst			ST					

Analytical Data Report



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			Analytical	Data Report			
Lab Sample ID	Description				Matrix Date Rec	eived Date Sa	mplied SDC#
10119-5	Method Blank	A.C. Star	1911	1.188.	Solid 10/05/04		
10119-6	Lab Control Star	ndard % Recovery	Y		Solid 10/05/04		
10119-7	LCS Accuracy Con	ntrol Limit (%R))		Solid 10/05/04		
10119-8	Precision (%RPD)	MS/MSD			Solid 10/05/04		
10119-9	MS Precision Adv	visory Limit (%	RPD)		Solid 10/05/04		
			Lab San	ple IDs			
Parameter		Units	10119-5	10119-6	10119-7	10119-8	10119-9
Chlorida	(0251)						
citoride	(3231)						
Chloride		mg/kg dw	<40	95 %	90-110	0	20
Dilution Facto	r	-	20				
Prep Date			10/12/04				
Analysis Date			10/12/04				
Batch ID			CKS078	CKS078		CKS078	
Prep Method			SOP 885				
Analyst			CR				
Sulfate a	s SO4 (375.4-EXT)						
Sulfate as SO4		mg/kg dw	<100	99 %	90-110	0	20
Dilution Facto	r		20				
Prep Date			10/12/04				
Analysis Date			10/12/04				
Batch ID			SES068	SES068		SES068	
Prep Method			SOP819				
Analyst			CR			1111	
Fluoride	(340.2-EXT)						
Fluoride		mg/kg dw	<4.0	99 %	90-110	2	20
Dilution Factor			20				
Prep Date			10/09/04				
Analysis Date			10/09/04			Standart.	
Batch ID			FLS011	FLS011		FLS011	
Prep Method			SOP 832				
Analyst			51				



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		Analytic	al Data Report				
Lab Sample ID	Description			Matrix	Date Rec	ceived Date	Samplied SDG#
10119-5	Method Blank	ALC: Y	596	Solid	10/05/04	4	PAL DE AL
10119-6	Lab Control Standard % Re	covery		Solid	10/05/04		
10119-7	LCS Accuracy Control Limi	t (%R)		Solid	10/05/04		
10119-8	Precision (%RPD) MS/MSD			Solid	10/05/04		
10119-9	MS Precision Advisory Lim	it (%RPD)		Solid	10/05/04		
		Lab 1	Sample IDs				
Parameter	Units	10119-5	10119-6	1011	9-7	10119-8	10119-9
Calcium	mg/kg dw	<50	87 %	2680	-4180	7 %	20
Magnosium	mg/kg dw	<50	89 %	1560	-2520	3 %	20
Potassium	mg/kg dw	<100	86 %	1400	-2540	2 %	20
Sodium	mg/kg dw	<100	91 %	221-	579	4 %	20
Dilution Facto	r	1					
Prep Date		10/08/04					
Analysis Date		10/09/04					12 15 18 m 1 m
Batch ID		PS190	PS190			PS190	
Prep Method		3050B					
Analyst		GSP					
Quantitation Fa	actor	100.0					



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		Analytical Data Report	t	
Lab Sample ID Description			Matrix	Date Received Date Sampled SD
10119-10 Reporting Lin	nit (RL)		Solid	10/05/04
Parameter	Units	Lab Sample IDs 10119-10		
CO2 and Forms of Alkal	inity (4500D)			
Bicarbonate (2320/4500)	mg/kg dw	N/A		
Alkalinity (to pH 4.5)	as CaCO3 (2320B)			
Alkalinity (to pH 4.5) as CaCO3	mg/kg dw	20		
Specific Conductance (S	0050A)			
Specific Conductance	umhos/cm	1.0		
Chloride (9251)				
hloride	mg/kg dw	40		
Sulfate as SO4 (375.4-E	CTX			
Sulfate as SO4	mg/kg dw	100		
Fluoride (340.2-EXT)				
Fluoride	mg/kg dw	4.0		
Metals (6010B)				
alcium	mq/1	0.50		
Magnesium	mg/1	0.50		
Potassium	mg/1	1.0		
		1.0		

PANHAL	Pinnacle Labora	tories,	nc.			_	In	terl	lab	Ch	iair	n of	C	usto	dy				Dat	e:_[(14/0	4 Pa	ge:	1.	of_[_
	Network Project N	lanager:	Jaci	nta Tenori	0		_			-			111	A	NAL	YSIS	S RE	QUE	ST	1			1			
Pinna 2709- Albuq (505) 344	cle Laboratories, D Pan American uerque, NM 8710 -3777 Fax (505) 344-441	Inc. Fréewa)7 ₁₃	ay, NE	Чоц	19	i (8) RCRA	RCRA (8) Metals	-13 PP List	-TAL (23 Metals)	ved Fe, Mn, Pb (6010)	19,14 Na	Cation Anion Balance	hemistry: F, CI, S04, TDS	Blarb Carb, pH, EC	e Organics GC/MS (8260)			des/PCB (608/8081/8082)	des (615/8151)	(310)/8270 SIMS	rclp 1311) ZHE	utral Acid Compounds GC/MS	n (ICP-MS)	1 226+228	Alpha/Beta	
	SAMPLE ID	DATE	-			etals	CLP	etals	etals	ssol	A.N	8	en C	14	latil	9	9	stici	rbic	IA (8	09	se/Ne	aniu	diun	SSO	-14
0	SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Σ	Ĕ	Σ	Σ	ō	3	¥	Ŭ	A	2	M	ŏ	Pe	He	à	82	Bas	5	Ra	Ö	01
Cell#F19	ample #1@3 BGS/ -01	93004	1030	NAQ	2.1.1.1		-				X	X	X	X		12		13	1			1				
1#2	#102.5'865/ -02	1	101	1	See 1		1.54				X	X	X	X			15		Provide State		1		1.5	11	53.	1
#3	#1@ 2:8'865/ 410014	12	1128		1997			1		1	X	X	X	X			14	1					-			
1444	#1C2.5'B69 410014	1	1157								X	X	X	×												
-			1. A. A.				-	196						18	-17		2	1						12		1.19
PRO				SAMPLE RE	CEIPT	1	_	SAMF	PLES	SEN	IT TO):	-	RELIN	QUISI	EDE	BY:	121	12.21	1.	RELIN	QUIS	ED B	Y:	1920.3	2
PROJEC	#: 410014		Total Nu	mber of Cor	ala		-	PENS	SACO	LA -	STL-	FL	4	Signature			1:	Time:	170	10	Signatur	e:			Time:	
CLEVE	L'STD. IV	1.0	Received	Lustody Se	ais			ATEL	- A7			-	- 0	JUL N	nem	00	<u>vm</u>	Data	11	-	Defended					
C REQL	IRED: MS MSD	BLANK	Received	Good Con	d./Cold	13		ATEL	- MA	RION	V			FM	ncin	0.1	inv	10/0	14	al	Printed I	vame:			Date:	
TAT: 8	TANDARD) RUSH!!		LAB NUM	ABER:				ATEL	- ME	LMO	RE			Pinnack	e Labo	rator	ies, Ir	IC.	/ "		Compan	v	1	5 - 16 s		
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SPECIAL	CERTIFICATION							WCAS	S	1-1-1		-	-	Printed Na	ame:			Date:	5.5	1	Printed N	Name!		•	Date:	
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Lab	Order,#: 0410119	_		D	ate Received:	10-5	-af		
1.	Was there a Chain of Custody?	es No*		8.	Were samples ch preservative? (Ch H ₂ O requiring preserv SOP 917) except VO.	ecked for eck pH of all ative (STL-PN 4 vials that	Yes	No*	•
2.	Was Chain of Custody properly (refilled out and relinquished?	No*	al al	9.	Is there sufficient analysis requester	e/* volume for d?	Yes	No*	
3.	Were all samples properly (e)	No ⁺		10.	Were samples rec Holding Time?	eived within	Yes	No*	
4.	Were samples received cold? (Ye (Criteria: 0.1° - 6°C: STL-SOP 1055)	s) No*	N/A	11.	Is Headspace (but > ¼ " diameter in	ble) visible VOA vial(s)?*	Yes*	No	A
5.	Did samples require splitting or Ye	st No		12.	Were Trip Blanks I	Received?	Yes	No.	Contraction of the second
. (compositing*?			13.	If yes, was analysi Blanks requested?	is of Trip	Yes	No	(
. V	Nere samples received in Yes	No ⁺		14.	Were MS/MSD-spe provided?	cific bottles	Yes	No*	5
	equested? Were all sample containers) Not		15.	If any issues, how	was PM	PSIF [Verb	>
irbil oole omn	eceived intact? I Number(s): ا <u>ک ۲۶ او ۲۵ ۱۰</u> Ir Number(s) & Temp(s) °C: nents (reference item numbers	duen above a	7169 TE #340L Ind list Ani Ov	Del 4°C, IR Sam	Vivery By: UPS 4-66 -1-COOLER NUMBER, TEMPE ple IDs/Tests wf 24 AMC-L p	FedEx HD (HD - Hand L UTURE, THERMOMETE THERE APPROP. THERE APPROP.	BUS Delivery! (K) R MUMBERI riate): CVML	DHL	F
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Organic Data Qualifiers for Final Report

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

The result is not within control limit(s).

STL

SEVERN

ENT

Inorganic Data Qualifiers for Final Report

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

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

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

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

Florida Projects Inorganic/Organic

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

Arizona DEQ Projects

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

Severn Trent Laboratories Inc.

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



STL PENSACOLA Certifications, Memberships & Affiliations

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL) Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater) Arkansas Department of Pollution Control and Ecology, (88-0689) (Environmental) California Department of Health Services, ELAP Laboratory ID No. 2510 (Hazardous Waste and Wastewater) Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater) Florida DOH, NELAP Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater) Florida DEP/DOH CompQAP # 980156 Illinois Environmental Laboratory Accreditation Program (ELAP), NELAP Laboratory ID No. 200041 (Wastewater and Hazardous Waste) Iowa Department of Natural Resources, Laboratory ID No. 367 (Wastewater, UST, Solid Waste, & Contaminated Sites) Kansas Department of Health & Environment, NELAP Laboratory ID No. E10253 (Wastewater and Hazardous Waste) Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water) Kentucky Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST) Louisiana DEQ, LELAP, NELAP Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental) Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida) Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater) Michigan Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida) New Hampshire DES ELAP, NELAP Laboratory ID No. 250502 (Drinking Water & Wastewater) New Jersey DEP&E, NELAP Laboratory ID No. FL006 (Wastewater and Hazardous Waster) North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater) North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Arizona) Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater) Pennsylvania Department of Environmental Resources, NELAP Laboratory ID No. 68-467 (Drinking Water & Wastewater) South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL) Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water) Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL) West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater) EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031 NFESC (Naval Facilities Engineering Services Center) USACE (United States Army Corps. of Engineers), MRD STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599 Total Pages of Report certlist|condcert.lst revised 7/13/04

PI LAB	NAGE Pinnacle Laboratories Inc.	C		IN	0	F C			DY	1	P		cce:	ssio	n#:		4	100	514	A.		
D AREAS ARE FOR LAB USE ONLY.	PROJECT MANAGER: Ross Kennemer COMPANY: Animus Environmental ADDRESS: 624 E. Commete Farminton, nm & 741 PHONE: 564-2281 FAX: 324-2022 BILL TO: AES COMPANY: ADDRESS: SAMPLEID DATE TIME: MATRIX LABID (all*1 Souple*1235865 9-30-04 /030 Soil (0) Cell*2 Souple*1225865 9-30-04 /030 Soil (0)	 Petroleum Hydrocarbons (418.1) TRPH (MOD.8015) Diesel/Direct Inject 	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE		8021 (TCL)	8021 (EUA)	8021 (CUST)	504.1 EDB D/DBCP D	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics DPBMS S	8260 (CUST) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	<pre>c > Major Cations / Anion 5</pre>	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	K X RCRA Metals (8) RCRA Metals hv TCI P (Method1311)	Metals:	
MPLETELY. SHADED	Cell#3 Smple#172,5'865 9-30-04 AZ8 So:1 03 Cell#4Smaple#172,5'865 9-30-04 1157 S.; 1 04	× ×			XX												× ×			× × ×		777
PLEASE FILL THIS FORM IN CC	WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEAS PROJECT INFORMATION PRIOR AUTHORIZATION IS REPROJECT INFORMATION PROJECT INFORMATION PRIOR AUTHORIZATION IS REPROJECT INFORMATION PRIOR AUTHORIZATION IS REPROJECT INTO AVAILABLE ON ALL ANALYSES PROJ. NO.: (RUSH) 124hr 148hr 172hr PROJ. NAME: 100 hord for available on ALL ANALYSES Into Available on ALL ANALYSES Into Available on ALL ANALYSES PROJ. NAME: 100 hord for available on ALL ANALYSES Into Available on ALL ANALYSES Into Available on ALL ANALYSES PROJ. NAME: 100 hord for available on ALL ANALYSES Into Available on ALL ANALYSES Into Available on ALL ANALYSES PROJ. NAME: 100 hord for available on ALL ANALYSES Into Available on ALL ANALYSES Into Available on ALL ANALYSES PROJ. NAME: 100 hord for available on ALL ANALYSES Into Available on ALL ANALYSES Into Available on ALL ANALYSES PROJ. NO.: Into Available on ALL ANALYSES Into Available on ALL ANALYSES Into Available on ALL ANALYSES Shipped via: Into Available on All Available Into Available on All Available on All Available Supped via: Into Available on All Available						ER DLVED	C SI S P	RELIN ionature inited N isi k iompany ee Rever RECE ignature	QUIS ame: se side	(Force	D D D D D D D	: ime: 07 ate: 10 ure)	-1-	1. 1 1. 1.	Print Corr Print	ELINQ hature: ted Nar beary: ECEIV hature: <u>MCU</u> ted Nar MCU Pinna		HED I BY : 1 Turn Labor	BY: Tim Date (LAB Tim Date (LAB Tim Date (LAB Tim Date Date Date Date Date) * 173 * 173 * 173 * 173	2. 2. 5. rf c.

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Animas Environmental Services. LLC

624 E. Comanche • Farmington, NV 8740* TEL 505-564-2281 • F4/ 505-324-2022

January 7, 2005

Mike Dimond Benson-Montin-Greer Drilling Corporation 4900 College Blvd Farmington, New Mexico 87402

RE: Results of December, 2004, Treatment Zone Monitoring at BMG's Centralized Surface Waste Management Facility, Rio Arriba County, New Mexico

Dear Mr. Dimond:

On December 10, 2004, Animas Environmental Services, LLC (AES) completed the quarterly treatment zone monitoring and sampling of the Benson-Montin-Greer Drilling Corporation (BMG) Centralized Surface Waste Management Facility, located near the Canada Ojitos Unit (COU) Gas Plant in Rio Arriba County, New Mexico.

Sampling Procedures

As required by the New Mexico Oil Conservation Division (NMOCD) permit for this facility, one random soil sample was collected from each of the four treatment cells. Samples were collected at 2 feet below surface grade from each treatment cell. A stainless steel hand auger, which was decontaminated between each sampling point to prevent cross-contamination, was used to collect the samples. Once collected, each sample container was labeled with the date, sample location, sample type and sampler's initials. The containers were placed in a chilled, insulated cooler at 4°C until delivered to the analytical laboratory, Pinnacle Laboratories, Albuquerque, New Mexico. A Chain of Custody was completed at the time the samples were delivered to the laboratory.

Laboratory Analytical Methods

Each soil sample was analyzed for total petroleum hydrocarbons (TPH) per EPA Method 418.1 and benzene, toluene, ethylbenzene and xylene (BTEX) per EPA Method 8021. Samples collected for BTEX analysis were field-preserved with methanol at the time of collection with materials supplied by the analyzing laboratory.

Treatment Zone Monitoring Results

Based on AES's observations of the treatment cells at the time of sample collection, it is apparent that Treatment Cells #1, #2, and #3 are being tilled on a frequent basis. Soils within these cells were very loose, and no weeds or other vegetation, which would indicate infrequent tilling, were observed. No hydrocarbon stained soils were observed on the surface of any of the cells, and no hydrocarbon odors were noted during sample

collection. As observed during previous sampling events, Treatment Cell #4 appears to not be in use.

Laboratory analysis results for all samples collected were below the method detection limit. The sample collection point for each treatment cell, as well as the associated analytical results, are presented on Figure 1. Laboratory analytical reports have also attached.

The next monitoring and sampling event is scheduled to be completed during the week of March 21, 2005.

If you have any questions regarding the sampling procedures or results, please do not hesitate to contact me or Elizabeth McNally at (505) 564-2281.

Sincerely,

Ross Kennemer Project Manager

Attachments: Figure 1 Treatment Zone Monitoring Locations Pinnacle Laboratory Analytical Reports

Files/2004/BMG/Landfarm Sampling/gcbmg010705.doc



AIR STRIP



TABLE 1. SUMMARY OF QUARTERLY TREATMENT ZONE MONITORING DECEMBER, 2004

LANDFARM I.D.	SAMPLE I.D.	SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH (FT.)	BENZENE (MG/KG)	TOLUENE (MG/KG)	ETHYL BENZENE (MG/KG)	XYLENE (MG/KG)	TPH (MG/KG)
CELL #1	#1	N 36° 23.387' W 106° 52.070'	12/10/2004	2	<0.025	<0.025	<0.025	<0.050	<20
CELL #2	#1	N 36° 23.429' W 106° 52.023'	12/10/2004	2	<0.025	<0.025	<0.025	<0.050	<20
CELL #3	#1	N 36° 23.373' W 106° 51.823'	12/10/2004	2	<0.025	<0.025	<0.025	<0.050	<20
CELL #4	#1	N 36° 23.363' W 106° 51.784'	12/10/2004	2	<0.025	<0.025	<0.025	<0.050	<20





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

Pinnacle Lab ID number December 23, 2004 412217

ANIMAS ENVIRONMENTAL SERVICES 624 EAST COMMANCHE FARMINGTON, NM 87401

Project Name Project Number BMG LANDFARM SAMPLING (NONE)

Attention: ROSS KENNEMER

On 12/13/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **non-aq** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

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

MR: jt

Enclosure



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

CLIENT	: ANIMAS ENVIRONMENTAL SERVICES	PINNACLE ID	: 412217
PROJECT #	: (NONE)	DATE RECEIVED	: 12/13/2004
PROJECT NAME	: BMG LANDFARM SAMPLING	REPORT DATE	: 12/23/2004
PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
412217 - 01	CELL #1 @ 2'	NON-AQ	12/10/2004
412217 - 02	CELL #2 @ 2'	NON-AQ	12/10/2004
412217 - 03	CELL #3 @ 2'	NON-AQ	12/10/2004
412217 - 04	CELL #4 @ 2'	· NON-AQ	12/10/2004



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GENERAL CHEMISTRY RESULTS 418.1

CLIENT PROJEC PROJEC	T # T NAME	: ANIMAS ENV : (NONE) : BMG LANDF	VIRONMENTAL	. SERVICES	PINNACLE I. DATE RECE ANALYST	D. IVED	: 412217 : 12/13/2004 : BP	
SAMPLE			ALC AN	DATE	DATE	DATE	DIL.	
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
01	CELL #1 @ 2'		NON-AQ	12/10/2004	12/19/2004	12/19/2004	1	
02	CELL #2 @ 2'		NON-AQ	12/10/2004	12/19/2004	12/19/2004	1	
03	CELL #3 @ 2'	the of the state	NON-AQ	12/10/2004	12/19/2004	12/19/2004	1	
PARAME	TER		DET. LIMIT	UNITS	CELL #1 @ 2'	CELL #2 @ 2'	CELL #3 @ 2'	
PETROL	EUM HYDROCAR	BONS	20	MG/KG	< 20	< 20	< 20	
DRY WE	IGHT (%)				91	86	85	

CHEMIST NOTES: N/A



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GENERAL CHEMISTRY RESULTS 418.1

CLIENT PROJECT PROJECT	# NAME	: ANIMAS ENVIRONMENT : (NONE) : BMG LANDFARM SAMP	TAL SERVICES	PINNACLE I. DATE RECEI ANALYST	PINNACLE I.D. DATE RECEIVED ANALYST	
SAMPLE		The second second	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRI	X SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	CELL #4 @ 2'	NON-A	Q 12/10/2004	12/19/2004	12/19/2004	1
PARAMET	ER	DET. LIMI	T UNITS	CELL #4 @ 2'	A STATE AND	
PETROLE	UM HYDROCAR	BONS 20	MG/KG	< 20		

DRY WEIGHT (%)

CHEMIST NOTES: N/A




GENERAL CHEMISTRY - REAGENT BLANK 418.1

CLIENT PROJECT # PROJECT NAME	: ANIMA : (NONE : BMG L	S ENVIRONMEN) ANDFARM SAMP	TAL SERVICE	ES		PINNACLE I.D. SAMPLE MATRIX UNITS	: 412217 : NON-AQ : MG/KG
		REAGENT	SAMPLE	DATE	1000		3 8 9 9 9 9 8 9
PARAMETER		BLANK I.D.	RESULT	ANALYZED	ANALYST		in the second
PETROLEUM HYDROG	CARBONS	121904	<20	12/19/04	BP	SALE STORES	

CHEMIST NOTES: N/A



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GENERAL CHEMISTRY - QUALITY CONTROL LCS/LCSD

LCS/LCSD #	418.1 121904 ANIMAS EN' (NONE)	VIRONMEN	TAL SERVICE	S	PINNACLE DATE EXTR DATE ANA	I.D. RACTED LYZED		412217 12/19/2004 12/19/2004	
PROJECT NAME :	BMG LANDF	ARM SAMP	PLING		SAMPLE M UNITS	ATRIX	-	NON-AQ MG/KG	
	SAMPLE	CONC	SPIKED	%	DUP	DUP	See Jeway	REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
PETROLEUM HYDROCARBONS	<20	318	303	95	295	93	3	(75 - 125)	20

CHEMIST NOTES: N/A

% Recovery =

(Spike Sample Result - Sample Result)

X 100

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

Average Result

X 100





GENERAL CHEMISTRY - QUALITY CONTROL MS/MSD

TEST :	418.1				PINNACLE	I.D.	:	412217	
_MSMSD # :	412217-01	412217-01				DATE EXTRACTED		12/19/2004	
CLIENT :	ANIMAS EN	/IRONMEN	TAL SERVICE	S	DATE ANAL	LYZED	:	12/19/2004	
PROJECT # :	(NONE)				SAMPLE M	ATRIX	1	NON-AQ	
PROJECT NAME :	BMG LANDF	ARM SAMP	LING		UNITS		1	MG/KG	in the second
NAME OF A STREET OF A DECK	SAMPLE	CONC	SPIKED	%	DUP	DUP		REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
PETROLEUM HYDROCARBONS	<20	318	290	91	281	88	3	(75 - 125)	20

CHEMIST NOTES: N/A

% Recovery =

(Spike Sample Result - Sample Result) -- X 100

Spike Concentration

(Sample Result - Duplicate Result)

X 100

RPD (Relative Percent Difference) =

Average Result



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GAS CHROMATOGRAPHY RESULTS

TEST		: EPA 8021B - MI	ETHANOL PI	RESERVATIO	Ν			
CLIENT		: ANIMAS ENVIR	ONMENTAL	SERVICES	F	INNACLE I.D.	: 412217	
PROJECT #	#	: (NONE)				ANALYST	: BP	
PROJECT	NAME	: BMG LANDFAR	M SAMPLIN	G	State of the	See State	Mar Shares and	
SAMPLE				DATE	DATE	DATE	DIL.	
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
01	CELL #1 @ 2'	ALC: NOT THE ALC: NOT	NON-AQ	12/10/2004	NA	12/16/2004	1	
02	CELL #2 @ 2'		NON-AQ	12/10/2004	. NA	12/16/2004	1	
03	CELL #3 @ 2'	State of the state	NON-AQ	12/10/2004	NA	12/16/2004	1	2
PARAMETE	R	DET. LIMIT	UI	NITS	CELL #1 @ 2'	CELL #2 @ 2'	CELL #3 @ 2'	
BENZENE		0.025	M	G/KG	< 0.025	< 0.025	< 0.025	
TOLUENE		0.025	M	G/KG	< 0.025	< 0.025	< 0.025	
ETHYLBEN	ZENE	0.025	M	G/KG	< 0.025	< 0.025	< 0.025	
TOTAL XYL	ENES	0.050	M	G/KG	< 0.050	< 0.050	< 0.050	
METHYL-t-	BUTYL ETHER	0.13	M	G/KG	< 0.13	< 0.13	< 0.13	
SURROGA	TE:							
BROMOFLU		(%) (80 - 120)			98	97	101	
DRY WEIG	HT (%)	(00-120)			91	86	85	

CHEMIST NOTES: N/A



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GAS CHROMATOGRAPHY RESULTS

TEST		: EPA 8021B - M	ETHANOL PI	RESERVATIO	N		
CLIENT		: ANIMAS ENVIR	ONMENTAL	SERVICES	P	INNACLE I.D. :	412217
PROJECT	#	: (NONE)				ANALYST :	BP
PROJECT	NAME	: BMG LANDFAF	M SAMPLIN	G	S. Salation		and the second second
SAMPLE		The second second	e. A.	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	CELL #4 @ 2'		NON-AQ	12/10/2004	NA	12/16/2004	1
PARAMETE	ER	DET. LIMIT	UI	NITS	CELL #4 @ 2'		
BENZENE		0.025	M	G/KG	< 0.025		
TOLUENE		0.025	M	G/KG	< 0.025		
ETHYLBEN	IZENE	0.025	M	G/KG	< 0.025		
TOTAL XYL	ENES	0.050	M	G/KG	< 0.050		
METHYL-t-	BUTYL ETHER	0.13	M	G/KG	< 0.13		
	TF.						
BROMOFI		= (%)			99		
SUBBOGA	TELIMITS	(80 - 120)					
DRY WEIG	HT (%)	(00 120)			84		

CHEMIST NOTES: N/A



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GAS CHROMATOGRAPHY RESULTS REAGENT BLANK

TEST BLANK I. D. CLIENT PROJECT # PROJECT NAME	: EPA 8021B : 121504B : ANIMAS ENVIRONMENTAL SERVICES : (NONE) : BMG LANDEARM SAMPLING	PINNACLE I.D. DATE EXTRACTED DATE ANALYZED SAMPLE MATRIX ANALYST	: 412217 : N/A : 12/16/2004 : FP : BP
PARAMETER	UNITS		
BENZENE	MG/KG	<0.025	
TOLUENE	MG/KG	<0.025	
ETHYLBENZENE	MG/KG	<0.025	
TOTAL XYLENES	MG/KG	<0.050	
METHYL-t-BUTYL ETHER	MG/KG	<0.13	
SURROGATE:			

BROMOFLUOROBENZENE (%) SURROGATE LIMITS: CHEMIST NOTES: N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST BATCH # CLIENT PROJECT # PROJECT NAME	: EPA 8021B : 121504B : ANIMAS ENV : (NONE) : BMG LANDF	VIRONMEN	TAL SERVICE	S	PINNACLE DATE EXTE DATE ANAL SAMPLE M UNITS	I.D. RACTED YZED ATRIX		412217 N/A 12/16/2004 FP MG/KG	
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	1.03	103	0.999	100	3	(80 - 120)	20
TOLUENE	< 0.025	1.00	1.02	102	1.00	100	2	(80 - 120)	20
ETHYLBENZENE	<0.025	1.00	1.01	101	0.985	99	3	(80 - 120)	20
TOTAL XYLENES	< 0.050	3.00	3.03	101	2.95	98	3	(80 - 120)	20
METHYL-t-BUTYL ETHER	<0.13	1.00	0.890	89	0.900	90	1	(70 - 133)	20

CHEMIST NOTES: N/A

(Spike Sample Result - Sample Result)

% Recovery =

Spike Concentration

(Sample Result - Duplicate Result)

-- X 100

X 100

RPD (Relative Percent Difference) =

Average Result



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GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST MSMSD # CLIENT PROJECT # PROJECT NAME	: EPA 8021B : 412217-04 : ANIMAS ENV : (NONE) : BMG LANDF	VIRONMEN	TAL SERVICE	S	PINNACLE DATE EXTR DATE ANAL SAMPLE M UNITS	I.D. RACTED LYZED ATRIX		412217 N/A 12/16/2004 FP MG/KG	
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.025	1.00	0.997	100	1.06	106	6	(80 - 120)	20
TOLUENE	< 0.025	1.00	1.04	104	. 1.10	110	6	(80 - 120)	20
ETHYLBENZENE	< 0.025	1.00	1.02	102	1.09	109	7	(80 - 120)	20
TOTAL XYLENES	<0.050	3.00	3.06	102	3.26	109	6	(80 - 120)	20
METHYL-t-BUTYL ETHER	<0.13	1.00	0.967	97	1.05	105	8	(70 - 133)	20

- X 100

CHEMIST NOTES: N/A

(Spike Sample Result - Sample Result)

% Recovery =

Spike Concentration

(Sample Result - Duplicate Result)

-X 100

RPD (Relative Percent Difference) =

Average Result

Pinnacle Laboratories Inc.	
PROJECT MANAGER: 1055 Kennemer COMPANY: <u>Animus Environmental</u> ADDRESS: <u>624 E. Commchy</u> <u>Farminion NM 87401</u> PHONE: <u>564-2281</u> FAX: <u>324-2022</u> BILL TO: <u>AES</u> COMPANY: ADDRESS: <u>BILL TO:</u> <u>AES</u>	etroleum rrydrocarours (+ 10, 1), 11, 11, 11, 10, 10, 80, 15) Diesel/Direct Inject W0D.8015) Gas/Purge & Trap 021 (BTEX)/ 8015 (Gasothue) MTBE 021 (BTEX)/ 8015 (Gasothue) MTBE 021 (TCL) 021 (TCL
Cell#1 @ 21 D-10-#1 /015 Siil. Cell#2 @ 2 D-10-#1 /032 Soil Cell#2 @ 2 D-10-#1 1032 Soil Cell#2 @ 2 D-10-#1 1032 Soil Cell#2 @ 2 D-10-#1 1050 coil Cell#2 @ 21 D-10-#1 1050 coil Cell#2 @ 21 D-10-#1 121 Soil	
WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE PROJECTINFORMATION PROJ. NO.: (RUSH) D24hr* D48hr* D72hr* NOT AVAILABLE ON ALL ANALYSES PROJ. NAME: Smplic CERTIFICATION REQUIRED DM P.O. NO.:	NQUIRE. UIRED FOR RUSH PROJECTS RELINQUISHED BY 1 RELINQUISHED BY 2 1 WEEK (NORMAL) Signature: Time: Signature: Time: Time: 0 SDWA 0 AZ 0 THER OTHER Date: Printed Name: Date:
SHIPPED VIA: SAMPLERECEPT NOCONTAINERS CUSTODY SEALS RECEIVED INTACTO B(DEIOD OF SEALS B(DEIOD OF SEALS CUSTODY SEALS CUSTON CUSTODY SEALS CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CUSTON CU	e: L Surface art facility Printed Name: Date: Printed Name Date: Pr

July, 2003 PLI Inc.: Pinnacle Laboratories, Inc. + 2709-D Pan American Freeway, NE + Albuqueroue. New Mexico 87107 + (505) 344-3777 + Fay (505) 344-4413 + F.mail: DIAL 1 AD GATT ALCT

ATTACHMENT II 2004 Inspections of Evap. Pond Leak Detection System

BENSON-MONTIN-GREER DRILLING CORP. NW/4 SECTION 20, T25N, R1E, NMPM, Rio Arriba County, NM Permit NM-02-0004 Monthly Evaporation Impoundment Monitor Tube Fluid Levels. 04 For Calendar Year January 04 to December **Monitor Reading** Level Change in fluid level from Taken by: (Inches) prior Month (Inches) Date ben & Hors Jan- 5/04 1" Bent Hong Feb- 11/04 1" ben L Homala Mar- 17/04 1" Bent Hon Apr- 2 / 04 11 May- 5/04 Bent Howlet 1 11 Ben L Hon Jun- 9/04 1" Bent Jul- 6/04 2" 1) indo Aug- 23/04 11 Sep- 3 -1 Pumped out Fluid 111 lo 04 Octlar 11 tim Inujillo Nov- 4/04 11 Feer Thijllo Dec- 3 04

ATTACHMENT III 2004 Evap. Pond Water Analysis

January 12, 2004

Mr. Steve Owen Benson Montin Greer Drilling Corp. 4900 College Blvd. Farmington, NM 87401 Phone (505) 325-8874 Fax (505) 327-9207

Client No.: 99074-005 Job No.: 907405

Dear Mr. Owen,

Enclosed are the analytical results for the sample collected from the location designated as "Llaves". One water sample was collected by Benson Montin Greer personnel on 1/09/04, and received by the Envirotech laboratory on 01/12/04 for BTEX per USEPA 8021 analysis.

The sample was documented on Envirotech Chain of Custody No. 11730 and assigned Laboratory No. 27510 (COU Evaporation Pit) for tracking purposes.

The sample was analyzed on 01/12/04 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted, **Envirotech, Inc.**

Christine M. Walters

Christine M. Walters Laboratory Coordinator / Environmental Scientist

enc.

CMW/cmw

C:/files/labreports/benson.wpd

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	BMG	Project #:	99074-005
Sample ID:	COU Evaporation Pit	Date Reported:	01-12-04
Chain of Custody:	11730	Date Sampled:	01-09-04
Laboratory Number:	27510	Date Received:	01-12-04
Sample Matrix:	Water	Date Analyzed:	01-12-04
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	27.0		0.2
Toluene	25.7	1.1	0.2
Ethylbenzene	6.5	1	0.2
p,m-Xylene	19.1	1	0.2
o-Xylene	8.2	1	0.1
Total BTEX	86.5		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery			
	fluorobenzene	96 %			
	1,4-difluorobenzene	96 %			
	4-bromochlorobenzene	96 %			

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

Llaves.

Analyst

mistine multers Review

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	QC	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis:		N/A 01-12-04 N/A N/A 01-12-04 BTEX		
Calibration and	I-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect.	ALC: NO
Detection Linita (ugic)	ana mani mang kana tang kanang ka	Mecche Via	1196 0 2 13 10	CONC		
Benzene	4.2776E-002	4.2862E-002	0.20%	ND	0.2	
Toluene	4.8966E-002	4.8975E-002	0.02%	ND	0.2	
Ethylbenzene	7.4036E-002	7.4185E-002	0.20%	ND	0.2	
p,m-Xylene	6.8275E-002	6.8288E-002	0.02%	ND	0.2	
o-Xylene	5.5866E-002	5.6034E-002	0.30%	ND	0.1	
Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit		-
Benzene	27.0	26.7	1.1%	0 - 30%		
Toluene	25.7	25.6	0.4%	0 - 30%		
Ethylbenzene	6.5	6.3	3.1%	0 - 30%		
p,m-Xylene	19.1	18.7	2.1%	0 - 30%		
o-Xylene	8.2	8.0	2.4%	0 - 30%		
Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits	a state
Benzene	27.0	50.0	76	98.8%	39 - 150	
Toluene	25.7	50.0	75.1	99.2%	46 - 148	
Ethylbenzene	6.5	50.0	56.4	99.8%	32 - 160	
p.m-Xvlene	19.1	100	118	98.8%	46 - 148	
o-Xylene	8.2	50.0	58.1	99.8%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996. Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for sample 27510. Analyst

Review

CHAIN OF CUSTODY RECORD

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Sampler: ക്രം.			Client No.	4 - 00	5	of	ainers	8021							Remark	S	
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				(505) 632-0615				194	Cool - Ice/Blue Ice								

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Benson Montin Greer	Project #:	99074-005
Sample ID:	Llaves Evaporation Pond	Date Reported:	01-14-04
Laboratory Number:	27528	Date Sampled:	01-13-04
Chain of Custody No:	11736	Date Received:	01-14-04
Sample Matrix:	Water	Date Extracted:	01-14-04
Preservative:	Cool	Date Analyzed:	01-14-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: L

Llaves.

read Analyst

Mistine Miller Review

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	01-14-TPH Q/	VQC	Date Reported:		01-14-04
Laboratory Number:	27528		Date Sampled:		N/A
Sample Matrix:	Methylene Chlo	ride	Date Received:	N/A	
Preservative:	N/A		Date Analyzed:		01-14-04
Condition:	N/A		Analysis Reques	ted:	TPH
	I-Cal Date	I-Cal RF	C-Cal RF:	% Difference	Accept Range
Gasoline Range C5 - C10	04-29-03	1.8591E-002	1.8572E-002	0.10%	0 - 15%
Diesel Range C10 - C28	04-29-03	1.5507E-002	1.5476E-002	0.20%	0 - 15%
Blank Conc. (mg/L)		Concentration		Detection Lim	ile.
Gasoline Range C5 - C10		ND		0.2	1992
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND		0.2	
Duplicate Conc. (mg/L)	Sample	Duplicate	% Difference	Accept. Range	
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%	
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%	
Spike Conc. (mg/L)	Sample	Spike Added	Spike Result	% Recovery	Accept Rang
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments:

QA/QC for sample 27528.

Analyst

Review Review

CHAIN OF CUSTODY RECORD

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Envirotech, Inc.

5796 Hwy 64 Farmington, NM 87401

505-632-0615 505-632-1865

Phone Number Fax Number

Invoice

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Benson Montin Greer 4900 College Blvd Farmington, NM 87401

Lab Analysis

Job Manager: Dennis Ajeman

Professional Services for the Period: 01/01/04 to 01/15/04

Billing Group: 001

Lab Services

Cost Plus

January 15, 2004 Invoice: 8622

Expense Code	Date	Bill Units		Unit Bill Rate	BillUnffsharge
USEPA 8021 BTEX	01/12/04	1.00	Ea	\$80.00	\$80.00
COC 11730-Llaves: COU	Evaporation Pit				
USEPA 8015 TPH	01/15/04	1.00	Ea	\$80.00	80.00
COC 11736-Llaves: Llaves	s Evaporation Pond				
			Lab Serv	ices Totals:	\$160.00
			Billing (Group Subtotal:	\$160.00
			Billing (Group Fees	0.00
			New M	exico Gross Receipts Tax:	\$9.50
			Billing (Group Total:	\$169.50
Project Totals:					
			Project	Subtotal:	\$160.00

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Invoice Number: January 15, 2004 8622

\$9.50

Page 1

NM Gross Receipts Tax:

Envirotech, Inc. Job: 99074-005	Thursday, Ja Invoice:	anuary 15, 2004 8622
	Billing Total:	\$169.50
	Total Invoice Amount	\$169.50

All invoices are due upon receipt. A late charge of 1.5% will be added to any unpaid balance after 30 days.

CHAIN OF CUSTODY RECORD

Client / Project Name	Project Location				ANALYSIS / PARAMETERS												
Sampler:			Client No.	UT S			of ners	2021	3						Remarks		
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix		No. (Contai	х Ц Ц									_	
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CHAIN OF CUSTODY RECORD

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