NM1 - _10 - B____

MONITORING REPORT

YEAR(S):

2015-2016



P.O. Box 2043 Farmington, NM 87499

December 23, 2015

Mr. Jim Griswold Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Re: JFJ Landfarm/Operated by Industrial Ecosystems, Inc. - Permit: NM01-0010B - Background Testing

Industrial Ecosystems Inc.

Dear Mr. Griswold:

Following the request of the NMOCD, the attached report is being submitted to establish background soil concentrations for the JFJ Landfarm in accordance with NMAC 19.15.36.15.B-Background Testing. Pursuant to NMAC 19.15.36.15.B a total of twelve (12) composite background soil samples, each consisting of 16 discreet aliquots, were collected from a depth of at least six (6) inches below the original ground surface. The composite samples were collected from various "undisturbed" areas (areas which have never been impacted by previous operations nor have any treated soils been placed) outside and inside of the facility property.

The composite samples were delivered to the Green/Cardinal Laboratories drop off location with the applicable chain of custody form. Each composite sample was tested for analysis via the following methods:

- TPH 418.1
- BTEX 8021B/8260B
- Chlorides 300.0
- Subsections A & B of 20.6.2.3103 NMAC

The analytical report is attached as Appendix A. The coordinates of each sample spot were taken using a GPS unit and are listed in Appendix B. The GPS locations were uploaded into Google Earth and the corresponding maps are attached as Appendix C. Background Samples 9, 10, 11 & 12 were all taken from "undisturbed" areas outside of the facility fence line. Background Samples 1, 2, 3, 4, 5, 6, 7 & 8 were all taken from "undisturbed" areas within the facility fence line.

If there are any questions regarding this report, please feel free to contact me at the above listed telephone number.

Respectfully,

marcueamarguy

Regulatory/Compliance/HR Manager

Attachments:

Appendix A:Cardinal Laboratories Analytical Report (84 pages)Appendix B:GPS Coordinates (3 pages)Appendix C:Google Maps (6 pages)

Soil Reclamation Center ILUEIVED ()() Phone: (505) 632-1782 Fax: (505) 63251876 28 D 2 30

#49 CR 3150 Aztec, NM 87410

APPENDIX A



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 10, 2015

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC, NM 87410

RE: WQCC A&B

Enclosed are the results of analyses for samples received by the laboratory on 10/14/15 8:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at <u>www.tceq.texas.gov/field/ga/lab_accred_certif.htm</u>l.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Kune

Celey D. Keene Lab Director/Quality Manager



 INDUSTRIAL ECOSYSTEMS
 Project:
 WQCC A&B
 Reported:

 49 CR 3150
 Project Number:
 3541
 10-Nov-15 16:36

 AZTEC NM, 87410
 Project Manager:
 MARCELLA MARQUEZ

 Fax To:
 (505) 632-1876

Analytical Results For:

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BG 1	H502670-01	Soil	12-Oct-15 09:17	14-Oct-15 08:45
BG 2	H502670-02	Soil	12-Oct-15 09:11	14-Oct-15 08:45
BG 3	H502670-03	Soil	12-Oct-15 08:57	14-Oct-15 08:45
BG 4	H502670-04	Soil	12-Oct-15 08:19	14-Oct-15 08:45
BG 5	H502670-05	Soil	12-Oct-15 08:05	14-Oct-15 08:45
BG 6	H502670-06	Soil	12-Oct-15 10:20	14-Oct-15 08:45
BG 7	H502670-07	Soil	12-Oct-15 09:35	14-Oct-15 08:45
BG 8	H502670-08	Soil	12-Oct-15 08:43	14-Oct-15 08:45
B G 9	H502670-09	Soil	12-Oct-15 09:35	14-Oct-15 08:45
BG 10	H502670-10	Soil	12-Oct-15 08:16	14-Oct-15 08:45
BG 11	H502670-11	Soil	12-Oct-15 08:30	14-Oct-15 08:45
BG 12	H502670-12	Soil	12-Oct-15 08:50	14-Oct-15 08:45

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remety for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after completion or the applicable service. In no event shall be liable for incidential or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by damit, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based unover stated reasons or othewise. Results retain only to the sample statefield above. This report shall not be reported entrolised in the laporation espirated in claims.

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		F	Project Num Project Mana	oject: WQC nber: 3541 ager: MAR	CC A&B CELLA MAF	RQUEZ	Z			Reported: 10-Nov-15 1	6:36
		·	Fa	x To: (505) 632-1876	5					
				BG 1							
			H502	670-01 (Soi	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborato	ories						
Inorganic Compounds											
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-Cl-B	
рН*	8.22		0.100	pH Units	1		5111008	AP	10-Nov-15	9045	
Phenols	ND		0.5	mg/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	ND		100	mg/kg	10		5102105	AP	22-Oct-15	375.4	
Organic Compounds											
TPH 418.1	ND		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Radionuclides											SUR_RS
Radium-226	0.49			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE	
Radium-228	0.94			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay HPGE	
Total Radium	1.4			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE	
Petroleum Hydrocarbons by GC FID											
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane			91.0 %		47.2-157		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			105 %		52.1-176		5101401	MS	15-Oct-15	8015B	
PCBs BY GC/ECD											SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			129 %		35-140		5111002	СК	20-Oct-15	8082	

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Celeg Z. Karne

Celey D. Keene, Lab Director/Quality Manager



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Num Project Num Project Mana Fax	ject: WQ Iber: 354 Iger: MA To: (50	2CC A&B \$1 RCELLA MA 95) 632-187(RQUEZ 6			1	Reported: 0-Nov-15 1	6:36
			BG 1		-					
		H5020	670-01 (S	oil)						
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Labora	tories						
PCBs BY GC/ECD	·									SUB-SS
Surrogate: Decachlorobiphenyl		118 %		35-140		5111002	СК	20-Oci-15	8082	
Volatile Organic Compounds by I	EPA Method 826	08								
Vinyl chloride*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND	0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND	0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND	0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND	0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane		105 %		80.8-114		5101611	MS	19-0ct-15	8260	
Surrogate: Toluene-d8		98.5 %		83.7-121		5101611	MS	19-0ct-15	8260	
Surrogate: 4-Bromofluorobenzene		94.1 %		57.9-154		5101611	MS	19-Oct-15	8260	

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H502 DL Reporting Limit Cardin 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040 0.040	BG 1 2670-01 (S Units al Laborau mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Dilution U cories 40 40 40 40 40 40 40 40 40 40 40 40 40	UNC Bate 51013 51013 51013 51013 51013 51013 51013 51013 51013 51013	h Analys 08 MS 08 MS	Analyzed 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15 21-Oct-15	Method 8270C 8270C 8270C 8270C 8270C 8270C 8270C 8270C 8270C 8270C 8270C 8270C 8270C 8270C	Notes
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0.040	mg/kg	40	51015	00 1410			
0.040		-10	51013	08 MS	21-0ct-15	8270C	,
0.040	mg/kg	40	51013	08 MS	21-Oct-15	8270C	
0.040	mg/kg	40	51013	08 MS	21-Oct-15	8270C	
0.040	mg/kg	40	51013	08 MS	21-Oct-15	8270C	
0.040	mg/kg	40	51013	08 MS	21-Oct-15	8270C	
0.040	mg/kg	40	51013	08 MS	21-Oct-15	8270C	
0.040	mg/kg	40	51013	08 MS	21-Oct-15	8270C	
77.4 %		20.4-109	51013	08 MS	21-Oct-15	8270C	
73.2 %		23.4-133	51013	08 MS	21-Oct-15	8270C	
77.0 %		38.4-163	51013	08 MS	21-Oci-15	8270C	
Green Anal	ytical Lab	oratories					
1.00	mg/kg dry	100	B5102 7	0 KLJ	23-Oct-15	EPA9012 B	
					<u> </u>	*=Accredite	d Analvt
	77.0 % Green Anal 1.00	77.0 % Green Analytical Lab 1.00 mg/kg dry	77.0 % 38.4-163 Green Analytical Laboratories	77.0 % 38.4-163 510130 Green Analytical Laboratories 1.00 mg/kg dry 100 B5102 1.00 mg/kg dry 100 B5102 7	77.0 % 38.4-163 5101308 MS Green Analytical Laboratories 1.00 mg/kg dry 100 B51020 KLJ 7 7 100	77.0 % 38.4-163 5101308 MS 21-Oct-15 Green Analytical Laboratories 1.00 mg/kg dry 100 B51020 KLJ 23-Oct-15 7 7 7 38.4-163 38.4-163 38.4-163	77.0 % 38.4-163 5101308 MS 21-Oct-15 8270C Green Analytical Laboratories 1.00 mg/kg dry 100 B51020 KLJ 23-Oct-15 EPA9012 B 7 7

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	. •	F	Project Nur Project Man Fa	oject: WQG nber: 354 ager: MAR x To: (505	CC A&B 1 RCELLA MA 5) 632-187	RQUEZ				Reported: 10-Nov-15 16:	36
			H502	BG 1 670-01 (So	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			G reen Ana l	ytical Lab	oratories						
General Chemistry				·							
% Dry Solids	94.7			%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2
Soluble (DI Water Extraction)											
Fluoride	1.44		1.06	mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C	
Nitrate as N	1.28		0.800	mg/kg dry	20		[CALC]	KLJ	16-Oct-15	EPA353.2	
Nitrate/Nitrite as N	1.36		0.845	mg/kg dry	20		B51013	KLJ	15-Oct-15	EPA353.2	
Nitrite as N	ND		0.211	mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2	
Total Metals by ICP											
Iron	8340		5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B	
Total Metals by ICPMS				-							
Arsenic	2.69		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Barium	130		0.500	mg/kg dry	1000		B51027.	JGS	30-Oct-15	6020 A	
Cadmium	ND		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Chromium	2.35		1.00	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Copper	3.85		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Lead	5.69		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Manganese	346		2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Selenium	ND		1.00	mg/kg dry	1000		B51027	JGS -	30-Oct-15	6020 A	
Silver	ND		0.100	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	

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Celez Z. Kune



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	,	Project Nur Project Nur Project Man Fa	oject: WQ nber: 354 ager: MAR x To: (505	CC A&B 1 RCELLA MA 5) 632-187	RQUEZ 6			1	Reported: 0-Nov-15 16	:36
		H502	BG 1 670-01 (So	oil)						
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green Anal	ytical Lab	oratories					<u>\</u>	
Total Metals by ICPMS										
Uranium	0.360	0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	17.9	10.0	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA										
Mercury	0.118	0.106	mg/kg dry	500		B51017 1	JGS	22-Oct-15	EPA7471	

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Celez Z. Kanne



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P	Project Nun Project Mana Fax	oject: WQC nber: 3541 ager: MAR x To: (505	CC A&B L CELLA MAR) 632-1876	RQUEZ 5	2			Reported: 10-Nov-15 1	6:36
				BG 2							
· · · · · · · · · · · · · · · · · · ·			H502	670-02 (Soi	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborato	ries						
Inorganic Compounds											
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B	
pH*	8.42		0.100	pH Units	1		5111008	АР	10-Nov-15	9045	
Phenols	ND		0.5	mg/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	ND		40.0	mg/kg	4		5102105	АР	22-Oct-15	375.4	
Organic Compounds	1										
TPH 418.1	ND		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Radionuclides											SUB-RS
Radium-226	0.49			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE	
Radium-228	0.73			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay HPCE	
Total Radium	1.2			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE	
<u>Petroleum Hydrocarbons by GC FID</u>											
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane			94.1 %		47.2-157		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			104 %		52.1-176		5101401	MS	15-Oci-15	8015B	
PCBs BY GC/ECD											SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	i	-	5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			137 %		35-140		5111002	СК	20-0c1-15	8082	

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Celey D. Keine



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		1	Project Num Project Mana Fax	ject: WQ ber: 354 ger: MA To: (50	CC A&B 1 RCELLA MA 5) 632-187	RQUEZ 6	: 		1	Reported: 10-Nov-15 1	6:36
				BG 2							
			H5020	570-02 (S	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution		Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories					-	
PCBs BY GC/ECD											SUB-SS
Surrogate: Decachlorobiphenyl			119 %		35-140		5111002	СК	20-Oct-15	8082	
Volatile Organic Compounds by EP	A Method 826	B									
Vinyl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1.1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND		0.0500	mg/kg	50		5101611.	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			109 %		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8			95.5 %		83.7-121		5101611	MS	19-Oct-15	8260	
Surrogate: 4-Bromofluorobenzene			101 %		57.9-154	1	5101611	MS	19-Oct-15	8260	

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Celez D. Kune

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Pi Pro	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876				Reported: 10-Nov-15 16:36				
			H5026	BG 2 570-02 (Se	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories						
Semivolatile Organic Compounds	by GCMS										
Naphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
2-Methylnaphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
1-Methylnaphthalene	ND		0.020	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Fluorene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Phenanthrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Carbazole	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Fluoranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]anthracene	ND	k	0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Chrysene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[b]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[k]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Indeno[1,2,3-cd]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Dibenz[a,h]anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[g,h,i]perylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Surrogate: Nitrobenzene-d5			80.5 %		20.4-109		5101308	MS	21-Oct-15	8270C	
Surrogate: 2-Fluorobiphenyl			76.1 %		23.4-133		5101308	MS	21-Oct-15	8270C	
Surrogate: Terphenyl-dl4			80.8 %	·	38.4-163		5101308	MS	21-Oci-15	8270C	

Green Analytical Laboratories

General Chemistry				
Cyanide, Total	ND	1.00 mg/kg dry 100	B51020 KLJ 7	23-Oct-15 EPA9012 B

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Celey D. Kuna



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P		Reported: 10-Nov-15 16:36							
				BG 2				х.			
			H502	2670-02 (Sa	il)		-				
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		(Green Anal	ytical Lab	oratories						•
General Chemistry											
% Dry Solids	94.6			%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2
Soluble (DI Water Extraction)							. <u> </u>				
Fluoride	1.90	۲	1.06	mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C	
Nitrate as N	1.12		0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2	
Nitrate/Nitrite as N	1.18		0.423	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2	
Nitrite as N	ND		0.211	mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2	
Total Metals by ICP											
Iron	5840		5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B	
Total Metals by ICPMS											
Arsenic	2.18		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Barium	315		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Cadmium	ND		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Chromium	2.42		1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Copper	3.46		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Lead	5.24		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Manganese	308		2.00	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Selenium	ND		1.00	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Silver	ND		0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	

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Celey Di Kune

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	ECOSYSTEMS Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876							1	Reported: 0-Nov-15 16	:36
		Н50	BG 2 02670-02 (Se	oil)						
Analyte	Result	Reporting MDL Limi	g it Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green An	alytical Lab	oratories						
Total Metals by ICPMS										
Uranium	0.425	0.10) mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	22.3	10.0) mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA										
Mercury	ND	0.104	4 mg/kg dry	490		B51017 I	JGS	22-Oct-15	EPA7471	

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Celleg Z: Keine

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P	Project Nun Project Mana Fax		Reported: 10-Nov-15 16:36						
			H502	BG 3	n						
Analyte	Result	MDL	Reporting	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
· · · · ·	<u></u>	<u>,</u>	Cardina	al Laborato	ries						
Inorganic Compounds											
Chloride	ND		16.0	mg/kg	4	-	5101501	AP	20-Oct-15	4500-CI-B	
pH*	7.51		0.100	pH Units	1		5111008	AP	10-Nov-15	9045	
Phenols	ND		0.5 1	ng/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Salfate	4080		1000	mg/kg	100		5102105	AP	22-Oct-15	375.4	
Organic Compounds			_	·							
TPH 418.1	ND		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Radionuclides											SUB-RS
Radium-226	0.51			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE	
Radium-228	0.90			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPCE	
Total Radium	1.4			pCi/gram	1	0.06	5111004	СК	29-Oct-15	GammaRay HPGE	
Petroleum Hydrocarbons by GC FID											
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane			84.1 %		47.2-157	• • • • • • •	5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			99.2 %		52.I-176		5101401	MS	15-Oci-15	8015B	
PCBs BY GC/ECD											SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1221	ND		10.0	ug/kg	I		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			156 %		35-140		5111002	СК	20-0c1-15	8082	S-12

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Celez D. Kara



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Num Project Mana Fax		Reported: 10-Nov-15 16:36							
				BG 3							
			H5026	570-03 (S	oil)						<u> </u>
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories						
PCBs BY GC/ECD											SUB-SS
Surrogate: Decachlorobiphenyl	,		143 %		35-140		5111002	СК	20-Oct-15	8082	S-12
Volatile Organic Compounds by EP.	A Method 826	0 B									
Vinyl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	· ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND		0.150	mg/kg	50		- 5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			109 %		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8			95.1 %		83.7-121		5101611	MS	19-0ct-15	8260	
Surrogate: 4-Bromofluorobenzene			96.3 %		57.9-154		5101611	MS	[9-0ct-15	8260	

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Celez Di Kuna _



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876					Reported: 10-Nov-15 16:36			
		1	BG 3 H502670-03	3 3 (Soil)						
Analyte	Result	Repo MDL 1	arting Limit Unit	ts Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			rdinal Lab	oratories			4			
Semivolatile Organic Compounds h	oy GCMS									
Naphthalene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
2-Methylnaphthalene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
1-Methylnaphthalene	ND	0	.020 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Acenaphthylene	ND	0	.040 mg/l	kg 40	5	101308	MS	21-Oct-15	8270C	
Acenaphthene	ND	. 0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Fluorene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Phenanthrene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Anthracene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Carbazole	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Fluoranthene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Pyrene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Benzo[a]anthracene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Chrysene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Benzo[b]flouranthene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Benzo[k]flouranthene	ND	0	.040 mg/k	kg 40	5	101308	MS	21-Oct-15	8270C	
Benzo[a]pyrene	ND	0	.040 mg/k	cg 40	5	101308	MS	21-Oct-15	8270C	
indeno[1,2,3-cd]pyrene	ND	0	.040 mg/k	(g 40	5.	101308	MS	21-Oct-15	8270C	
Dibenz[a,h]anthracene	ND	0	.040 mg/k	(g 40	5	101308	MS	21-Oct-15	8270C	
Benzo[g,h,i]perylene	ND	0	.040 mg/k	cg 40	5	101308	MS	21-Oct-15	8270C	
Surrogate: Nitrohenzene-d5		76.	1%	20.4-109) 5,	101308	MS	21-Oci-15	8270C	
Surrogate: 2-Fluorobiphenyl		73.	1%	23.4-133	. 5 .	101308	MS	21-Oct-15	8270C	
Surrogate: Terphenyl-dl4		79 .	4%	38.4-163	5.	101308	MS	21-Oct-15	8270C	
		Green	Analytical]	Laboratories						
General Chemistrv										
Cyanide, Total	ND		1.00 mg/kg	dry 100	B	351020 7	KLJ	23-Oct-15	EPA9012 B	
Cardinal Laboratories									*=Accredit	ed Analyt

ruces notic: Lesumy enu sensores. Caronal paid by dient for anycest enteredy for any centre assessment of the angle in a stand in contract or bort, shall be limited to the angunt paid by dient for analyses. All daims, includental to consequential damage any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thinty (30) days after completion of the applicable service. In no event shall be lable for incidental or consequential damage including, whether suit claims including, whittees in successors setting out to the performance of the services hereunder by Cardinal, regardless of whether suit claims is based any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approal of Cardinal Laboratories.

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Nur Project Nur Project Man Fa		Reported: 10-Nov-15 16:36						
			BG 3							
		H502	2 670-03 (S a	oil)						-
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green Anal	lytical Lab	oratories						
General Chemistry			. <u></u>							
% Dry Solids	94.0		%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2
Soluble (DI Water Extraction)	· · · -									
Fluoride	2.78	1.06	mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C	
Nitrate as N	0.984	0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2	
Nitrate/Nitrite as N	1.05	0.425	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2	
Nitrite as N	ND	0.213	mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2	
Total Metals by ICP										
Iron	8020	5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B	
Total Metals by ICPMS										
Arsenic	2.39	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Barium	229	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Cadmium	ND	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Chromium	2.71	1.00	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Copper	4.50	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Lead	6.70	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Manganese	294	2.00	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Selenium	ND	1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Silver	ND	0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	

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Celez D. Keine



Analytical Results For:

BG 3 H502670-03 (Soil)		16:36	Reported: 10-Nov-15 1	1			RQUEZ	CC A&B 1 CELLA MA 5) 632-187		INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410			
H5026 /0-03 (S6II)								1 0	BG 3	TIEDO			
								11)	0/0-03 (50	H502		·	
Reporting Analyte Result MDL Limit Units Dilution UNC Batch Analyst Analyzed Method	iotes	Ň	Method	Analyzed	Analyst	Batch	UNC	Dilution	Units	Reporting Limit	MDL	Result	Analyte
Green Analytical Laboratories								oratories	ytical Lab	Freen Anal	C		
Total Metals by ICPMS													Total Metals by ICPMS
Uranium 0.685 0.100 mg/kg dry 1000 B51027 JGS 30-Oct-15 6020 A 0			6020 A	30-Oct-15	JGS	B51027 0		1000	mg/kg dry	0.100		0.685	Jranium
Zinc 27.5 10.0 mg/kg dry 1000 B51027 JGS 30-Oct-15 6020 A 0			6020 A	30-Oct-15	JGS	B51027 0		1000	mg/kg dry	10.0		27.5	Zinc
Total Mercury by CVAA													Total Mercury by CVAA
Mercury ND 0.104 mg/kg dry 490 B51017 JGS 22-Oct-15 EPA7471 1			EPA7471	22-Oct-15	JGS	B51017 1		490	mg/kg dry	0.104		ND	Mercury

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876						-	Reported: 10-Nov-15 16:36			
			H502	BG 4 670-04 (Soi	il)							
Anaiyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	al Laborato	ries							
Inorganic Compounds												
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B		
pH*	7.46		0.100	pH Units	1		5111008	AP	10-Nov-15	9045		
Phenols	ND		0.5	mg/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL	
Sulfate	5730		1000	mg/kg	100		5102105	AP	22-Oct-15	375.4		
Organic Compounds												
TPH 418.1	ND		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1		
Radionuclides											SUB-RS	
Radium-226	0.69			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE		
Radium-228	0.79			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay		
Total Radium	1.5			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE		
Petroleum Hydrocarbons by GC FID												
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B		
DRO >C10-C28	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B		
Surrogate: 1-Chlorooctane			91.7 %		47.2-157		5101401	MS	15-Oct-15	8015B		
Surrogate: 1-Chlorooctadecane	~		105 %		52.1-176		5101401	MS	15-Oct-15	8015B		
PCBs BY GC/ECD											SUB-SS	
PCB 1016	ND		10.0	ug/kg	1		5111002	ск	20-Oct-15	8082		
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	,	
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
Surrogate: Tetrachloro-meta-xylene		-	160 %		35-140		51]1002	СК	20-Oct-15	8082	S-12	

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Celleg D. Kenne



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876									Reported: 10-Nov-15 16:36			
				BG 4							·			
			H5020	570-04 (S	oil)									
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Labora	tories									
DCD- DV CC/ECD														
Surrogate: Decachlorobiphenyl			144 %		35-140		5111002	СК	20-Oct-15	8082	<u>50B-55</u> S-12			
Valatile Organia Compounds by F	DA Mathad 916	đ۵												
Vinyl chloride*	ND		0.0500	ma/ka	50		5101611	MS	19-Oct-15	8260				
1 1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Methylene chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
1.1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	-			
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260				
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260				
Surrogate: Dibromofluoromethane			105 %		80.8-114		5101611	MS	19-Oct-15	8260				
Surrogate: Toluene-d8			88.0 %		83.7-121		5101611	MS	19-0ct-15	8260				
Surrogate: 4-Bromofluorobenzene			99.6 %		57.9-154	,	5101611	MS	19-Oct-15	8260				

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Celez D. Kuna



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		l Project N Project Ma				Reported: 10-Nov-15 16:	36			
· .		Н5	BG 4 02670-04 (Se	oil)						
Analyte	Result	Reportin MDL Linn	ng nit Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Card	inal Laborat	ories						,
Semivolatile Organic Compounds b	y GCMS									
Naphthalene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
2-Methylnaphthalene	ND	0.04	() mg/kg	40		5101308	MS	21-Oct-15	8270C	
1-Methylnaphthalene	ND	0.02	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthylene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Fluorene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Phenanthrene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Anthracene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Carbazole	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Fluoranthene	ND	0.04	0 mg/kg	40		5101308	ŃS	21-Oct-15	8270C	
Pyrene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]anthracene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Chrysene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[b]flouranthene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[k]flouranthene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]pyrene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Indeno[1,2,3-cd]pyrene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Dibenz[a,h]anthracene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[g,h,i]perylene	ND	0.04	0 mg/kg	40		5101308	MS	21-Oct-15	8270C	
Surrogate: Nitrobenzene-d5		72.2 9	%	20.4-109		5101308	MS	21-Oct-15	8270C	
Surrogate: 2-Fluorobiphenyl		70.0 9	%	23.4-133		5101308	MS	21-Oct-15	8270C	
Surrogate: Terphenyl-dl4		75.8 9	%	38.4-163		5101308	MS	21-0ci-15	8270C	
		Green An	alytical Lab	oratories						
General Chemistry										
Cyanide, Total	ND	1.0	() mg/kg dry	100		B51020 7	KLJ	23-Oct-15	EPA9012 B	
Cardinal Laboratories									*=Accredite	ed Analyte

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P Pr		Reported: 10-Nov-15 16:36							
				BG 4							
		<u>.</u>	H502	670-04 (Sa	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		G	reen Anal	ytical Lab	oratories			·			
General Chemistry											
% Dry Solids	93.1			%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2
Soluble (DI Water Extraction)											
Fluoride	2.85		1.07	mg/kg dry	4		B51027	ABP	30-Oct-15	4500-F- C	
Nitrate as N	3.01		0.400	mg/kg dry	10		, [CALC]	KLJ	16-Oct-15	EPA353.2	
Nitrate/Nitrite as N	3.23		0.430	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2	
Nitrite as N	ND		0.215	mg/kg dry	10		3 B51013 5	KLJ	16-Oct-15	EPA353.2	
Total Metals by ICP											
Iron	8000		5.00	mg/kg dry	100	,	B51017 2	JGS	22-Oct-15	EPA6010 B	
Total Metals by ICPMS	·										
Arsenic	3.33		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Barium	185		0.500	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Cadmium	ND		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Chromium	3.97		1.00	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Copper	6.31		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Lead	7.71		0.500	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Manganese	332		2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Selenium	ND		1.00	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Silver	ND		0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	

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Celez Di Keine



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		F Pi		1	Reported: 0-Nov-15 *	16:36						
			H502	BG 4 670-04 (So	vil)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method		Notes
		G	reen Anal	ytical Lab	oratories							
Total Metals by ICPMS												
Uranium	0.734		0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A		
Zinc	26.0		10.0	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A		
Total Mercury by CVAA												
Mercury	ND		0.105	mg/kg dry	490		B51017 1	JGS	22-Oct-15	EPA7471		

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876								Reported: 10-Nov-15 16:36			
			H502	BG 5 670-05 (Soi	n							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	al Laborato	ries							
Inorganic Compounds	<u>.</u>											
Chloride	48.0		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B		
pH*	7.52		0.100	pH Units	· 1		5111008	AP	10-Nov-15	9045		
Phenols	ND		0.5	ng/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL	
Sulfate	5330		1000	mg/kg	100		5102105	AP	22-Oct-15	375.4		
Organic Compounds												
TPH 418.1	ND		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1		
Radionuclides											SUB-RS	
Radium-226	0.70			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE		
Radium-228	0.77			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay	·	
Total Radium	1.5			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE		
Petroleum Hydrocarbons by GC FID												
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B		
DRO >C10-C28	ND		10.0	mg/kg	- 1		5101401	MS	15-Oct-15	8015B		
Surrogate: 1-Chlorooctane			98.9 %		47.2-157		5101401	MS	15-Oct-15	8015B		
Surrogate: 1-Chlorooctadecane			113 %		52.1-176		5101401	MS	15-Oci-15	8015B		
PCBs BY GC/ECD											SUB-SS	
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
Surrogate: Tetrachloro-meta-xylene			137 %		35-140		5111002	СК	20-0ct-15	8082		

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Calling D. Kune



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410			Pro Project Num Project Mana Fax	ject: Wo ber: 35 ger: MA To: (50	QCC A&B 41 ARCELLA MA 05) 632-1870	RQUEZ	:		1	Reported: 0-Nov-15 1	6:36
	· .		H5026	BG 5 670-05 (S	Soil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
L			Candlina								
			Cardina	I Labora	itories						
PCBs BY GC/ECD											SUB-SS
Surrogate: Decachlorobiphenyl			125 %		35-140		5111002	СК	20-Oct-15	8082	
Volatile Organic Compounds by]	EPA Method 826	0B									
Vinvl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			114%		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8			92.3 %		83.7-121		5101611	MS	19-0ci-15	8260	
Surrogate: 4-Bromofluorobenzene			98.1 %		57.9-154		5101611	MS	19-Oct-15	8260	

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Celleg Z. Kuna

Celey D. Keene, Lab Director/Quality Manager



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876						Reported: 10-Nov-15 16	:36
		H502	BG 5 2670-05 (Se	oil)					
Analyte	Result	Reporting MDL Limit	Units	Dilution I	UNC Batch	Analyst	Analyzed	Method	Notes
		Cardin	al Laborat	ories					
Semivolatile Organic Compounds	by GCMS								
Naphthalene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
2-Methylnaphthalene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
1-Methylnaphthalene	ND	0.020	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Acenaphthylene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Acenaphthene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Fluorene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Phenanthrene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Anthracene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Carbazole	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Fluoranthene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Ругепе	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Benzo[a]anthracene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Chrysene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Benzo[b]flouranthene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Benzo[k]flouranthene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Benzo[a]pyrene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	5101308	MS	21-Oct-15	8270C	
Surrogate: Nitrobenzene-d5		74.2 %		20.4-109	5101308	MS	21-Oct-15	8270C	
Surrogate: 2-Fluorobiphenyl		70.6 %		23.4-133	5101308	MS	21-Oct-15	8270C	
Surrogate: Terphenyl-dl4		76.2 %		38.4-163	5101308	MS	21-Oci-15	8270C	
		Green Anal	ytical Lab	oratories					
General Chemistry									
Cyanide, Total	ND	1.00	mg/kg dry	100	B51020 7	KLJ	23-Oct-15	EPA9012 B	
							<u></u>		od Apaluta

Celez Di Kune



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876								Reported: 10-Nov-15 16:36				
			H502	BG 5 670-05 (So	ii)								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes		
		(Green Anal	ytical Lab	oratories								
General Chemistry													
% Dry Solids	91.6			%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2		
Soluble (DI Water Extraction)													
Fluoride	3.27		1.09	mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C			
Nitrate as N	3.44		0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2			
Nitrate/Nitrite as N	3.75		0.437	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2			
Nitrite as N	ND		0.218	mg/kg dry	ີ 10		B51013 5	KLJ	16-Oct-15	EPA353.2			
Total Metals by ICP										<u> </u>			
Iron	10900		5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B			
Total Metals by ICPMS										_			
Arsenic	3.26	X	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Barium	337		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Cadmium	ND		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Chromium	5.51		1.00	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Copper	8.28		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Lead	8.28		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A			
Manganese	273		2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A			
Selenium	ND		1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A			
Silver	ND		0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876							1	Reported: 0-Nov-15 10	6:36
				BG 5							
			H502	670-05 (5	Soil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		6	Freen Anal	ytical La	boratories						
Total Metals by ICPMS											
Uranium	0.821	<u> </u>	0.100	mg/kg dry	, 1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	31.1		10.0	mg/kg dry	/ 1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA											
Mercury	ND		0.107	mg/kg dry	, 490		B51017 I	JGS	22-Oct-15	EPA7471	

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	F	Project Nun Project Mana Fa:	oject: WQC nber: 3541 ager: MAR x To: (505	C A&B CELLA MAI) 632-1876	RQUEZ	:		1	Reported: 10-Nov-15 1	Reported: D-Nov-15 16:36	
			TIFOA	BG 6	•						
r			H502	070-06 (50)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborato	ries						
Inorganic Compounds											
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B	
pH*	8.21		0.100	pH Units	1		5111008	AP	10-Nov-15	9045	
Phenols	ND		0.5	ng/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	66.7		40.0	mg/kg	4		5102105	AP	22-Oct-15	375.4	
Organic Compounds											
TPH 418.1	25.4	· · · · · ·	20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Dediamolidae											CT TO DO
Raulonuchides	0.50			-01		0.02	6111004				SUB-RS
Radium-226	0.50			pCi/gram	1	0.03	5111004	CK	29-001-15	Gammakay HPGE	
Radium-228	0.85			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay	
Total Padium	14			nCi/amm	1	0.06	\$111004	CV	20-0 at-15	HPGE	
	1.4			pergram		0.00	5111004	CK	47-001-1J	HPGE	
Petroleum Hydrocarbons by GC FID											
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	10.1		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane		······	100 %		47.2-157		5101401	MS		8015B	
Surrogate: 1-Chlorooctadecane			113 %		52.1-176		5101401	MS	15-Oct-15	8015B	
PCB, BV COTCD											etth ee
PCB 1016	ND		10.0	ng/kg			5111002	<u></u>	20-Oct-15	8082	<u>508-95</u>
PCB 1221	ND		10.0	ug/kg			5111002	CK	20-Oct-15	8082	
PCB 1232	ND		10.0				5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/ke	1		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			147 %		35-140		5111002	СК	20-()ci-15	8082	S-12

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Celez D. Keine



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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		1	Project Num Project Mana Fax		Reported: 10-Nov-15 16:36						
				BG 6							
			H5020	670 -06 (S	Soil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labor	atories						
PCBs BY GC/ECD										<u>.</u>	SUB-SS
Surrogate: Decachlorobiphenyl			136 %	/	35-140		5111002	СК	20-Oct-15	8082	
Volatile Organic Compounds by EP	<u>A Method 826(</u>)B									
Vinyl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	NĎ		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	' ND	-	0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			103 %		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8			93.9 %		83.7-121		5101611	MS	19-0ct-15	8260	
Surrogate: 4-Bromofluorobenzene			98.9 %		57.9-154	1	5101611	MS	19-Oct-15	8260	

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS	Project: WQCC A&B								Reported: 10-Nov-15 16:36					
49 CR 3150		Project Number: 5341 Droject Mapager: MADCELLA MADOLIEZ								10-1107-12 10:30				
AZIEC NM, 87410		P	Fa	x To: (505	632-1876	KQUEZ S								
	· ·			BC (·····			
			H502	ву б 670-06 (So	il)									
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes			
			Cardin	al Laborate	ories									
Semivolatile Organic Compounds	by GCMS													
Naphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
2-Methylnaphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
1-Methylnaphthalene	ND		0.020	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Acenaphthylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Acenaphthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Fluorene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Phenanthrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Carbazole	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Fluoranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Benzo[a]anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Chrysene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Benzo[b]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Benzo[k]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Benzo[a]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Indeno[1,2,3-cd]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Dibenz[a,h]anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Benzo[g,h,i]perylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C				
Surrogate: Nitrobenzene-d5			73.6%		20.4-109		5101308	MS	21-Oct-15	8270C				
Surrogate: 2-Fluorobiphenyl			67.6 %		23.4-133		5101308	MS	21-Oct-15	8270C				
Surrogate: Terphenyl-dl4			71.0 %		38.4-163		5101308	MS	21-Oci-15	8270C				
		Ċ	Green Anal	ytical Labo	oratories									
General Chemistry					. <u></u>		.`							
Cyanide, Total	ND		1.00	mg/kg dry	100		B51020	KLJ	23-Oct-15	EPA9012 B				

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Cellez D. Kune



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876									Reported: 10-Nov-15 16:36				
			H507	BG 6	in									
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes			
^		(Green Anal	ytical Lab	oratories									
General Chemistry														
% Dry Solids	94.0			%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2			
Soluble (DI Water Extraction)														
Fluoride	1.94		1.06	mg/kg dry	4		B51027	ABP	30-Oct-15	4500-F- C				
Nitrate as N	1.79		0.400	mg/kg dry	10		(CALC]	KLJ	16-Oct-15	EPA353.2				
Nitrate/Nitrite as N	1.90		0.425	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2				
Nitrite as N	ND		0.213	mg/kg dry	10		3 B51013 5	KLJ	16-Oct-15	EPA353.2				
Total Metals by ICP														
Iron	6950		5.00	mg/kg dry	100	-	B51017 2	JGS	22-Oct-15	EPA6010 B				
Total Metals by ICPMS														
Arsenic	1.90		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Barium	284		0.500	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	· .			
Cadmium	ND		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				
Chromium	2.47		1.00	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				
Соррег	4.15		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Lead	5.96		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Manganese	421		2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Selenium	ND		1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Silver	ND		0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Pr Project Nu Project Mar Fa	oject: WQ mber: 354 hager: MAI ax To: (50	CC A&B 1 RCELLA MA 5) 632-187		Reported: ,10-Nov-15 16:36					
		H50	BG 6 2670-06 (Se	oil)							
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes	
		Green Ana	lytical Lab	oratories							
Total Metals by ICPMS					_						
Uranium	0.383	0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A		
Zinc	22.6	10.0	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A		
Total Mercury by CVAA											
Mercury	0.135	0.105	mg/kg dry	495		B51017 1	JGS	22-Oct-15	EPA7471		

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876						Reported: 10-Nov-15 16:36			
				BG 7	_						
			H502	670-07 (Soi	il)						·
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborato	ories						
Inorganic Compounds											
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B	
pH*	8.47		0.100	pH Units	1		5111008	AP	10-Nov-15	9 045	
Phenols	ND		0.5	mg/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	ND		40.0	mg/kg	4		5102105	AP	22-Oct-15	375.4	
Organic Compounds			-					,			
TPH 418.1	ND		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Padionuclides											STIR-DS
Redinm_226	0.66			nCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay	<u>.30<u></u>D-N3</u>
	0.00			per gran		0.00	2111001	cit	27 000 17	HPGE	
Radium-228	1.3			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE	
Total Radium	2.0			pCi/gram	1	0.06	5111004	СК	29-Oct-15	GammaRay HPGE	
Petroleum Hydrocarbons by GC FID											
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane		,	101 %		47.2-157		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			116 %		52.1-176		5101401	MS	15-Oci-15	8015B	
PCBs BY GC/ECD											SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			151 %		35-140		5111002	СК	20-Oct-15	8082	S-12

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		F	Project Num Project Mana Fax		Reported: 10-Nov-15 16:36						
				BG 7							
			H5020	670-07 (S	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories						
PCBs BY GC/ECD											SUB-SS
Surrogate: Decachlorobiphenyl			136 %		35-140		5111002	СК	20-Oct-15	8082	
Volatile Organic Compounds by EP.	A Method 826(B									
Vinyl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50	6	5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			102 %		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8			96.0 %		83.7-121		5101611	MS	19-0ct-15	8260	
Surrogate: 4-Bromofluorobenzene		•	93 .7 %		57.9-154		5101611	MS	19-Oct-15	8260	

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Celez Di Kune


Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Pro Proj			Reported: 10-Nov-15 16	5:36					
\ \			H502	BG 7 670-07 (So	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories						
Semivolatile Organic Compour	nds by GCMS				- ··						
Naphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
2-Methylnaphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
1-Methylnaphthalene	ND		0.020	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	`
Acenaphthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Fluorene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Phenanthrene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Anthracene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Carbazole	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Fluoranthene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Pyrene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Benzo[a]anthracene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Chrysene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Benzo[b]flouranthene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Benzo[k]flouranthene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Benzo[a]pyrene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Indeno[1,2,3-cd]pyrene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Dibenz[a,h]anthracene	ND		0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Benzo[g,h,i]perylene	ND	_	0.040	mg/kg	40	:	5101308	MS	21-Oct-15	8270C	
Surrogate: Nitrohenzene-d5			76.0 %		20.4-109		5101308	MS	21-Oct-15	8270C	
Surrogate: 2-Fluorobiphenyl			70.1%		23.4-133	<u>:</u>	5101308	MS	21-Oct-15	8270C	
Surrogate: Terphenyl-dl4			75.0 %		38.4-163	<u>-</u>	5101308	MS	21-Oci-15	8270C	
·		Gre	en Anal	ytical Labo	oratories						
General Chemistry											
Cyanide, Total	ND		1.00	mg/kg dry	100		B51021 4	KLJ	23-Oct-15	EPA9012 B	
Cardinal Laboratories	.									*=Accredi	ted Analyi

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P	Reported: 10-Nov-15 16:36								
				BG 7							
			H502	670-07 (So	il)					<u></u> .	
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		(Green Anal	ytical Labo	oratories						
General Chemistry				· · · · · ·							
% Dry Solids	93.7			%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2
Soluble (DI Water Extraction)								<u>.</u>			
Fluoride _	1.63		1.07	mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C	
Nitrate as N	0.998		0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2	
Nitrate/Nitrite as N	1.06		0.427	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2	
Nitrite as N	ND		0.213	mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2	
Total Metals by ICP											
Iron	7640		5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B	
Total Metals by ICPMS											
Arsenic	1.86		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Barium	131		0.500	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Cadmium	ND		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Chromium	2.66		1.00	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	
Copper	4.31		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Lead	5.22		0.500	mg/kg dry	1000		0 B51027	JGS	30-Oct-15	6020 A	
Manganese	244		2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	•
Selenium	ND		1.00	mg/kg dry	1000		0 B51027	JGS	30-Oct-15	6020 A	•
Silver	ND		0.100	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	

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Cellery D. Keine



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P Pr	Project Nun roject Man Fa	oject: WQQ nber: 354: ager: MAR x To: (505	CC A&B L CELLA MA 5) 632-187	RQUEZ			1	Reported: 0-Nov-15 1	6:36
			H502	BG 7 670-07 (So	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		G	reen Anal	ytical Labo	oratories						
Total Metals by ICPMS											
Uranium	0.399		0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	18.8		10.0	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA	·										
Mercury	ND		0.106	mg/kg dry	495		B51017	JGS	22-Oct-15	EPA7471	

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P	Project Nun Project Mana Project Mana Fax	oject: WQC nber: 3541 ager: MAR x To: (505	CC A&B CELLA MAF) 632-1876	RQUEZ	2		1	Reported: IO-Nov-15 10	6:36
х			H502	BG 8 670-08 (Soi	'n						
			Reporting							<u> </u>	
Analyte	Result	MDL	Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardins	al Laborato	ries	2.					
Inorganic Compounds											
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B	
pH*	7.59		0.100	pH Units	1		5111008	AP	10-Nov-15	9045	
Phenols	ND		0.5 1	ng/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	5930		1000	mg/kg	100		5102105	AP	22-Oct-15	375.4	
Organic Compounds											_
TPH 418.1	62.8		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Radionuclides											SUB-RS
Radium-226	0.83			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE	
Radium-228	0.70			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay HPGE	
Total Radium	1.5			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE	
Petroleum Hydrocarbons by GC FID											
GRO C6-C10	ND		10.0	mg/kg	I		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane			100 %		47.2-157		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			113 %		52.1-176		5101401	MS	15-Oci-15	8015B	
PCBs BY GC/ECD											SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	I		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			145 %		35-140		5111002	СК	20-Oct-15	8082	S-12

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Calay D. Karne

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876									Reported: 10-Nov-15 16:36		
				BG 8								
			H5026	670 -08 (S	oil)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes	
	ſ		Cardina	l Labora	tories							
PCBs BY GC/ECD											SUB-SS	
Surrogate: Decachlorobiphenyl			137 %		35-140		5111002	СК	20-Oct-15	8082		
Volatile Organic Compounds by EPA	Method 8260	B										
Vinyl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
1,1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	/ 19-Oct-15	8260		
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260		
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260		
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260		
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260		
Surrogate: Dibromofluoromethane			105 %		80.8-114	!	5101611	MS	19-Oct-15	8260		
Surrogate: Toluene-d8			97.5 %		83.7-121		5101611	MS	19-Oci-15	8260		
Surrogate: 4-Bromofluorobenzene			98.7 %		57.9-154		5101611	MS	19-Oci-15	8260		

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876						Reported: 10-Nov-15 16:36			
				BG 8							
			H5020	570-08 (S	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories						
Semivolatile Organic Compound	ls by GCMS										
Naphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
2-Methylnaphthalene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
1-Methylnaphthalene	ND		0.020	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Fluorene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Phenanthrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Carbazole	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Fluoranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Chrysene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[b]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[k]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Indeno[1,2,3-cd]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Dibenz[a,h]anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[g,h,i]perylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Surrogate: Nitrobenzene-d5			71.6%		20.4-109		5101308	MS	21-Oct-15	8270C	
Surrogate: 2-Fluorobiphenyl			67.2 %		23.4-133		5101308	MS	21-Oct-15	8270C	
			69.9 %		38.4-163		5101308	MS	21-Oct-15	8270C	

<u>General Chemistry</u>								
Cyanide, Total	ND	1.00	mg/kg dry	100	B51021 4	KLJ	23-Oct-15	EPA9012 B

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Celley D. Karne



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Nun Project Mana Faz	oject: WQ nber: 354 ager: MAI x To: (50	2CC A&B 11 RCELLA MA 5) 632-187	RQUEZ				Reported: 10-Nov-15 16:	36
			BG 8							
		H502	670-08 (S	oil) ,						
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green Anal	ytical Lab	oratories	_	_				
General Chemistry		<u> </u>						·····		
% Dry Solids	92.5		%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2
Soluble (DI Water Extraction)										
Fluoride	3.83	1.08	mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C	
Nitrate as N	1.47	0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2	
Nitrate/Nitrite as N	1.59	0.432	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2	
Nitrite as N	ND	0.216	mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2	
Total Metals by ICP										
Iron	11700	5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B	
Total Metals by ICPMS										
Arsenic	8.95	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Barium	335	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Cadmium	ND .	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Chromium	3.64	1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Copper	8.56	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Lead	9.09	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Manganese	234	2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Selenium	ND	1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Silver	ND	0.100	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P Project Nu Project Ma F	roject: WQ umber: 354 nager: MAI ax To: (50	CC A&B 1 RCELLA MA 5) 632-187	ARQUEZ '6			1	Reported: 0-Nov-15 16	5:36
		H50	BG 8)2670-08 (Se	oil)						i
Analyte	Result	Reportin MDL Limi	g t Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green An	alytical Lab	oratories						
Total Metals by ICPMS									_	
Uranium	1.26	0.10) mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	25.3	10.) mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA										
Mercury	0.176	0.10	5 mg/kg dry	490	,	B51017	JGS	22-Oct-15	EPA7471	

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		F	Reported: 10-Nov-15 16:36								
				BG 9							
			H502	670-09 (So	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborato	ories						
Inorganic Compounds				•							
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B	
pH*	8.24		0.100	pH Units	1		5111008	AP	10-Nov-15	9045	
Phenols	ND		0.5	mg/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	84.0		40.0	mg/kg	4 .		5102105	AP	22-Oct-15	375.4	
Organic Compounds											
TPH 418.1	ND		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Radionuclides		·									SUB-RS
Radium-226	0.50			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE	
Radium-228	0.70			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay	
Total Radium	1.2			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE	
Petroleum Hydrocarbons by GC FID								_			
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1	_	5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane			98.1 %		47.2-157		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			110 %		52.1-176		5101401	MS	15-Oct-15	8015B	
PCBs BY GC/ECD	/										SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	<u> </u>
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			137 %		35-140		5111002	CK.	20-0c1-15	8082	

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410			Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876				: 		1	Reported: 0-Nov-15 1	6:36
·			,	BG 9							
			H502	670-09 (S	ioil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories						
PCBs BY GC/ECD									· · · · · · · · · · · · · · · · · · ·		SUB-SS
Surrogate: Decachlorobiphenyl			124 %		35-140		5111002	СК	20-Oct-15	8082	
Volatile Organic Compounds by EP	A Method 8260) B									
Vinyl chloride*	ND		0.0500	mg/kg	50		5101611	MŞ	19-Oct-15	8260	
1,1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		<u>5101611</u>	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND -		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			110 %		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8		~	96 .7 %		83.7-121		5101611	MS	19-Oct-15	8260	
Surrogate: 4-Bromofluorobenzene			97.2 %		57.9-154		5101611	MS	19-Oct-15	8260	

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Celeg D. Kune



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876				2	Reported: 10-Nov-15 16:36					
			H502	BG 9 670-09 (S	oil)						
Analyte	Result	R MDL	eporting Limit	Units	Dilution	UNÇ	Batch	Analyst	Analyzed	Method	Not
			Cardina	l Labora	tories	_					
<u>Semivolatile Organic Compounds t</u>	W GCMS										
Naphthalene	ND		0.040	mg/kg	40	_	5101308	MS	21-Oct-15	8270C	
-Methylnaphthalene	ND		0.040	mg/kg	r 40		5101308	MS	21-Oct-15	8270C	
-Methylnaphthalene	ND		0.020	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Acenaphthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
fluorene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Phenanthrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Carbazole	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
luoranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
yrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]anthracene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Chrysene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Senzo[b]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[k]flouranthene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Benzo[a]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
ndeno[1,2,3-cd]pyrene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Dibenz[a,h]anthracene	ND	1	0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
Senzo[g,h,i]perylene	ND		0.040	mg/kg	40		5101308	MS	21-Oct-15	8270C	
urrogate: Nitrobenzene-d5			73.9 %		20.4-109		5101308	MS	2]-Oct-15	8270C	
Surrogate: 2-Fluorobiphenyl			72.7 %		23.4-133		5101308	MS	2]-Oct-15	8270C	
Surrogate: Terphenyl-dl4			78.2 %		38.4-163		5101308	MS	21-Oct-15	8270C	
		Gree	n Analy	ytical Lat	oratories		·		7		
General Chemistry						, <u> </u>					
Cyanide, Total	ND		1.00	mg/kg dry	100		B51021 4	KLJ	23-Oct-15	EPA9012 B	
Cardinal Laboratories					. <u></u>					*=Accredite	d Analy

any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether sur claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876								Reported: 10-Nov-15 16:36				
			BG 9										
		H502	670-09 (Sc	oil)									
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes			
		Green Anal	ytical Lab	oratories									
<u>General Chemistry</u>	·												
% Dry Solids	94.3		%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2			
Soluble (DI Water Extraction)													
Fluoride	3.03	1.06	mg/kg dry	4		B51027	ABP	30-Oct-15	4500-F- C				
Nitrate as N	1.96	0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2				
Nitrate/Nitrite as N	2.08	0.424	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2				
Nitrite as N	ND	0.212	mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2				
Total Metals by ICP									-				
Iron	6490	5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B				
Total Metals by ICPMS													
Arsenic	1.73	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Barium	207	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				
Cadmium	ND	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				
Chromium	2.31	1.00	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				
Copper	4.20	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				
Lead	5.39	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A				
Manganese	244	2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Selenium	ND	1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				
Silver	ND	0.100	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A				

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Project		Reported: 10-Nov-15 16:36							
		I	l 15026	BG 9 70-09 (So	il)						
Analyte	Result	Repo MDL I	rting imit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green	Analy	tical Lab	pratories						
Total Metals by ICPMS											
Uranium	0.451	0	100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	20.4		10.0	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA											
Mercury	ND	0	106 1	mg/kg dry	500		B51017	JGS	22-Oct-15	EPA7471	

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Celay D. Keine

Celey D. Keene, Lab Director/Quality Manager

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876							Reported: 10-Nov-15 16:36			
ſ			H502	BG 10 670-10 (Soi	i)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborato	ories						
Inorganic Compounds				· 							
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-Cl-B	
pH*	7.76		0.100	pH Units	1		5111008	AP	10-Nov-15	9045	
Phenols	ND		0.5	mg/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	1000		200	mg/kg	20		5102105	AP	22-Oct-15	375.4	
Organic Compounds											
TPH 418.1	71.8		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Radionuclides		_									SUB-RS
Radium-226	0.61			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE	
Radium-228	1.1			pCi/gram	1	0.06	5111004	СК	29-Oct-15	GammaRay	
Total Radium	1.7			pCi/gram	1	0.07	5111004	СК	29-Oct-15	GammaRay HPGE	
Petroleum Hydrocarbons by GC FID											
GRO C6-C10	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane	-		103 %		47.2-157		5101401	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			117 %		52.1-176		5101401	MS	15-Oct-15	8015B	
PCBs BY GC/ECD											SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			138 %		35-140		5111002	СК	20-Oct-15	8082	

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876									Reported: 10-Nov-15 16:36			
]	BG 10	oitt								
[Reporting				··		·				
Analyte	Result	MDL	Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	l Labora	tories								
PCB. RV CC/FCD													
Surrogate: Decachlorobiphenyl		<u></u>	123 %		35-140		5111002	СК	20-Oct-15	8082	<u> </u>		
Valatila Ougania Compounda La Pi	DA Mathad 044	ΛD								-			
Volatile Organic Compounds by En	A MICLOU BLO	<u>08</u>	0.0500	malka	50		\$101611	Mg	10 Oct 15	8760			
1 1 Dichloroethene*			0.0500	mg/kg	50		5101011	MS	19-0ct-15	8260			
Netwiene shlorida*			0.0500	mg/kg	50		5101611	MS	19-00-15	8260			
1 1 Dichloroethane*			0.200	ma/ka	50		5101611	MS	19-0ct-15	8260			
Chloroform*	ND		0.0500	ma/ka	50		5101611	MS	19-0ct-15	8260			
Carbon tetrachloride*	ND		0.0500	ma/ka	50		\$101611	MS	19-04-15	8260			
1 1 1-Trichloroethane*	ND		0.0500	ma/ka	50		5101611	MS	19-Oct-15	8260			
Renzene*	ND		0.0500	ma/ka	50		5101611	MS	19-Oct-15	8260			
1.2-Dichloroethane*	ND		0.0500	ma/ka	50		5101611	MS	19-0ct-15	8260			
Trichloroethene*	ND		0.0500	me/ke	50		5101611	MS	19-Oct-15	8260			
Toluene*	ND		0.0500	me/kg	50		5101611	MS	19-Oct-15	8260			
Tetrachloroethene*	ND		0.0500	me/ke	50		5101611	MS	19-Oct-15	8260			
1 1 2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260			
1.2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260			
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260			
m-p Xvlenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260			
o-Xvlene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260			
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260			
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260			
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260			
Surrogate: Dibromofluoromethane		·	108 %		80.8-114		5101611	MS	19-Oct-15	8260			
Surrogate: Toluene-d8			97.9 %		83.7-121		5101611	MS	19-0ci-15	8260			
Surrogate: 4-Bromofluorobenzene			94.8 %		57.9-154		5101611	MS	19-Oct-15	8260			

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Celey D. Keene, Lab Director/Quality Manager

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876							Reported: 10-Nov-15 16:36			
]	BG 10								
			H5020	570-10 (S	oil)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Labora	tories							
Semivolatile Organic Compounds h	oy GCMS											
Naphthalene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
- 2-Methylnaphthalene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
1-Methylnaphthalene	ND		0.020	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Acenaphthylene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Acenaphthene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Fluorene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Phenanthrene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Anthracene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	1	
Carbazole	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Fluoranthene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Pyrene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Benzo[a]anthracene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Chrysene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Benzo[b]flouranthene	ND	,	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Benzo[k]flouranthene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Benzo[a]pyrene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Indeno[1,2,3-cd]pyrene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Dibenz[a,h]anthracene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Benzo[g,h,i]perylene	ND		0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C		
Surrogate: Nitrobenzene-d5			70.3 %		20.4-109		5101308	MS	22-Oci-15	8270C		
Surrogate: 2-Fluorobiphenyl			67.8 %		23.4-133		5101308	MS	22-Oct-15	8270C		
Surrogate: Terphenyl-dl4			74.4 %		38.4-163		5101308	MS	22-Oct-15	8270C		
		C	Green Analy	tical Lab	orato rie s							

General Chemistry								
Cyanide, Total	ND	1.00	mg/kg dry	100	B51021 4	KLJ	23-Oct-15	EPA9012 B

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876								Reported: 10-Nov-15 16:36			
		UEA	BG 10	, in		·						
		Hou		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,]		
Analyte	Result	MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes		
		Green Ana	lytical Lab	oratories								
General Chemistry												
% Dry Solids	93.1		%	1	-	B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2		
Soluble (DI Water Extraction)												
Fluoride	2.89	1.07	mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C			
Nitrate as N	1.06	0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2			
Nitrate/Nitrite as N	1.48	0.430	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2			
Nitrite as N	0.346	0.215	mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2			
Total Metals by ICP												
Iron	9040	5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B			
Total Metals by ICPMS						_						
Arsenic	1.83	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A			
Barium	777	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Cadmium	ND	0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Chromium	2.99	1.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A			
Copper	5.36	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A			
Lead	5.39	0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A			
Manganese	254	2.00	mg/kg dry	1000		0 B51027	JGS	30-Oct-15	6020 A			
Selenium	ND	1.00	mg/kg dry	1000		0 B51027	JGS	30-Oct-15	6020 A			
Silver	ND	0.100	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A			

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Celay Z. Kune



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876								Reported: 10-Nov-15 16:36			
			H502	BG 10 670-10 (So	il)								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes		
		G	reen Anal	ytical Lab	oratories								
Total Metals by ICPMS													
Uranium	0.427		0.100	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Zinc	25.8		10.0	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A			
Total Mercury by CVAA													
Mercury	ND		0.107	mg/kg dry	500		B51017 1	JGS	22-Oct-15	EPA7471			

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Calley D. Kuna

Celey D. Keene, Lab Director/Quality Manager

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876					<u></u>		Reported: 10-Nov-15 16:36		
			H502	BG 11 670-11 (Soi	I)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborato	ries						
Inorganic Compounds											
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-Cl-B	
pH*	7.89		0.100	pH Units	1		5111009	AP	10-Nov-15	9045	
- Phenols	ND		0.5	ng/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL
Sulfate	498		200	mg/kg	20		5102105	AP	22-Oct-15	375.4	
Organic Compounds											
TPH 418.1	63.2		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1	
Radionuclides											SUB-RS
Radium-226	0.56			pCi/gram	1	0.03	5111004	СК	29-Oct-15	GammaRay HPGE	
Radium-228	1.0			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay HPGE	
Total Radium	1.6			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE	
Petroleum Hydrocarbons by GC FII)										
GRO C6-C10	ND		10.0	mg/kg	1		5101504	MS	15-Oct-15	8015B	
DRO >C10-C28	ND		10.0	mg/kg	1		5101504	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctane			93.1 %		47.2-157		5101504	MS	15-Oct-15	8015B	
Surrogate: 1-Chlorooctadecane			101 %		52.1-176		5101504	MS	15-Oct-15	8015B	
PCBs BY GC/ECD	-								_		SUB-SS
PCB 1016	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	
Surrogate: Tetrachloro-meta-xylene			130 %		35-140		5111002	СК	20-Oct-15	8082	

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Celling D. Kuna



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Num Project Mana Fax		1	Reported: 0-Nov-15 1	6:36					
]	BG 11							
·····			H5026	670-11 (8	Soil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labors	atories						
PCBs BY GC/ECD											SUB-SS
Surrogate: Decachlorobiphenyl			121 %		35-140		5111002	СК	20-Oct-15	8082	
Volatile Organic Compounds by FD	A Method 276	0R									
Vinvl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1.1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND V		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			107 %		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8			98.1 %		83.7-121		5101611	MS	19-0ci-15	8260	
Surrogate: 4-Bromofluorobenzene			95.6 %		57.9-154		5101611	MS	19-0ct-15	8260	

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Celez D. Keine



Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Nur Project Nur Project Man Fa		1	Reported: 10-Nov-15 16:	36				
		H502	BG 11 2670-11 (Sa	il)			·			
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
к.		Cardin	al Laborat	ories						
Semivolatile Organic Compounds	by GCMS									
Naphthalene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
2-Methylnaphthalene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
1-Methylnaphthalene	ND	0.020	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Acenaphthylene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Acenaphthene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Fluorene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Phenanthrene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Anthracene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Carbazole	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Fluoranthene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Pyrene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Benzo[a]anthracene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Chrysene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Benzo[b]flouranthene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Benzo[k]flouranthene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Benzo[a]pyrene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40		5101308	MS	22-Oct-15	8270C	
Surrogate: Nitrohenzene-d5		89.3 %		20.4-109		5101308	MS	22-Oct-15	8270C	
Surrogate: 2-Fluorobiphenyl		73.3 %		23.4-133		5101308	MS	22-Oct-15	8270C	
Surrogate: Terphenyl-dl4	,	82.6 %		38.4-163		5101308	MS	22-0ct-15	8270C	
		Green Anal	ytical Labo	ratories						
General Chemistry										
Cyanide, Total	ND	1.00	mg/kg dry	100		B51021 4	KLJ	23-Oct-15	EPA9012 B	
Cardinal Laboratories		-	<u> </u>						*=Accredite	d Analyte

Celez Z. Kune



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876							Reported: 10-Nov-15 16:36			
		H	BG 11 502670-11 (S	Soil)							
Analyte	Result	Reporti MDL Lin	ng nit Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes	
		Green A	nalytical La	boratories							
General Chemistry											
% Dry Solids	93.0		%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2	
Soluble (DI Water Extraction)					_						
Fluoride	2.30	1.0)8 mg/kg dry	4		B51027 7	ABP	30-Oct-15	4500-F- C		
Nitrate as N	1.64	0.4)() mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2		
Nitrate/Nitrite as N	1.76	0.43	30 mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2		
Nitrite as N	ND	0.2	15 mg/kg dry	10		B51013 5	KLJ	16-Oct-15	EPA353.2		
Total Metals by ICP											
Iron	9020	5.0)() mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B		
Total Metals by ICPMS									-		
Arsenic	1.39	0.50)() mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A		
Barium	323	0.50)() mg/kg dry	1000	į	B51027 0	JGS	30-Oct-15	6020 A		
Cadmium	ND	0.50)() mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A		
Chromium	2.84	1.0)() mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A		
Copper	4.53	0.50)() mg/kg dry	1000	,	B51027 0	JGS	30-Oct-15	6020 A		
Lead	5.12	0.50)() mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A		
Manganese	231	2.0)() mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A		
Selenium	ND	1.0)() mg/kg dry	1000		0 B51027	JGS	30-Oct-15	6020 A		
Silver	ND	0.10)() mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A		

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Celez Di Keine

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project Nur Project Nur Project Man Fa	oject: W nber: 35 ager: M/ x To: (5	QCC A&B 541 ARCELLA MA 05) 632-187	RQUEZ 6			1	Reported: 0-Nov-15 16	5:36
		H502	BG 11 2670-11 (S	Soil)						
Analyte	Result	Reporting MDL Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green Anal	ytical La	boratories						
Total Metals by ICPMS			_							
Uranium	0.373	0.100	mg/kg dry	/ 1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	24.4	10.0	mg/kg dry	/ 1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA										
Mercury	ND	0.103	mg/kg dry	/ 480		B51017 1	JGS	22-Oct-15	EPA7471	

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Celleg D. Kuna



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876								Reported: 10-Nov-15 16:36			
			H502	BG 12 670-12 (Soi	I)							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	al Laborato	ories							
Inorganic Compounds												
Chloride	ND		16.0	mg/kg	4		5101501	AP	20-Oct-15	4500-CI-B		
pH*	8.21		0.100	pH Units	1		5111009	AP	10-Nov-15	9045		
Phenols	ND		0.5	mg/kg dry wt.	1		5111005	СК	30-Oct-15	EPA9065	SUB-AL	
Sulfate	154		40.0	mg/kg	4		5102105	AP	22-Oct-15	375.4		
Organic Compounds												
TPH 418.1	55.2		20.0	mg/kg	2		5110208	СК	04-Nov-15	418.1		
Padionualides												
Radionactions	0.58	<u> </u>		nCi/aram	1	0.03	5111004	CK	29-Oct-15	GammaRay	<u>300-R3</u>	
Naurum-220	0.50			pengium	•	0,00	5111004	CK	2)-00-15	HPGE		
Radium-228	1.0			pCi/gram	1	0.04	5111004	СК	29-Oct-15	GammaRay HPGE		
Total Radium	1.6			pCi/gram	1	0.05	5111004	СК	29-Oct-15	GammaRay HPGE		
Petroleum Hydrocarbons by GC FID											_	
GRO C6-C10	ND		10.0	mg/kg	1		5101504	MS	15-Oct-15	8015B		
DRO >C10-C28	ND		10.0	mg/kg	1		5101504	MS	15-Oct-15	8015B		
Surrogate: 1-Chlorooctane			91.7 %		47.2-157		5101504	MS	15-Oct-15	8015B		
Surrogate: 1-Chlorooctadecane			100 %		52 .1-176	•	5101504	MS	15-Oct-15	8015B		
PCBs BY GC/ECD											SUB-SS	
PCB 1016	ND	·	10.0	ug/kg	1		5111002	СК	20-Oct-15	8082	562 55	
PCB 1221	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1232	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1242	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1248	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1254	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
PCB 1260	ND		10.0	ug/kg	1		5111002	СК	20-Oct-15	8082		
Surrogate: Tetrachloro-meta-xylene			148 %		35-140		5111002	СК	20-0ct-15	8082	S-12	

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Celeg D. Karne



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		· · ·	Project Num Project Mana Fax	ject: W(Iber: 35 Iger: MA To: (50	QCC A&B 41 RCELLA MA 05) 632-1870	RQUEZ 6			1	Reported: 0-Nov-15 1	6:36
			1	BG 12							
	-		H5020	670-12 (S	ioil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Lahora	tories						
			Çaruma	I Dabula							
PCBs BY GC/ECD											SUB-SS
Surrogate: Decachlorobiphenyl			140 %		35-140		5111002	СК	20-Oct-15	8082	
Volatile Organic Compounds by EP	A Method 826	0 B									
Vinyl chloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1-Dichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Methylene chloride*	ND		0.200	mg/kg	50		5101 611	MS	19-Oct-15	8260	
1,1-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Chloroform*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Carbon tetrachloride*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,1-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Benzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Trichloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Toluene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Tetrachloroethene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2-Trichloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,2-Dibromoethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Ethylbenzene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
m-p Xylenes*	ND		0.100	mg/kg	50		5101611	MS	19-Oct-15	8260	
o-Xylene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Total Xylenes*	ND		0.150	mg/kg	50		5101611	MS	19-Oct-15	8260	
1,1,2,2-Tetrachloroethane*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Naphthalene*	ND		0.0500	mg/kg	50		5101611	MS	19-Oct-15	8260	
Surrogate: Dibromofluoromethane			110 %		80.8-114		5101611	MS	19-Oct-15	8260	
Surrogate: Toluene-d8			95.0 %		83.7-121		5101611	MS	19-Oct-15	8260	
Surrogate: 4-Bromofluorobenzene			92.6 %		57.9-154		5101611	MS	19-0ct-15	8260	

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876							Reported: 10-Nov-15 16:36			
			H502	BG 12 670-12 (So	il)							
Analyte	Result	MDL.	Reporting Limit	Units	Dilution	UNC B	Batch	Analyst	Analyzed	Method	Notes	
			Cardin	al Laborate	ories							
<u>Semivolatile Organic Compounds b</u>	oy GCMS											
Naphthalene	ND		0.040	mg/kg	40	51	01308	MS	22-Oct-15	8270C		
2-Methylnaphthalene	ND		0.040	mg/kg	40	51	01308	MS	22-Oct-15	8270C		
1-Methylnaphthalene	ND		0.020	mg/kg	40	51	01308	MS	22-Oct-15	8270C		
Acenaphthylene	ND		0.040	mg/kg	40	51	01308	MS	22-Oct-15	8270C		
Acenaphthene	ND		0.040	mg/kg	40	51	01308	MS	22-Oct-15	8270C		
Fluorene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Phenanthrene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Anthracene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Carbazole	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Fluoranthene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Pyrene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Benzo[a]anthracene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Chrysene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Benzo[b]flouranthene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Benzo[k]flouranthene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Benzo[a]pyrene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Indeno[1,2,3-cd]pyrene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Dibenz[a,h]anthracene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Benzo[g,h,i]perylene	ND		0.040	mg/kg	40	510	01308	MS	22-Oct-15	8270C		
Surrogate: Niirobenzene-d5			86.3 %		20.4-109	510	01308	MS	22-Oct-15	8270C	· · · ·	
Surrogate: 2-Fluorobiphenyl			67.6 %		23.4-133	510	01308	MS	22-Oct-15	8270C		
Surrogate: Terphenyl-dl4			74.7 %		38.4-163	510	01308	MS	22-Oct-15	8270C		
		G	Freen Analy	ytical Labo	ratories							
General Chemistry												
Cvanide, Total	ND	-	1.00	mg/kg dry	100	B5	1021	KLJ	23-Oct-15	EPA9012 B		

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	, 	Pr Prc	Pro oject Nur oject Man Fa	oject: WQ nber: 354 ager: MAR x To: (505	CC A&B 1 CELLA MA 5) 632-187	NRQUEZ 6				Reported: 10-Nov-15 16:	36
			H502	BG 12 670-12 (So	il)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Gi	reen Anal	ytical Labo	pratories						
General Chemistry			_								
% Dry Solids	86.1			%	1		B51017 3	MAJ	20-Oct-15	EPA160.3/25 40C	H2
Soluble (DI Water Extraction)											
Fluoride	2.01		1.16	mg/kg dry	4		B51027	ABP	30-Oct-15	4500-F- C	
Nitrate as N	2.72		0.400	mg/kg dry	10		[CALC]	KLJ	16-Oct-15	EPA353.2	
Nitrate/Nitrite as N	3.16		0.465	mg/kg dry	10		B51013	KLJ	15-Oct-15	EPA353.2	
Nitrite as N	ND		0.232	mg/kg dry	10		5 B51013 5	KLJ	16-Oct-15	EPA353.2	
Total Metals by ICP											
Iron	7850		5.00	mg/kg dry	100		B51017 2	JGS	22-Oct-15	EPA6010 B	
Total Metals by ICPMS											
Arsenic	1.79		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Barium	1260		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Cadmium	ND		0.500	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Chromiam	3.08		1.00	mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Copper	6.05		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Lead	7.37		0.500	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Manganese	249		2.00	mg/kg dry	1000		B51027	JGS	30-Oct-15	6020 A	
Selenium	ND		1.00	mg/kg dry	1000		U B51027	JGS	30-Oct-15	6020 A	
Silver	ND		0.100	mg/kg dry	1000		0 B51027 0	JGS	30-Oct-15	6020 A	

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Analytical Results For:

INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410		P Project Nu Project Ma F	roject: WQ umber: 354 nager: MAI ax To: (50)	CC A&B 1 RCELLA MA 5) 632-187	ARQUEZ 16			1	Reported: 0-Nov-15 16	:36
		H50	BG 12 2670-12 (Se	oil)						
Analyte	Result	Reporting MDL Limi	g t Units	Dilution	UNC	Batch	Analyst	Analyzed	Method	Notes
		Green Ana	alytical Lab	oratories						
Total Metals by ICPMS										
Uranium	0.437	0.100) mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Zinc	31.5	10.0) mg/kg dry	1000		B51027 0	JGS	30-Oct-15	6020 A	
Total Mercury by CVAA										
Mercury	0.127	0.114	‡ mg/kg dry	490		B51017 1	JGS	22-Oct-15	EPA7471	

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUE Fax To: (505) 632-1876	Reported: 10-Nov-15 16:36 Z
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Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5101501 - General Prep - Wet Chem										
Blank (5101501-BLK1)				Prepared &	Analyzed:	15-Oct-15				
Chloride	ND	16.0	mg/kg							
LCS (5101501-BS1)				Prepared &	z Analyzed:	15-Oct-15				
Chloride	400	16.0	mg/kg	400		100	80-120			
LCS Dup (5101501-RSD1)				Prepared &	Analyzed	15-Oct-15				
Chloride	400	16.0	mg/kg	400		100	80-120	0.00	20	
Batch 5102105 - General Prep - Wet Chem										
Biank (5102105-BLK1)				Prepared: 2	21-Oct-15 A	nalyzed: 2	2-Oct-15			
Sulfate	ND	10.0	mg/kg	•						
LCS (5102105-BS1)				Prepared: 2	21-Oct-15 A	nalyzed: 2	2-Oct-15			
Sulfate	21.6	10.0	mg/kg	20.0		108	80-120			
LCS Dup (5102105-BSD1)				Prepared: 2	21-Oct-15 A	nalyzed: 2	2-Oct-15			
Sulfate	22.7	10.0	mg/kg	20.0		113	80-120	5.02	20	
Batch 5111005 - General Prep										
Blank (5111005-BLK1)				Prepared &	: Analyzed:	30-Oct-15				
Phenols	ND	0.5	mg/kg dry wt.	•	2					
LCS (5111005-BS1)				Prepared &	Analyzed:	30-Oct-15				
Phenols	0.4		mg/kg	0.400		103	70-130			

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INDUSTRIAL ECOSYSTEMSProject:WQCC A&B49 CR 3150Project Number:3541AZTEC NM, 87410Project Manager:MARCELLA MARQUEZFax To:(505) 632-1876	Reported: 10-Nov-15 16:36
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Inorganic Compounds - Quality Control

	Cardinal Laboratories Reporting Result Spike Limit Source Vnits Source Result %REC VREC RPD Limit RPD Limit Notes 5111005 - General Prep 50urce: H502670-02 Prepared & Analyzed: 30-Oct-15 -									
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5111005 - General Prep										
Matrix Spike (5111005-MS1)	Sour	ce: H50267(-02	Prepared &	Analyzed:	30-Oct-15				
Phenols	3.3		mg/kg	4.22	0.0	78.7	70-130			
Matrix Spike Dup (5111005-MSD1)	Sour	ce: H50267(-02	Prepared &	Analyzed:	30-Oct-15				
Phenois	3.7		mg/kg	4.22	0.0	87.2	70-130	10.3	20	
Batch 5111008 - General Prep - Wet Chem										
LCS (5111008-BS1)		,		Prepared &	Analyzed:	10-Nov-15				
pH	7.14		pH Units	7.00		102	90-110			
Duplicate (5111008-DUP1)	Sour	ce: H502670	-02	Prepared &	Analyzed:	10-Nov-15				
pH	8.31	0.100	pH Units		8.42			1.31	20	
Batch 5111009 - General Prep - Wet Chem										
LCS (5111009-BS1)				Prepared &	Analyzed:	10-Nov-15				
рН	7.17		pH Units	7.00		102	90-110			
Duplicate (5111009-DUP1)	Sour	ce: H502670	-11	Prepared &	: Analyzed:	10-Nov-15				
рН	7.94	0.100	pH Units		7.89			0.632	20	

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INDUSTRIAL ECOSYSTEMS	Project: WQCC A&B	Reported:
49 CR 3150	Project Number: 3541	10-Nov-15 16:36
AZTEC NM, 87410	Project Manager: MARCELLA MARQ	UEZ
	Fax To: (505) 632-1876	

Organic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5110208 - Solvent Extraction						_	_			
Blank (5110208-BLK1)				Prepared &	Analyzed:	04-Nov-15				
TPH 418.1	ND	20.0	mg/kg							
LCS (5110208-BS1)	_			Prepared &	Analyzed:	04-Nov-15				
TPH 418.1	4840	20.0	mg/kg	5000		96.7	70-130			
LCS Dup (5110208-BSD1)				Prepared &	Analyzed:	04-Nov-15				
TPH 418.1	5830	20.0	mg/kg	5000		117	70-130	18.6	20	

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INDUSTRIAL ECOSYSTEMS Project: 49 CR 3150 Project Number: AZTEC NM, 87410 Project Manager: Fax To: Fax To:	WQCC A&B Reported: 3541 10-Nov-15 16:36 MARCELLA MARQUEZ (505) 632-1876
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5101401 - General Prep - Organics						· · ·				
Blank (5101401-BLK1)				Prepared: 1	14-Oct-15 A	nalyzed: 1	5-Oct-15			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg)	
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	44.4		mg/kg	50.0		88.8	47.2-157			
Surrogate: 1-Chlorooctadecane	52.7		mg/kg	50.0		105	52.1-176			
LCS (5101401-BS1)				Prepared: 1	4-Oct-15 A	nalyzed: 1	5-Oct-15			
GRO C6-C10	203	10.0	mg/kg	200		101	72.5-115	·		
DRO >C10-C28	211	10.0	mg/kg	200		, 105	81.3-118			
Total TPH C6-C28	414	10.0	mg/kg	400		103	80-113			
Surrogate: 1-Chlorooctane	53.5		mg/kg	50.0		107	47.2-157			
Surrogate: 1-Chlorooctadecane	59.0		mg/kg	50.0		118	52.1-176			
LCS Dup (5101401-BSD1)				Prepared: 1	4-Oct-15 A	nalyzed: 1	5-Oct-15			
GRO C6-C10	198	10.0	mg/kg	200		98.9	72.5-115	2.54	10.1	
DRO >C10-C28	198	10.0	mg/kg	200		98.9	81.3-118	6.34	15.3	
Total TPH C6-C28	396	10.0	mg/kg	400		98 .9	80-113	4.46	12.1	
Surrogate: 1-Chlorooctane	52.0		mg/kg	50.0		104	47.2-157			•
Surrogate: I-Chlorooctadecane	56.3		mg/kg	50.0		113	52.1-176			

Batch 5101504 - General Prep - Organics

Biank (5101504-BLK1)				Prepared & Anal	yzed: 15-Oct-15	;	
GRO C6-C10	ND	10.0	mg/kg	<i></i>			
DRO >C10-C28	ND	10.0	mg/kg				
EXT DRO >C28-C35	ND	10.0	mg/kg				
Total TPH C6-C28	ND	10.0	mg/kg				
Surrogate: 1-Chlorooctane	46.6		mg/kg	50.0	93.2	47.2-157	
Surrogate: 1-Chlorooctadecane	51.6		mg/kg	50.0	103	52.1-176	

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 F AZTEC NM, 87410 P	Project: WQCC A&B Project Number: 3541 roject Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876	Reported: 10-Nov-15 16:36
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5101504 - General Prep - Organics										
LCS (5101504-BS1)				Prepared &	Analyzed:	15-Oct-15				
GRO C6-C10	193	10.0	mg/kg	200		96.4	72.5-115			
DRO >C10-C28	205	10.0	mg/kg	200		102	81.3-118			
Total TPH C6-C28	398	10.0	mg/kg	400		99.4	80-113			
Surrogate: 1-Chlorooctane	45.5		mg/kg	50.0		90.9	47.2-157			
Surrogate: 1-Chlorooctadecane	50. I		mg/kg	50.0		100	52.1-176			
LCS Dup (5101504-BSD1)			_	Prepared &	Analyzed:	15-Oct-15				
GRO C6-C10	203	10.0	mg/kg	200		101	72.5-115	5.03	10.1	
DRO >C10-C28	215	10.0	mg/kg	200		108	81.3-118	4.87	15.3	
Total TPH C6-C28	418	10.0	mg/kg	400		104	80- 113	4.95	12.1	
Surrogate: 1-Chlorooctane	48.1		mg/kg	50.0		96.2	47.2-157			
Surrogate: 1-Chlorooctadecane	52.7		mg/kg	50.0		105	52.1-176			

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: Project Number: Project Manager: Fax To:	WQCC A&B 3541 MARCELLA MARQUEZ (505) 632-1876	Reported: 10-Nov-15 16:36
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PCBs BY GC/ECD - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5111002 - 3550										
Blank (5111002-BLK1)				Prepared:	16-Oct-15 A	analyzed: 2	0-Oct-15			
PCB 1016	ND	10.0	ug/kg							
PCB 1221	ND	10.0	ug/kg							
PCB 1232	ND	10.0	ug/kg						•	
PCB 1242	ND	10.0	ug/kg							
PCB 1248	ND	10.0	ug/kg							
PCB 1254	ND	10.0	ug/kg							
PCB 1260	ND	10.0	ug/kg							
Surrogate: Tetrachloro-meta-xylene	13.2		ug/L	10.0	-	132	35-140			
Surrogate: Decachlorohiphenyl	11.6		ug/L	10.0		116	35-140			
LCS (5111002-BS1)				Prepared:	16-Oct-15 A	nalyzed: 2	0-Oct-15			
PCB 1016	150		ug/L	100		150	40-130			QM-13
PCB 1260	156		ug/L	100		156	40-130			QM-13
Surrogate: Tetrachloro-meta-xylene	14.3		ug/L	10.0		143	35-140			S-12
Surrogate: Decachlorobiphenyl	13.5		ug/L	10.0		135	35-140			
Matrix Spike (5111002-MS1)	Sou	rce: H502670-	-01	Prepared:	6-Oct-15 A	nalyzed: 2	0-Oct-15			
PCB 1016	157		ug/L	100	ND	157	40-130			QM-13
PCB 1260	142		ug/L	100	, ND	142	40-130			QM-13
Surrogate: Tetrachloro-meta-xylenc]4.4		ug/L	10.0		144	35-140			S-12
Surrogate: Decachlorobiphenyl	12.9		ug/L	10.0		129	35-140			
Matrix Spike Dup (5111002-MSD1)	Sou	rce: H502670-	-01	Prepared: 1	16-Oct-15 A	nalyzed: 2	0-Oct-15			
PCB 1016	148		ug/L	100	ND	148	40-130	5.90	30	QM-13
PCB 1260	135		ug/L	100	ND	135	40-130	5.05	30	QM-13
Surrogate: Tetrachloro-meta-xylene	12.3		ug/L	10.0		123	35-140			
Surrogate: Decachlorohiphenyl	11.1		ug/L	10.0		Ш	35-140			

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Celey Z. Keine



INDUSTRIAL ECOSYSTEMSProject49 CR 3150Project NumberAZTEC NM, 87410Project ManagerFax ToFax To	WQCC A&B Reported: 3541 10-Nov-15 16:36 MARCELLA MARQUEZ (505) 632-1876
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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Cardinal Laboratories

		Demostir -		Cu iler	E aurora				DDD	
Analyte	Result	Limit	Units	Spike	Source Result	%REC	%REC Limits	RPD	Limit	Notes
Batch 5101611 - Volatiles										
Blank (5101611-BLK1)				Prepared: 1	6-Oct-15 A	nalyzed: 1	9-Oct-15			
Vinyl chloride	ND	0.0500	mg/kg	· •		e		· · · · · · · · · · · · · · · · · · ·	·	
1,1-Dichloroethene	ND	0.0500	mg/kg							
Methylene chloride	ND	0.0500	mg/kg		•					
1,1-Dichloroethane	ND	0.0500	mg/kg							
Chloroform	ND	0.0500	mg/kg							
Carbon tetrachloride	ND	0.0500	mg/kg							
1,1,1-Trichloroethane	ND	0.0500	mg/kg							
Benzene	ND	0.0500	mg/kg		•					
1,2-Dichloroethane	ND	0.0500	mg/kg							
Trichloroethene	ND	0.0500	mg/kg							
Toluene	ND	0.0500	mg/kg					•		
Tetrachloroethene	ND	0.0500	mg/kg							
1,1,2-Trichloroethane	ND	0.0500	mg/kg							
1,2-Dibromoethane	ND	0.0500	mg/kg							
Ethylbenzene	ND	0.0500	mg/kg							
m-p Xylenes	ND	0.100	mg/kg							
o-Xylene	ND	0.0500	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
1,1,2,2-Tetrachloroethane	ND	0.0500	mg/kg							
Nøphthalene	ND	0.0500	mg/kg							
Surrogate: Dibromofluoromethane	0.550		mg/kg	0.500		110	80.8-114			
Surrogate: Toluene-d8	0.476		mg/kg	0.500		95.2	83.7-121			
Surrogate: 4-Bromofluorobenzene	0.470		mg/kg	0.500		93.9	57.9-154			
LCS (5101611-BS1)				Prepared: 1	6-Oct-15 A	nalyzed: 1	9-Oct-15			
Vinyl chloride	1.13	0.0500	mg/kg	1.00		113	27.3-182			
1, 1-Dichloroethene	0.775	0.0500	mg/kg	1.00		77.5	49.8-244			
Methylene chloride	0.471	0.0500	mg/kg	1.00		47.1	39.3-197			
1,1-Dichloroethane	0.930	0.0500	mg/kg	1.00		93.0	54.8-185			
Chloroform	0.942	0.0500	mg/kg	1.00		94.2	58.3-148			
Carbon tetrachloride	0.882	0.0500	mg/kg	1.00		88.2	63.1-149			
1,1,1-Trichloroethane	0.903	0.0500	mg/kg	1.00		90.3	63.5-152			

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Celez Keene

Celey D. Keene, Lab Director/Quality Manager

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: Project Number: Project Manager: Fax To:	WQCC A&B 3541 MARCELLA MARQUEZ (505) 632-1876	Reported: 10-Nov-15 16:36
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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Cardinal Laboratories

	• •	Reporting	••••	Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5101611 - Volatiles										
LCS (5101611-BS1)				Prepared: 1	6-Oct-15 A	nalyzed: 19	-Oct-15		,	
Benzene	0.885	0.0500	mg/kg	1.00		88.5	78.3-139			
1,2-Dichloroethane	0.896	0.0500	mg/kg	1.00		89.6	41.8-156			
Trichloroethene	0.884	0.0500	mg/kg	1.00		88.4	60.7-142			
Toluene	0.836	0.0500	mg/kg	1.00		83.6	75.1-137			
Tetrachloroethene	0.844	0.0500	mg/kg	1.00		84.4	66-153			
1,1,2-Trichloroethane	0.830	0.0500	mg/kg	1.00		83.0	57.8-129			
1,2-Dibromoethane	0.892	0.0500	mg/kg	1.00		89.2	67.2-120			
Ethylbenzene	0.843	0.0500	mg/kg	1.00		84.3	71.7-131			
m-p Xylenes	1.70	0.100	mg/kg	2.00		85.1	70-130	Υ.		
o-Xylene	0.823	0.0500	mg/kg	1.00		82.3	69.8-132			
Total Xylenes	2.52	0.150	mg/kg	3.00		84.1	70.9-136			
1,1,2,2-Tetrachloroethane	0.826	0.0500	mg/kg	1.00		82.6	42.4-125			
Naphthalene	0.993	0.0500	mg/kg	1.00		99.3	28.2-126			
Surrogate: Dibromofluoromethane	0.519		mg/kg	0.500		104	80.8-114			
Surrogate: Toluene-d8	0.495		mg/kg	0.500		98.9	83.7-121			
Surrogate: 4-Bromofluorobenzene	0.515		mg/kg	0.500		103	57.9-154			
LCS Dup (5101611-BSD1)				Prepared: 10	6-Oct-15 A	nalyzed: 19	-Oct-15			
Vinyl chloride	1.09	0.0500	mg/kg	1.00		109	27.3-182	3.74	27.6	·
1,1-Dichloroethene	0.766	0.0500	mg/kg	1.00		76.6	49. 8-2 44	1.14	29.8	
Methylene chloride	0.470	0.0500	mg/kg	1.00		47.0	39.3-197	0.176	37.6	
1,1-Dichloroethane	0.929	0.0500	mg/kg	1.00		92.9	54.8-185	0.0904	37.3	
Chloroform	0.947	0.0500	mg/kg	1.00		94.7	58.3-148	0.443	35	
Carbon tetrachloride	0.885	0.0500	mg/kg	1.00		88.5	63.1-149	0.256	33.1	
1,1,1-Trichloroethane	0.892	0.0500	mg/kg	1.00		89.2	63.5-152	1.18	33.8	
Benzene	0.863	0.0500	mg/kg	1.00		86.3	78.3-139	2.52	17.9	
1,2-Dichloroethane	0.889	0.0500	mg/kg	1.00		88.9	41.8-156	0.774	34.1	
Trichloroethene	0.844	0.0500	mg/kg	1.00		84.4	60.7-142	4.62	36.2	
Toluene	0.828	0.0500	mg/kg	1.00		82.8	75.1-137	0.996	20.7	
Tetrachloroethene	0.800	0.0500	mg/kg	1.00		80.0	66-153	5.38	58.9	
1,1,2-Trichloroethane	0.854	0.0500	mg/kg	1.00		85.4	57.8-129	2.91	38.9	
1,2-Dibromoethane	0.876	0.0500	mg/kg	1.00		87.6	67.2-120	1.84	34.4	

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Celez D. Kune

Celey D. Keene, Lab Director/Quality Manager


INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A Project Number: 3541 Project Manager: MARCEL Fax To: (505) 63	I&B Reported: 10-Nov-15 1 LA MARQUEZ 32-1876	6:36
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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5101611 - Volatiles										<u> </u>
LCS Dup (5101611-BSD1)				Prepared: 1	6-Oct-15 A	nalyzed: 1	9-Oct-15			
Ethylbenzene	0.832	0.0500	mg/kg	1.00		83.2	71.7-131	1.39	18.5	
m-p Xylenes	1.69	0.100	mg/kg	2.00	J	84.4	70-130	0.730	20	
o-Xylene	0.819	0.0500	mg/kg	1.00		81.9	69. 8- 132	0.507	18.8	
Total Xylenes	2.51	0.150	mg/kg	3.00		83.6	70.9-136	0.657	19.9	
1,1,2,2-Tetrachloroethane	0.895	0.0500	mg/kg	1.00		89.5	42.4-125	7.99	32.2	
Naphthalene	1.01	0.0500	mg/kg	1.00		101	28.2-126	1.58	35	
Surrogate: Dibromofluoromethane	0.554		mg/kg	0.500		Ш	80.8-114			
Surrogate: Toluene-d8	0.502		mg/kg	0.500		100	83.7-121			
Surrogate: 4-Bromofluorobenzene	0.505		malka	0.500		101	57.9-154			

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Celey D. Kune



INDUSTRIAL ECOSYSTEMSProject49 CR 3150Project NumberAZTEC NM, 87410Project ManagerFax ToFax To	: WQCC A&B Reported: : 3541 10-Nov-15 16:36 : MARCELLA MARQUEZ : (505) 632-1876
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Semivolatile Organic Compounds by GCMS - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5101308 - SW-846 3550							<u> </u>			
Blank (5101308-BLK1)				Prepared: 1	3-Oct-15 A	nalyzed: 14	4-Oct-15		-	
Naphthalene	ND	0.040	mg/kg							
2-Methylnaphthalene	ND	0.040	mg/kg							
1-Methylnaphthalene	ND ·	0.020	mg/kg							
Acenaphthylene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							
Fluorene	ND	0.040	mg/kg							
Phenanthrene	ND	0.040	mg/kg					•		
Anthracene	ND	0.040	mg/kg							
Carbazole	. ND	0.040	mg/kg							
Fluoranthene	ND	0.040	mg/kg							
Pyrene	ND	0.040	mg/kg							
Benzo[a]anthracene	ND	0.040	mg/kg							
Chrysene	ND	0.040	mg/kg							
Benzo[b]flouranthene	ND	0.040	mg/kg							
Benzo[k]flouranthene	. ND	0.040	mg/kg							
Benzo[a]pyrene	ND	0.040	mg/kg							
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg							
Dibenz[a,h]anthracene	ND	0.040	mg/kg							
Benzo[g,h,i]perylene	ND	0.040	mg/kg							
Surrogate: Nitrobenzene-d5	1.30		mg/kg	2.00		64.9	20.4-109			
Surrogate: 2-Fluorobiphenyl	1.35		mg/kg	2.00		67.5	23.4-133			
Surrogate: Terphenyl-dl4	1.39		mg/kg	2.00		69.4	38.4-163			
LCS (5101308-BS1)				Prepared: 1	3-Oct-15 A	nalyzed: 14	-Oct-15			
Naphthalene	0.580	0.040	mg/kg	0.800		72.4	33.8-147			
2-Methylnaphthalene	0.594	0.040	mg/kg	0.800		74.3	41.4-151			
Acenaphthylene	0.599	0.040	mg/kg	0.800		74.9	39.2-150			
Acenaphthene	0.600	0.040	mg/kg	0.800		75.0	39.3-154			
Fluorene	0.597	0.040	mg/kg	0.800		74.6	40.4-158			
Phenanthrene	0.587	0.040	mg/kg	0.800		73.4	34.7-164			
Anthracene	0.598	0.040	mg/kg	0.800		74.8	33.5-162			
Carbazole	0.584	0.040	mg/kg	0.800		73.0	31.6-163			

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Celay D. Kune

Celey D. Keene, Lab Director/Quality Manager



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: Project Number: Project Manager: Fax To:	WQCC A&B 3541 MARCELLA MARQUEZ (505) 632-1876	Reported: 10-Nov-15 16:36
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Semivolatile Organic Compounds by GCMS - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5101308 - SW-846 3550										
LCS (5101308-BS1)				Prepared: 1	3-Oct-15 A	nalyzed: 1	4-Oct-15			
Fluoranthene	0.597	0.040	mg/kg	0.800		74.6	38.5-165			
Pyrene	0.577	0.040	mg/kg	0.800		72.2	28-180			
Benzo[a]anthracene	0.585	0.040	mg/kg	0.800		73.1	28.6-167			
Chrysene	0.595	0.040	mg/kg	0.800		74.3	27.7-171			
Benzo[b]flouranthene	0.657	0.040	mg/kg	0.800		82.2	24-168			
Benzo[k]flouranthene	0.528	0.040	mg/kg	0.800		66.0	28.9-170			
Benzo[a]pyrene	0.596	0.040	mg/kg	0.800		74.5	27.2-163			
Indeno[1,2,3-cd]pyrene	0.618	0.040	mg/kg	0.800		77.2	21.9-162			
Dibenz[a,h]anthracene	0.622	0.040	mg/kg	0.800		77.8	19-164			
Benzo[g,h,i]perylene	0.603	0.040	mg/kg	0.800		75.3	14.1-172			
Surrogate: Nitrobenzene-d5	1.43		mg/kg	2.00		71.4	20.4-109			
Surrogate: 2-Fluorobiphenyl	1.48		mg/kg	2.00		74.0	23.4-133			
Surrogate: Terphenyl-dl4	1.45		mg/kg	2.00		72.6	38.4-163			
LCS Dup (5101308-BSD1)				Prepared: 1	3-Oct-15 A	nalyzed: 14	4-Oct-15			
Naphthalene	0.577	0.040	mg/kg	0.800		72.2	33.8-147	0.384	20	
2-Methylnaphthalene	0.598	0.040	mg/kg	0.800		74.8	41.4-151	0.676	20	
Acenaphthylene	0.604	0.040	mg/kg	0.800		75.5	39.2-150	0.825	20	
Acensphthene	0.596	0.040	mg/kg	0.800		74.4	39.3-154	0.808	20	
Fluorene	0.603	0.040	mg/kg	0.800		75.4	40.4-158	0.965	20	
Phenanthrene	0.592	0.040	mg/kg	0.800		74.1	34.7-164	0.962	20	
Anthracene	0.599	0.040	mg/kg	0.800		74.9	33.5-162	0.120	20	
Carbazole	0.597	0.040	mg/kg	0.800		74.7	31.6-163	2.27	20	
Fluoranthene	0.592	0.040	mg/kg	0.800		74.0	38,5-165	0.806	20	
Pyrene	0.594	0.040	mg/kg	0.800		74.3	28-180	2.87	20	
Benzo[a]anthracene	0.609	0.040	mg/kg	0.800		76.1	28.6-167	4.08	20	
Chrysene	0.610	0.040	mg/kg	0.800		76.2	27.7-171	2.51	20	
Benzo[b]flouranthene	0.603	0.040	mg/kg	0.800	,	75.4	24-168	8.61	21.5	
Benzo[k]flouranthene	0.628	0.040	mg/kg	0.800		78,5	28.9-170	17.2	20.5	
Benzo[a]pyrene	0.614	0.040	mg/kg	0.800		76.7	27.2-163	2.91	20	
Indeno[1,2,3-cd]pyrene	0.637	0.040	mg/kg	0.800		79 .7	21.9-162	3.15	32.1	
Dibenz[a,h]anthracene	0.637	0.040	mg/kg	0.800		79.7	19-164	2.40	30.5	

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Celling Zitherne



INDUSTRIAL ECOSYSTEMSProject:WQCC A&B49 CR 3150Project Number:3541AZTEC NM, 87410Project Manager:MARCELLA MARQUEZFax To:(505) 632-1876	Reported: 10-Nov-15 16:36
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Semivolatile Organic Compounds by GCMS - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5101308 - SW-846 3550		· · ·								
LCS Dup (5101308-BSD1)				Prepared: 1	13-Oct-15 A	nalyzed: 1	4-Oct-15			
Benzo[g,h,i]perylene	0.622	0.040	mg/kg	0,800		77.8	14.1-172	3.24	39.3	
Surrogate: Nitrobenzene-d5	1.43		mg/kg	2.00		71.7	20.4-109			
Surrogate: 2-Fluorobiphenyl	1.49		mg/kg	2.00		74.3	23.4-133			
Surrogate: Terphenyl-dl4	1.44		mg/kg	2.00		72.0	38.4-163			

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Celez D. Keine



INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876					Reported: 10-Nov-15 16:36				
	Ge	eneral Che	mistry - (Quality C	ontrol					
	í (Green An	alytical l	Laborato	ries					
_		Reporting		Spike	Source		%REC		RPD	
Analyte	. Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B510173 - General Prep - Wet Chem										
Duplicate (B510173-DUP1)	Sou	rce: H502670	-01	Prepared &	z Analyzed:	20-Oct-15	;			
% Dry Solids	95.0		%		94.7			0.327	20	
Duplicate (B510173-DUP2)	Sou	rce: H502670	-10	Prepared &	Analyzed:	20-Oct-15	;			
% Dry Solids	93.4		%		93.1			0.311	20	
Ratch R510207 - General Pren - Wet Chem										
Blank (B510207-BLK1)				Prenared: 2		nalvzed 2				
Cyanide, Total	ND	0,0100	mg/kg wet	11000000						-
LCS (B510207-BS1)				Prenared: 2	22-Oct-15 A	nalvzed 2	3-Oct-15			
Cyanide, Total	0.0916	0.0100	mg/kg wet	0.100		91.6	80-120			•=
LCS Dup (B510207-BSD1)				Prenared: 2	22-Oct-15 A	nalyzed: 2	3-Oct-15			
Cyanide, Total	0.0911	0.0100	mg/kg wet	0.100	2-000-10-11	91.1	80-120	0.547	20	
Ratch B\$10214 - General Pren - Wet Chem										
Direct DE10314 PL K1				Demonad: 1	01 Oct 15 A		2 Out 16			
Cyanide, Total	ND	0.0100	mg/kg wet	Frepared: 2		nalyzeu: 2	3-001-13			
				D	0.04164		2 0 - 4 15			
LU3 (B310214-B31)	0.0840	0.0100		Prepared: 2	1-Oct-15 A	nalyzed: 2	3-UCI-13			
Cyamue, Iotai	0.0849	0.0100	mg/kg wet	0.100		84.9	80-120			
LCS Dup (B510214-BSD1)		<u> </u>		Prepared: 2	21-Oct-15 A	nalyzed: 2	3-Oct-15	·		· · · · · · · · · · · · · · · · · · ·
Cyanide, Total	0.0919	0.0100	mg/kg wet	0.100		91.9	80-120	7.92	20	

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INDUSTRIAL ECOSYSTEMS	Project:	WQCC A&B	Reported:
49 CR 3150	Project Number:	3541	10-Nov-15 16:36
AZTEC NM, 87410	Project Manager:	MARCELLA MARQUEZ	
	Fax To:	(505) 632-1876	

Soluble (DI Water Extraction) - Quality Control

Green Analytical Laboratories

4	Darrik	Reporting	** '-	Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B510133 - General Prep - Wet Chem										
Blank (B510133-BLK1)				Prepared &	z Analyzed:	15-Oct-15				
Nitrate/Nitrite as N	0.021	0.020	mg/kg wet							
LCS (B510133-BS1)				Prepared &	k Analyzed:	15-Oct-15				
Nitrate/Nitrite as N	1.04	0.020	mg/kg wet	1.00		104	80-120			
LCS Dup (B510133-BSD1)				Prepared &	k Analyzed:	15-Oct-15				
Nitrate/Nitrite as N	0.997	0.020	mg/kg wet	1.00		99.7	80-120	4.22	20	·
Batch B510135 - General Prep - Wet Chem										
Blank (B510135-BLK1)				Prepared &	k Analyzed:	16-Oct-15				
Nitrite as N	ND	0.200	mg/kg wet							
LCS (B510135-BS1)			,	Prepared &	z Analyzed:	16-Oct-15				
Nitrite as N	0.111	0.020	mg/kg wet	0.100		111	80-120			
LCS Dup (B510135-BSD1)				Prepared &	2 Analyzed:	16-Oct-15				
Nitrite as N	0.111	0.020	mg/kg wet	0.100		111	80-120	0.00	20	
Batch B510277 - General Prep - Wet Chem										
Blank (B510277-BLK1)				Prepared &	Analyzed:	30-Oct-15				
luoride	ND	0.250	mg/kg wet	-						
LCS (B510277-BS1)				Prepared &	z Analyzed:	30-Oct-15				
	0.990	0.250	mg/kg wet	1.00		99.0	85-115			

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Project:	WOCC A&B	Ren	orted:
Project Number:	3541	10-No	v-15 16:36
Project Manager:	MARCELLA MAROUEZ		
Fax To:	(505) 632-1876		
Soluble (DI Water Extrac	tion) - Quality Control		
Green Analytical	l Laboratories	X	
	Project: Project Number: Project Manager: Fax To: Soluble (DI Water Extrac Green Analytica)	Project: WQCC A&B Project Number: 3541 Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876 Soluble (DI Water Extraction) - Quality Control Green Analytical Laboratories	Project: WQCC A&B Rep Project Number: 3541 10-No Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876 Soluble (DI Water Extraction) - Quality Control Green Analytical Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B510277 - General Prep - Wet Chem										
LCS Dup (B510277-BSD1)				Prepared &	Analyzed:	30-Oct-15				
Fluoride	0.986	0.250	mg/kg wet	1.00		98.6	85-115	0.405	20	

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: Project Number: Project Manager: Fax To:	WQCC A&B 3541 MARCELLA MARQUEZ (505) 632-1876	Reported: 10-Nov-15 16:36
	Total Metals by ICP	- Quality Control	

Green Analytical Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B510172 - EPA 3050										
Blank (B510172-BLK1)				Prepared: 2	1-Oct-15 A	nalyzed: 22	2-Oct-15			
Iron	ND	0.050	mg/kg dry							
LCS (B510172-BS1)				Prepared: 2	21-Oct-15 A	nalyzed: 22	2-Oct-15			
Iron	3.87	0.050	mg/kg dry	4.00		96.8	85-115			_
LCS Dup (B510172-BSD1)	· · · · ·			Prepared: 2	1-Oct-15 A	nalyzed: 22	2-Oct-15			
Iron	3.82	0.050	mg/kg dry	4.00		95.5	85-115	1.32	20	

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: Project Number: Project Manager: Fax To:	WQCC A&B 3541 MARCELLA MARQUEZ (505) 632-1876	Repo 10-Nov	orted: /-15 16:36
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Total Metals by ICPMS - Quality Control

Green Analytical Laboratories

Analuta	n	Reporting	11-2	Spike	Source	A/RE2	%REC	PAR	RPD	
Апаусе	Kesult	Limit	Units	Level	Kesult	%REC	Limits	KPD	Limit	Notes
Batch B510270 - EPA 3050M										
Blank (B\$10270-BLK1)				Prepared &	Analyzed:	30-Oct-15		,		
Selenium	ND	0.0010	mg/kg dry							
Chromium	ND	0.0010	mg/kg dry							
Uranium	ND	0.0001	mg/kg dry							
Barium	· ND	0.0005	mg/kg dry							
Zinc	ND	0.0100	mg/kg dry							
Cadmium	ND	0.0005	mg/kg dry							
Copper	ND	0.0005	mg/kg dry							
Arsenic	ND	0.0005	mg/kg dry							
Lead	ND	0.0005	mg/kg dry							
Silver	ND	0.0001	mg/kg dry							
Manganese	ND	0.0020	mg/kg dry							
LCS (B510270-BS1)				Prepared &	: Analyzed:	30-Oct-15				
Barium	0.0531	0.0005	mg/kg dry	0.0500		106	85-115			
Cadmium	0.0572	0.0005	mg/kg dry	0.0500		114	85-115			
Copper	0.0543	0.0005	mg/kg dry	0.0500		109	85-115			
Arsenic	0.0552	0.0005	mg/kg dry	0.0500		110	85-115			
Selenium	0.276	0.0010	mg/kg dry	0.250		110	85-115			
Uranium	0.0575	0.0001	mg/kg dry	0.0500		115	85-115			
Zinc	0.0560	0.0100	mg/kg dry	0.0500		112	80-120			
Silver	0.0559	0.0001	mg/kg dry	0.0500		112	85-115			
Chromium	0.0568	0.0010	mg/kg dry	0.0500		114	85-115			
Lead	0.0569	0.0005	mg/kg dry	0.0500		114	85-115			
Manganese	0.0548	0.0020	mg/kg dry	0.0500		110	85-115			
LCS Dup (B510270-BSD1)				Prepared &	Analyzed:	30-Oct-15	_			
Barium	0.0512	0.0005	mg/kg dry	0.0500		102	85-115	3.71	20	
Cadmium	0.0554	0.0005	mg/kg dry	0.0500		111	85-115	3.21	20	
Chromium	0.0576	0.0010	mg/kg dry	0.0500		115	85-115	1.46	20	
Zinc	0.0574	0.0100	mg/kg dry	0.0500		115	80-120	2.36	20	
Lead	0.0536	0.0005	mg/kg dry	0.0500		107	85-115	6.00	20	
Uranium	0.0534	0.0001	mg/kg dry	0.0500		107	85-115	7.28	20	
Silver	0.0561	0.0001	mg/kg dry	0.0500		112	85-115	0.342	20	

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Celey D. Keene, Lab Director/Quality Manager

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: Wo Project Number: 35 Project Manager: MA Fax To: (50	/QCC A&B 541 ARCELLA MARQUEZ 505) 632-1876	Reported: 10-Nov-15 16:36
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Total Metals by ICPMS - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B510270 - EPA 3050M							·			

LC2 Dup (B2102/0-B2D1)				Prepared & Anal	yzed: 30-Oct-15				
Manganese	0.0573	0.0020 m	ng/kg dry	0.0500	115	85-115	4.58	20	
Copper	0.0554	0.0005 m	ng/kg dry	0.0500	111	85-115	2.10	20	
Arsenic	0.0538	0.0005 m	ng/kg dry	0.0500	108	85-115	2.46	20	
Selenium	0.274	0.0010 m	ng/kg dry	0.250	110	85-115	0.687	20	

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Celey D. Keene, Lab Director/Quality Manager

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INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC NM, 87410	Project: Project Number: Project Manager: Fax To:	WQCC A&B 3541 MARCELLA MARQUEZ (505) 632-1876	Reported: 10-Nov-15 16:36
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Total Mercury by CVAA - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B510171 - EPA 7471										
Blank (B510171-BLK1)				Prepared: 2	21-Oct-15 A	nalyzed: 22	2-Oct-15			
Мегситу	ND	0.0002	mg/kg wet							
LCS (B510171-BS1)				Prepared: 2	21-Oct-15 A	analyzed: 22	2-Oct-15			
Mercury	0.0021	0.0002	mg/kg wet	0.00200		107	85-115			
LCS Dup (B510171-BSD1)				Prepared: 2	21-Oct-15 A	nalyzed: 22	2-Oct-15			
Mercury	0.0021	0.0002	mg/kg wet	0.00200		103	85-115	3.63	20	

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PHONE (575) 393-2326 * 101 E. MARLAND * HOBBS, NM 88240

Notes and Definitions

SUB-SS	Analysis subcontracted to SunStar Laboratories, Inc.
SUB-RS	Analysis subcontracted to Radiation Safety Engineering, Inc.
SUB-AL	Analysis subcontracted to Anatek Labs, Inc.
S-12	The surrogate recovery in the LCS/LCSD, MS and/or MSD was blas high. The surrogate recovery in associated samples was bias high and the samples were ND. No negative impact on the data is expected.
QM-13	Spike recovery for this analyte was bias high in the LCS and/or MS/MSD. Instrument blank, method blank and all sample were ND. No negative impact on data is expected.
H2	Sample analysis performed past hold time specified by the method.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Company Name:	Industrial Ecosystems, Inc.			T		B	ill to ([ifd	iffere	ent):					AN	LYS	is r	EQU	EST		
Project Manager:	Marcella Marquez	· · · · · · · · · · · · · · · · · · ·		P.O.	#:		3	354	1										\square		
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Phone #: 505-63	2-1782 Email: marcella@indu	strialecosyste	ams.com	Add	ress:						-		1								
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† GAL cannot abelijs accept verbal changes. Please fax or email written change requests.

* Chein of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges. #54

APPENDIX B JFJ Landfarm/ Industrial Ecosystems, Inc. Background Samples GPS Coordinates

Name	Latitude	Longitude	Name	Latitude	Longitude
BG 1-1	36.74779	-108.06127	BG 2-1	36.75086	-108.06350
BG 1-2	36.74781	-108.06128	BG 2-2	36.75081	-108.06346
BG 1-3	36.74778	-108.06132	BG 2-3	36.75085	-108.06338
BG 1-4	36.74778	-108.06134	BG 2-4	36.75089	-108.06338
BG 1-5	36.74781	-108.06135	BG 2-5	36.75083	-108.06333
BG 1-6	36.74784	-108.06129	BG 2-6	36.75076	-108.06338
BG 1-7	36.74782	-108.06137	BG 2-7	36.75076	-108.06331
BG 1-8	36.74784	-108.06135	BG 2-8	36.75080	-108.06321
BG 1-9	36.74781	-108.06143	BG 2-9	36.75087	-108.06327
BG 1-10	36.74777	-108.06142	BG 2-10	36.75091	-108.06333
BG 1-11	36.74778	-108.06139	BG 2-11	36.75097	-108.06340
BG 1-12	36.74778	-108.06142	BG 2-12	36.75102	-108.06330
BG 1-13	36.74791	-108.06145	BG 2-13	36.75093	-108.06318
BG 1-14	36.74788	-108.06131	BG 2-14	36.75081	-108.06309
BG 1-15	36.74773	-108.06135	BG 2-15	36.75102	-108.06320
BG 1-16	36.74773	-108.06146	BG 2-16	36.75088	-108.06321
BG 3-1	36.75260	-108.06383	BG 4-1	36.75276	-108.06418
BG 3-2	36.75262	-108.06390	BG 4-2	36.75277	-108.06413
BG 3-3	36.75273	-108.06386	BG 4-3	36.75275	-108.06411
BG 3-4	36.75270	-108.06380	BG 4-4	36.75275	-108.06406
BG 3-5	36.75270	-108.06373	BG 4-5	36.75274	-108.06402
BG 3-6	36.75266	-108.06369	BG 4-6	36.75275	-108.06395
BG 3-7	36.75263	-108.06363	BG 4-7	36.75273	-108.06384
BG 3-8	36.75259	-108.06365	BG 4-8	36.75275	-108.06384
BG 3-9	36.75248	-108.06371	BG 4-9	36.75276	-108.06378
BG 3-10	36.75251	-108.06377	BG 4-10	36.75274	-108.06374
BG 3-11	36.75252	-108.06384	BG 4-11	36.75274	-108.06369
BG 3-12	36.75259	-108.06389	BG 4-12	36.75274	-108.06367
BG 3-13	36.75263	-108.06399	BG 4-13	36.75277	-108.06369
BG 3-14	36.75274	-108.06359	BG 4-14	36.75278	-108.06373
BG 3-15	36.75268	-108.06357	BG 4-15	36.75283	-108.06375
BG 3-16	36.75258	-108.06350	BG 4-16	36.75285	-108.06377

APPENDIX B JFJ Landfarm/ Industrial Ecosystems, Inc. Background Samples GPS Coordinates

Name	Latitude	Longitude	N	lame	Latitude	Longitude
BG 5-1	36.75293	-108.06380	B	IG 6-1	36.74900	-108.06189
BG 5-2	36.75292	-108.06382	B	G 6-2	36.74913	-108.06196
BG 5-3	36.75294	-108.06385	B	G 6-3	36.74918	-108.06196
BG 5-4	36.75300	-108.06390	B	3G 6-4	36.74922	-108.06195
BG 5-5	36.75303	-108.06393	B	G 6-5	36.74924	-108.06198
BG 5-6	36.75308	-108.06396	B	IG 6-6	36.74930	-108.06203
BG 5-7	36.75311	-108.06397	B	8G 6-7	36.74929	-108.06207
BG 5-8	36.75310	-108.06400	B	IG 6-8	36.74925	-108.06207
BG 5-9	36.75308	-108.06406	B	3G 6-9	36.74922	-108.06204
BG 5-10	36.75308	-108.06409	B	3G 6-10	36.74919	-108.06209
BG 5-11	36.75302	-108.06407	B	BG 6-11	36.74924	-108.06216
BG 5-12	36.75305	-108.06402	B	BG 6-12	36.74917	-108.06220
BG 5-13	36.75297	-108.06395	B	G 6-13	36.74927	-108.06226
BG 5-14	36.75294	-108.06396	B	3G 6-14	36.74900	-108.06181
BG 5-15	36.75289	-108.06390	B	BG 6-15	36.74907	-108.06183
BG 5-16	36.75282	-108.06396	B	BG 6-16	36.74919	-108.06189
BG 7-1	36.74770	-108.06223	B	BG 8-1	36.75252	-108.06471
BG 7-2	36.74770	-108.06215	B	3G 8-2	36.75256	-108.06474
BG 7-3	36.74770	-108.06210	B	3G 8-3	36.75262	-108.06476
BG 7-4	36.74770	-108.06200	B	3G 8-4	36.75271	-108.06476
BG 7-5	36.74775	-108.06203	B	3G 8-5	36.75274	-108.06466
BG 7-6	36.74776	-108.06210	B	3G 8-6	36.75272	-108.06459
BG 7-7	36.74775	-108.06216	B	3G 8-7	36.75267	-108.06461
BG 7-8	36.74774	-108.06224	B	3G 8-8	36.75266	-108.06454
BG 7-9	36.74776	-108.06230	B	3G 8-9	36.75270	-108.06450
BG 7-10	36.74781	-108.06224	B	3G 8-10	36.75273	-108.06446
BG 7-11	36.74783	-108.06218	B	3G 8-11	36.75274	-108.06439
BG 7-12	36.74788	-108.06210	B	3G 8-12	36.75271	-108.06433
BG 7-13	36.74788	-108.06206	B	8G 8-13	36.75275	-108.06425
BG 7-14	36.74790	-108.06200	E	8G 8-14	36.75274	-108.06416
BG 7-15	36.74785	-108.06196	B	3G 8-15	36.75269	-108.06415
BG 7-16	36.74782	-108.06194	B	3G 8-16	36.75267	-108.06405
D. Stating						

APPENDIX B JFJ Landfarm/ Industrial Ecosystems, Inc. Background Samples GPS Coordinates

Name	Latitude	Longitude		Name	Latitude	Longitude
BG 9-1	36.75343	-108.06807		BG 10-1	36.74886	-108.06836
BG 9-2	36.75339	-108.06807	. 1	BG 10-2	36.74874	-108.06835
BG 9-3	36.75331	-108.06805		BG 10-3	36.74862	-108.06834
BG 9-4	36.75325	-108.06807		BG 10-4	36.74849	-108.06835
BG 9-5	36.75317	-108.06807		BG 10-5	36.74840	-108.06835
BG 9-6	36.75308	-108.06807		BG 10-6	36.74833	-108.06837
BG 9-7	36.75298	-108.06808	1	BG 10-7	36.74824	-108.06836
BG 9-8	36.75291	-108.06806	1	BG 10-8	36.74814	-108.06838
BG 9-9	36.75281	-108.06808		BG 10-9	36.74805	-108.06839
BG 9-10	36.75282	-108.06814		BG 10-10	36.74799	-108.06838
BG 9-11	36.75268	-108.06817		BG 10-11	36.74792	-108.06842
BG 9-12	36.75261	-108.06819		BG 10-12	36.74785	-108.06840
BG 9-13	36.75257	-108.06818		BG 10-13	36.74781	-108.06842
BG 9-14	36.75249	-108.06817	I	BG 10-14	36.74778	-108.06843
BG 9-15	36.75241	-108.06816	1	BG 10-15	36.74775	-108.06845
BG 9-16	36.75229	-108.06816	J	BG 10-16	36.74770	-108.06838
BG 11-1	36.74771	-108.06833	1	BG 12-1	36.74769	-108.06657
BG 11-2	36.74770	-108.06828	I	BG 12-2	36.74769	-108.06647
BG 11-3	36.74770	-108.06819		BG 12-3	36.74770	-108.06637
BG 11-4	36.74771	-108.06809	1	BG 12-4	36.74769	-108.06624
BG 11-5	36.74770	-108.06800		BG 12-5	36.74771	-108.06618
BG 11-6	36.74771	-108.06792	I	BG 12-6	36.74770	-108.06607
BG 11-7	36.74771	-108.06783		BG 12-7	36.74769	-108.06598
BG 11-8	36.74770	-108.06773	1	BG 12-8	36.74771	-108.06585
BG 11-9	36.74769	-108.06762	I	BG 12-9	36.74770	-108.06574
BG 11-10	36.74768	-108.06752		BG 12-10	36.74771	-108.06564
BG 11-11	36.74770	-108.06740	I	BG 12-11	36.74770	-108.06553
BG 11-12	36.74771	-108.06730		BG 12-12	36.74769	-108.06541
BG 11-13	36.74771	-108.06720		BG 12-13	36.74768	-108.06527
BG 11-14	36.74768	-108.06711	1	BG 12-14	36.74769	-108.06520
BG 11-15	36.74769	-108.06699	I	BG 12-15	36.74767	-108.06506
BG 11-16	36.74769	-108.06689		BG 12-16	36.74765	-108.06498
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BG 5-10 BG 5-6 BG 5-11 BG 5-5 BG 5-13 BG 5-4 BG 5-14 BG 5-3 BG 5-15 BG 5-2

BG 5-16 BG 4-15

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BG 3-13 BG 3-2 BG 3-7 BG 3-12 BG 3-1 BG 3-8 BG 3-16

> BG 3-10 BG 3-9

36°45'10.13" N 108°03'50.93" W elev 5901 ft

Google earth

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BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

2015 DEC 28 P 3: 18

RECEIVED OCD

December 21, 2015

Mr. Brad Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: JFJ Waste Management Facility: Permit NM-01-0010B 2015 3rd Quarterly Report on Treatment Zone Monitoring

On behalf of JFJ Landfarm L.L.C., Blagg Engineering, Inc. (BEI) is submitting quarterly treatment zone monitoring test results for the JFJ Waste Management Facility pursuant to Permit NM-01-0010B. This report is for the quarterly sample event conducted on September 30, 2015.

The facility permit describes annual cell sampling to be within the treatment zone, defined in the permit as: "A treatment zone not to exceed three (3) feet beneath the landfarm and compost pile native ground surface". This is the interval that was sampled during the sample event. Samples were submitted to Hall Environmental Laboratories in Albuquerque, New Mexico for analytical testing that included total petroleum hydrocarbons (TPH) by U.S. EPA Method 8015D (GRO, DRO and MRO), volatile hydrocarbons (BTEX) by U.S. EPA Method 8021B, and chlorides by Method 300.0 For this event samples were collected from active cell units 2f, 3h, 4f, 7b, 8b, 9c, 11d, 12g and 13g (see attached figure). No constituents were found to be in excess of landfarm permit standards.

Questions or comments concerning this transmittal may be directed to myself at (505)632-1199 or Jake Hatcher with JFJ Landfarm L.L.C. at (505)632-1786.

Respectfully submitted: Blagg Engineering, Inc.

L C- Blogg

Jeffrey C. Blagg, P.E. President

Attachments: Site Figure Analytical Test Reports

cc: Brandon Powell, NMOCD Aztec District Office Jake Hatcher, JFJ Farmington



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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

October 13, 2015

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: JFJ Landfarm

OrderNo.: 1510086

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 10/2/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering	Client Sample ID: Cell 2F							
Project: JFJ Landfarm	,		Collection I	Date: 9/3	0/2015 9:50:00 AM			
Lab ID: 1510086-001	Matrix:	SOIL	Received I	Received Date: 10/2/2015 8:00:00 AM				
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS	, _,				Analyst	LGT		
Chloride	ND	30	mg/Kg	20	10/7/2015 1:25:49 PM	21726		
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	KJH		
Diesel Range Organics (DRO)	10	9.7	mg/Kg	1	10/9/2015 12:24:47 AM	21629		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/9/2015 12:24:47 AM	21629		
Surr. DNOP	98.6	57. 9 -140	%REC	1	10/9/2015 12:24:47 AM	21629		
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB		
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/7/2015 1:46:24 AM	21665		
Sur: BFB	88.0	75.4-113	%REC	1	10/7/2015 1:46:24 AM	21665		
EPA METHOD 8021B: VOLATILES					Analyst	NSB		
Benzene	ND	0.047	mg/Kg	1	10/7/2015 1:46:24 AM	21665		
Toluene	ND	0.047	mg/Kg	1	10/7/2015 1:46:24 AM	21665		
Ethylbenzene	ND	0.047	mg/Kg	1	10/7/2015 1:46:24 AM	21665		
Xylenes, Total	ND	0.095	mg/Kg	1	10/7/2015 1:46:24 AM	21665		
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	10/7/2015 1:46:24 AM	21665		

Qualifiers:	•	Val
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	Н	Ho
		NT-4

- Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering	Client Sample ID: Cell 3H						
Project: IFI Landfarm			Collection	Date: 9/3	0/2015 9:05:00 AM		
Lab ID: 1510086-002	Matrix:	/2/2015 8:00:00 AM					
Analyses	Result	RL C	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS	-				Analys	st: LGT	
Chloride	ND	30	mg/Kg	20	10/7/2015 2:27:51 PM	21726	
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	it: KJH	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/9/2015 12:51:37 A	M 21629	
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/9/2015 12:51:37 A	M 21629	
Surr: DNOP	9 9.5	57. 9 -140	%REC	1	10/9/2015 12:51:37 A	M 21629	
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	st NSB	
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	10/7/2015 2:09:25 AM	21665	
Surr: BFB	88.0	75.4-113	%REC	1	10/7/2015 2:09:25 AM	21665	
EPA METHOD 8021B: VOLATILES					Analys	t: NSB	
Benzene	ND	0.046	mg/Kg	1	10/7/2015 2:09:25 AM	21665	
Toluene	ND	0.046	mg/Kg	1	10/7/2015 2:09:25 AM	21665	
Ethylbenzene	ND .	0.046	mg/Kg	1	10/7/2015 2:09:25 AM	21665	
Xylenes, Total	ND	0.093	mg/Kg	1	10/7/2015 2:09:25 AM	21665	
Surr: 4-Bromofluorobenzene	104	80-120	%REC	. 1	10/7/2015 2:09:25 AM	21665	

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Ð	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering	Client Sample ID: Cell 4F							
Project: JFJ Landfarm			Collection	Date: 9/3	0/2015 8:20:00 AM			
Lab ID: 1510086-003	Matrix:	SOIL	Received I	Received Date: 10/2/2015 8:00:00 AM				
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	t: LGT		
Chloride	ND	30	mg/Kg	20	10/7/2015 2:40:16 PM	21726		
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	s			Analys	t: KJH		
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	. 1	10/9/2015 1:18:28 AM	21629		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/9/2015 1:18:28 AM	21629		
Sur: DNOP	101	57.9-140	%REC	1	10/9/2015 1:18:28 AM	21629		
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/7/2015 2:32:23 AM	21665		
Surr: BFB	87.8	75.4-113	%REC	1	10/7/2015 2:32:23 AM	21665		
EPA METHOD 8021B: VOLATILES					Analys	t: NSB		
Benzene	ND	0.048	mg/Kg	1	10/7/2015 2:32:23 AM	21665		
Toluene	ND	0.048	mg/Kg	1	10/7/2015 2:32:23 AM	21665		
Ethylbenzene	ND	0.048	mg/Kg	1	10/7/2015 2:32:23 AM	21665		
Xylenes, Total	ND	0.095	mg/Kg	1	10/7/2015 2:32:23 AM	21665		
Surr: 4-Bromofluorobenzene	103	80-120	%REC	1	10/7/2015 2:32:23 AM	21665		

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В
	D	Sample Diluted Due to Matrix	Е
	Н	Holding times for preparation or analysis exceeded	J
	ND	Not Detected at the Reporting Limit	P
	R	RPD outside accepted recovery limits	RL

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

- J Analyte detected below quantitation limits Page 3 of 13
- P Sample pH Not In Range
- L Reporting Detection Limit

Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

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CLIENT: Blagg Engineering		<u> </u>	Client Sampl	e ID: Ce	ll 7B			
Project: JFJ Landfarm	Collection Date: 9/30/2015 9:27:00 AM							
Lab ID: 1510086-004	Matrix:	SOIL	Received	Date: 10	/2/2015 8:00:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	t LGT		
Chloride	ND	30	mg/Kg	20	10/7/2015 2:52:40 PM	21726		
EPA METHOD 8015M/D: DIESEL R	ANGE ORGANIC	S			Analys	t KJH		
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/9/2015 1:45:26 AM	21629		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/9/2015 1:45:26 AM	21629		
Surr: DNOP	99.2	57.9-140	%REC	1	10/9/2015 1:45:26 AM	21629		
EPA METHOD 8015D: GASOLINE I	RANGE				Analys	t NSB		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/7/2015 2:55:46 AM	21665		
Sur: BFB	88.6	75.4-113	%REC	1	10/7/2015 2:55:46 AM	21665		
EPA METHOD 8021B: VOLATILES					Analys	t NSB		
Benzene	ND	0.049	mg/Kg	1	10/7/2015 2:55:46 AM	21665		
Toluene	ND	0.049	mg/Kg	1	10/7/2015 2:55:46 AM	21665		
Ethylbenzene	ND	0.049	mg/Kg	1	10/7/2015 2:55:46 AM	21665		
Xylenes, Total	· ND	0.098	mg/Kg	1	10/7/2015 2:55:46 AM	21665		
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	10/7/2015 2:55:46 AM	21665		

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

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CLIENT:	Blagg Engineering			Client Sampl	e ID: Ce	ell 8B	
Project:	JFJ Landfarm			Collection 3	Date: 9/ 3	30/2015 8:42:00 AM	
Lab ID:	1510086-005	Matrix:	SOIL	Received 1	Date: 10	/2/2015 8:00:00 AM	
Analyses		Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS					Analyst	LGT
Chloride		ND	30	mg/Kg	20	10/7/2015 3:05:05 PM	21726
EPA MET	HOD 8015M/D: DIESEL RAN	GE ORGANIC	s			Analyst	t KJH
Diesei R	ange Organics (DRO)	ND	10	mg/Kg	1	10/9/2015 2:12:44 AM	21629
Motor Oi	Range Organics (MRO)	ND	50	mg/Kg	1	10/9/2015 2:12:44 AM	21629
Surr: [DNOP	102	57.9-140	%REC	1	10/9/2015 2:12:44 AM	21629
EPA MET	THOD 8015D: GASOLINE RAN	IGE				Analysi	t NSB
Gasoline	Range Organics (GRO)	ND	4.9	mg/Kg	1	10/7/2015 3:19:06 AM	21665
Sum: E	BFB	88.4	75.4-113	%REC	1	10/7/2015 3:19:06 AM	21665
EPA MET	THOD 8021B: VOLATILES					Analys	t: NSB

PA METHOD 8021B: VOLATILES					Anaiyst	NSB
Benzene	ND	0.049	mg/Kg	1	10/7/2015 3:19:06 AM	21665
Toluene	ND	0.049	mg/Kg	1	10/7/2015 3:19:06 AM	21665
Ethylbenzene	ND	0.049	mg/Kg	1	10/7/2015 3:19:06 AM	21665
Xylenes, Total	ND	0.097	mg/Kg	1	10/7/2015 3:19:06 AM	21665
Surr. 4-Bromofluorobenzene	105	80-120	%REC	1	10/7/2015 3:19:06 AM	21665

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B
	D	Sample Diluted Due to Matrix	E
	Н	Holding times for preparation or analysis exceeded	J
	ND	Not Detected at the Reporting Limit	Р
	R	RPD outside accepted recovery limits	RI

S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 13
- P Sample pH Not In Range
- L Reporting Detection Limit

Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering	Client Sample ID: Cell 9C							
Project: JFJ Landfarm	Collection Date: 9/30/2015 1:10:00 PM							
Lab ID: 1510086-006	Matrix:	SOIL	Received	Date: 10/	/2/2015 8:00:00 AM			
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analyst	LGT		
Chloride	ND	30	mg/Kg	20	10/7/2015 3:17:29 PM	21726		
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s			Analyst	: KJH		
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/9/2015 2:39:54 AM	21629		
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/9/2015 2:39:54 AM	21629		
Surr: DNOP	101	57.9-140	%REC	1	10/9/2015 2:39:54 AM	21629		
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	10/7/2015 3:42:23 AM	21665		
Surr: BFB	88.1	75.4-113	%REC	1	10/7/2015 3:42:23 AM	21665		
EPA METHOD 8021B: VOLATILES					Analyst	: NSB		
Benzene	ND	0.049	mg/Kg	1	10/7/2015 3:42:23 AM	21665		
Toluene	ND	0.049	mg/Kg	1	10/7/2015 3:42:23 AM	21665		
Ethylbenzene	ND	0.049	mg/Kg	1	10/7/2015 3:42:23 AM	21665		
Xylenes, Total	ND	0.098	mg/Kg	1	10/7/2015 3:42:23 AM	21665		
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	10/7/2015 3:42:23 AM	21665		

Qualifiers:	+	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Ε	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 6 of 13
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report	
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Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT.	Rlagg Engineering			Client Sampl	e ID• Ce		
Duciant.				Collection	Data 0/2	20/2015 1.25.00 DNA	
Project:	JFJ Langiam			Conection	Date: 9/3	SU/2013 1.23.00 FIVI	
Lab ID:	1510086-007	Matrix:	SOIL	Received	Date: 10	/2/2015 8:00:00 AM	
Analyses		Result	RL Qua	l Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS					Analyst	LGT
Chloride		ND	30	mg/Kg	20	10/7/2015 3:29:54 PM	21726
EPA MET	HOD 8015M/D: DIESEL RAM	NGE ORGANIC	s			Analyst	KJH
Diesel R	ange Organics (DRO)	ND	9.8	mg/Kg	1	10/9/2015 3:06:54 AM	21629
Motor Oi	Range Organics (MRO)	ND	49	mg/Kg	1	10/9/2015 3:06:54 AM	21629
Surr: [ONOP	103	57.9-140	%REC	1	10/9/2015 3:06:54 AM	21629
EPA MET	HOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline	Range Organics (GRO)	ND	4.6	mg/Kg	1	10/7/2015 4:05:32 AM	21665
Surr: E	BFB	87.6	75.4-113	%REC	1	10/7/2015 4:05:32 AM	21665
EPA MET	HOD 8021B: VOLATILES					Analyst	NSB
Benzene	•	ND	0.046	mg/Kg	1	10/7/2015 4:05:32 AM	21665
Toluene		ND	0.046	mg/Kg	1	10/7/2015 4:05:32 AM	21665
Ethylben	zene	ND	0.046	mg/Kg	1	10/7/2015 4:05:32 AM	21665
Xylenes,	Total	ND	0.092	mg/Kg	1	10/7/2015 4:05:32 AM	21665
Surr: 4	4-Bromofluorobenzene	103	80-120	%REC	1	10/7/2015 4:05:32 AM	21665

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 7 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Kepo	ort
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Lab Order 1510086

Date Reported: 10/13/2015

CLIENT:	Blagg Engineering			Client Samp	le ID: Ce	ll 12G	
Project:	JFJ Landfarm			Collection	Date: 9/3	0/2015 1:35:00 PM	
Lab ID:	1510086-008	Matrix:	SOIL	Received	Date: 10/	2/2015 8:00:00 AM	
Analyses		Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS					Analysi	: LGT
Chloride		ND	30	mg/Kg	20	10/7/2015 3:42:19 PM	21726
EPA MET	HOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analys	: KJH
Diesel Ra	ange Organics (DRO)	ND	10	mg/Kg	1	10/9/2015 3:34:13 AM	21629
Motor Oil	Range Organics (MRO)	ND	50	mg/Kg	1	10/9/2015 3:34:13 AM	21629
Surr: D	DNOP	101	57.9-140	%REC	1	10/9/2015 3:34:13 AM	21629
EPA MET	HOD 8015D: GASOLINE R	ANGE				Analys	: NSB
Gasoline	Range Organics (GRO)	ND	4.7	mg/Kg	1	10/7/2015 4:28:49 AM	21665
Sur: E	BFB	89.5	75.4-113	%REC	1	10/7/2015 4:28:49 AM	21665
EPA MET	HOD 8021B: VOLATILES					Analysi	: NSB
Benzene		ND	0.047	mg/Kg	1	10/7/2015 4:28:49 AM	21665
Toluene		· ND	0.047	mg/Kg	1	10/7/2015 4:28:49 AM	21665
Ethylben	zene	ND	0.047	mg/Kg	1	10/7/2015 4:28:49 AM	21665
Xylenes,	Total	ND	0.095	mg/Kg	1	10/7/2015 4:28:49 AM	21665
Surr: 4	I-Bromofluorobenzene	106	80-120	%REC	1	10/7/2015 4:28:49 AM	21665

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	•	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Ε	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 8 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report Lab Order 1510086

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering	Client Sample ID: Cell 13G							
Project: JFJ Landfarm	Collection Date: 9/30/2015 1:58:00 PM							
Lab ID: 1510086-009	Matrix:	Received 1						
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analyst	LGT		
Chloride	ND	30	mg/Kg	20	10/7/2015 3:54:44 PM	21726		
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	s			Analyst	KJH		
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/9/2015 4:01:20 AM	21629		
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/9/2015 4:01:20 AM	21629		
Surr. DNOP	107	57. 9 -140	%REC	1	10/9/2015 4:01:20 AM	21629		
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	NSB		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/7/2015 4:52:02 AM	21665		
Surr: BFB	88.5	75.4-113	%REC	1	10/7/2015 4:52:02 AM	21665		
EPA METHOD 8021B: VOLATILES					Analyst	NSB		
Benzene	ND	0.048	mg/Kg	1	10/7/2015 4:52:02 AM	21665		
Toluene	ND	0.048	mg/Kg	1	10/7/2015 4:52:02 AM	21665		
Ethylbenzene	ND	0.048	mg/Kg	1	10/7/2015 4:52:02 AM	21665		
Xylenes, Total	ND	0.097	mg/Kg	1	10/7/2015 4:52:02 AM	21665		
Surr. 4-Bromofluorobenzene	104	80-120	%REC	1	10/7/2015 4:52:02 AM	21665		

Qualifiers:	٠	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 9 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

WO#:

1510086 13-Oct-15

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Hall	Environmental	Analysis	La	boratory, .	Inc.
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Client: Blagg Engineering

Project:	JFJ Landfarm
I I UJUCU	

Sample ID MB-21726 Client ID: PBS Prep Date: 10/7/2015	SampType: MBLK Batch ID: 21726 Analysis Date: 10/7/2015	TestCode: EPA Method RunNo: 29393 SeqNo: 894029	300.0: Anions Units: mg/Kg	
AnalyteChloride	Result PQL SPK value ND 1.5	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Sample ID LCS-21726	SampType: LCS TestCode: EPA Method 300.0: Anions Batch ID: 24726 RunNo: 29393			
Prep Date: 10/7/2015	Analysis Date: 10/7/2015	SeqNo: 894030	Units: mg/Kg	
Anabre	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual

Qualifiers:

- ٠ Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Value above quantitation range Е
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL **Reporting Detection Limit**

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WO#: 1510086

13-Oct-15

Hall Environmenta	l Analysis	Laboratory	y, Inc.
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Client:	Blagg E	ngineering									
Project:	JFJ Lan	dfarm									
Sample ID	MB-21652	SampType	e: Mi	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esei Rang	e Organics	
Client ID:	PBS	Batch ID): 21	652	F	RunNo: 2	9273				
Prep Date:	10/5/2015	Analysis Date	: 1 (0/5/2015	5	SeqNo: 8	90900	Units: %RE	C		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	,	7.9		10.00		78.7	57.9	140			·····
Sample ID	LCS-21652	SampType	e: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	<u>_</u>
Client ID:	LCSS	Batch ID): 21	652	F	RunNo: 2	9273				
Prep Date:	10/5/2015	Analysis Date	: . 1 (0/5/2015	5	SeqNo: 8	90901	Units: %RE	C		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suit: DNOP	,	4.7		5.000		94.7	57.9	140			
Sample ID	MB-21629	SampType	e: Mi	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch ID): 21	629	F	RunNo: 2	9273				
Prep Date:	10/2/2015	Analysis Date	: 1 (0/6/2015	5	SeqNo: 8	92312	Units: mg/H	(g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	10								
Motor Oil Rang	ge Organics (MRO)	ND	50	40.00		400	67.0	440			
		10		10.00		103	57.9	140			
Sample ID	LCS-21629	SampType	e: LC	S	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch ID): 21	629	F	RunNo: 2	9273				
Prep Date:	10/2/2015	Analysis Date	: 1	0/6/2015	5	SeqNo: 8	92314	Units: mg/k	<g< td=""><td></td><td></td></g<>		
Analyte	<u> </u>	Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	48	10	50.00	0	96.7	57.4	139			
Sun: DNOP) 	5.3		5.000		107	57.9	140			
Sample ID	MB-21679	SampTyp	e: Mi	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch ID): 21	679	F	RunNo: 2	9273				
Prep Date:	10/6/2015	Analysis Date	e: 1	0/8/2015	5	SeqNo: 8	94236	Units: %RE	C		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sur: DNOP		10		10.00		105	57.9	140			
Sample (D	LCS-21679	SampType	e: LC		Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch ID): 21	679	F	RunNo: 2	9273				
Prep Date:	10/6/2015	Analysis Date	e: 1	0/8/2015	5	SeqNo: 8	94238	Units: %RE	C		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sur: DNOP)	5.6		5.000		112	57.9	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

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- E Value above quantitation range
- J Analyte detected below quantitation limits
 - Sample pH Not In Range
- RL Reporting Detection Limit

P

Client: Blagg Project: JFJ L	Engineering andfarm							
Sample ID MB-21665	SampType: MI	BLK	Tesl	Code: El	PA Method	8015D: Gaso	oline Rang	9
Client ID: PBS	Batch ID: 21	665	R	tunNo: 2	9332			
Prep Date: 10/5/2015	Analysis Date: 1	0/6/2015	s	eqNo: 8	92336	Units: mg/K	ģ	
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Gasoline Range Organics (GRO)	ND 5.0							
Sunt: BFB	880	1000		88.5	75.4	113		
Sample ID LCS-21665	SampType: LC	cs	Test	Code: El	PA Method	8015D: Gaso	line Rang	je
Client ID: LCSS	Batch ID: 21	665	R	unNo: 2	9332			
Prep Date: 10/5/2015	Analysis Date: 1	0/6/2015	S	ieqNo: 8	92337	Units: mg/K	(g	

Hall Environmental Analysis Laboratory, Inc.

Client ID: PBS	Batch	D: 21	665	F	RunNo: 2	9332				
Prep Date: 10/5/2015	Analysis Da	te: 10	0/6/2015	8	SeqNo: 8	92336	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Sunt: BFB	880		1000		88.5	75.4	113			<u> </u>
Sample ID LCS-21665	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	ID: 21	665	F	RunNo: 2	9332				
Prep Date: 10/5/2015	Analysis Da	te: 10	0/6/2015	8	SeqNo: 8	92337	Units: mg/M	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.4	79.6	122			
Surr: BFB	950		1000		95.5	75.4	113			
· · · · · · · · · · · · · · · · · · ·										
Sample ID MB-21694	SampTy	pe: ME	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	8	
Sample ID MB-21694 Client ID: PBS	SampTy Batch	pe: ME iD: 21	3LK 694	Tes	tCode: E RunNo: 2	PA Method 9364	8015D: Gasc	oline Rang	8	
Sample ID MB-21694 Client ID: PBS Prep Date: 10/6/2015	SampTy Batch I Analysis Da	pe: ME ID: 21 te: 10	BLK 694 0/7/2015	Tes F	tCode: El RunNo: 2 SeqNo: 8	PA Method 9364 93258	8015D: Gaso Units: %RE	oline Rang C		<u> </u>
Sample ID MB-21694 Client ID: PBS Prep Date: 10/6/2015 Analyte	SampTy Batch Analysis Da Result	pe: ME ID: 21 te: 10 PQL	3LK 694 0/7/2015 SPK value	Tes F SPK Ref Val	tCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 9364 93258 LowLimit	8015D: Gaso Units: %RE HighLimit	oline Rang C %RPD	e RPDLimit	Qual
Sample ID MB-21694 Client ID: PBS Prep Date: 10/6/2015 Analyte Surr: BFB	SampTy Batch Analysis Da Result 880	pe: ME ID: 21 te: 10 PQL	3LK 694 0/7/2015 SPK value 1000	Tes F SPK Ref Val	tCode: El RunNo: 2 SeqNo: 8 %REC 88.0	PA Method 9364 93258 LowLimit 75.4	8015D: Gasc Units: %RE HighLimit 113	oline Rang C %RPD	e RPDLimit	Qual
Sample ID MB-21694 Client ID: PBS Prep Date: 10/6/2015 Analyte Sur: BFB Sample ID LCS-21694	SampTy Batch I Analysis Da Result 880 SampTy	pe: ME ID: 21 Ite: 10 PQL pe: LC	BLK 694 0/7/2015 SPK value 1000	Tes F SPK Ref Val Tes	tCode: E RunNo: 2 SeqNo: 8 %REC 88.0 tCode: E	PA Method 9364 93258 LowLimit 75.4 PA Method	8015D: Gasc Units: %RE HighLimit 113 8015D: Gasc	oline Rang C %RPD oline Rang	e RPDLimit	Qual
Sample ID MB-21694 Client ID: PBS Prep Date: 10/6/2015 Analyte Sur: BFB Sample ID LCS-21694 Client ID: LCSS	SampTy Batch I Analysis Da Result 880 SampTy Batch	pe: ME ID: 21 Ite: 10 PQL pe: LO ID: 21	3LK 694 0/7/2015 SPK value 1000 SS 694	Tes F SPK Ref Val Tes F	tCode: El RunNo: 2 SeqNo: 8 %REC 88.0 tCode: El RunNo: 2	PA Method 9364 93258 LowLimit 75.4 PA Method 9364	8015D: Gaso Units: %RE HighLimit 113 8015D: Gaso	Dine Rang C %RPD Dine Rang	e RPDLimit	Qual
Sample ID MB-21694 Client ID: PBS Prep Date: 10/6/2015 Analyte Sur: BFB Sample ID LCS-21694 Client ID: LCSS Prep Date: 10/6/2015	SampTy Batch Analysis Da Result 880 SampTy Batch Analysis Da	pe: ME ID: 21 ID: 21 ID: 21 PQL PQL ID: 21 ID: 21	3LK 694 0/7/2015 SPK value 1000 SS 694 0/7/2015	Tes F SPK Ref Val Tes F	tCode: El RunNo: 2 SeqNo: 8 %REC 88.0 tCode: El RunNo: 2 SeqNo: 8	PA Method 9364 93258 LowLimit 75.4 PA Method 9364 93259	8015D: Gasc Units: %RE HighLimit 113 8015D: Gasc Units: %RE	Dine Rang C %RPD Dine Rang	e RPDLimit	Qual
Sample ID MB-21694 Client ID: PBS Prep Date: 10/6/2015 Analyte Sur: BFB Sample ID LCS-21694 Client ID: LCSS Prep Date: 10/6/2015 Analyte	SampTy Batch I Analysis Da Result 880 SampTy Batch I Analysis Da Result	pe: ME ID: 21 PQL pe: LC ID: 21 ID: 21 Ite: 10 PQL	3LK 694 0/7/2015 SPK value 1000 CS 694 0/7/2015 SPK value	Tes F SPK Ref Val Tes F SPK Ref Val	tCode: El RunNo: 2 SeqNo: 8 %REC 88.0 tCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 9364 93258 LowLimit 75.4 PA Method 9364 93259 LowLimit	8015D: Gaso Units: %RE HighLimit 113 8015D: Gaso Units: %RE HighLimit	oline Rang C %RPD oline Rang C %RPD	e RPDLimit e RPDLimit	Quai

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- J Analyte detected below quantitation limits
 - Sample pH Not In Range
- RL **Reporting Detection Limit**

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WO#:

Hall	Environment	al A	Analysis	Laboratory,	Inc.
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Client: Blagg Engineering

Project: JFJ Landfarm

Sample ID MB-21665	SampType: MBLK	TestCode: EPA Method	8021B: Volatiles	
Client ID: PBS	Batch ID: 21665	RunNo: 29332		
Prep Date: 10/5/2015	Analysis Date: 10/6/2015	SeqNo: 892380	Units: mg/Kg	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qua	al
Benzene	ND 0.050			
Toluene	ND 0.050			
Ethylbenzene	ND 0.050			
Xylenes, Total	ND 0.10			
Surr: 4-Bromoftuorobenzene	1.1 1.00	0 106 80	120	
Sample ID LCS-21665	SampType: LCS	TestCode: EPA Method	i 8021B: Volatiles	
Client ID: LCSS	Batch ID: 21665	RunNo: 29332		
Prep Date: 10/5/2015	Analysis Date: 10/6/2015	SeqNo: 892381	Units: mg/Kg	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qua	ai
Benzene	1.0 0.050 1.00	0 0 103 80	120	
Toluene	0.99 0.050 1.00	0 0 99.1 80	120	
Ethylbenzene	1.0 0.050 1.00	0 0 100 80	120	
Xylenes, Total	3.0 0.10 3.00	0 0 99.8 80	120	
Surr: 4-Bromofluorobenzene	1.1 1.00	0 113 80	120	
Sample ID MB-21694	SampType: MBLK	TestCode: EPA Method	I 8021B: Volatiles	
Client ID: PBS	Batch ID: 21694	RunNo: 29364		
Prep Date: 10/6/2015	Analysis Date: 10/7/2015	SeqNo: 893314	Units: %REC	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qua	al
Surr: 4-Bromofluorobenzene	1.0 1.00	0 105 80	120	
Sample ID LCS-21694	SampType: LCS	TestCode: EPA Method	l 8021B: Volatiles	
Client ID: LCSS	Batch ID: 21694	RunNo: 29364		
Prep Date: 10/6/2015	Analysis Date: 10/7/2015	SeqNo: 893315	Units: %REC	
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qua	al
Sur: 4-Bromofluorobenzene	1.1 1.00	0 111 80	120	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 13 of 13

WO#: 1510086

13-Oct-15

HALL RONMENTAL ENVIRONMENTAL ANALYSIS LABORATORY Website: www.	4901 Hàwkin 4901 Hàwkin Albuquerque. NN 8 975 FAX: 505-345- 9 hallenvironmeniu	1009 17109 Sam j 1107 1.com	ole Log-In Ch	eck List
Client Name: BLAGG Work Order Numl	ber: 1510086		RcptNo:	1. 1
Received by/date: 10 02 15		<u></u>		
Logged By: Lindsay Mangin 10/2/2015 8:00:00 /	AM	Julytheo		
Completed By: Lindsay Mangin 10/2/2015 1:26:51 I	PM	Start Hago		
Reviewed By: On Inthis lis		V		
chain of Custody		<u></u>		
1 Custody seals intact on sample bottles?	Yes 🗖	No 🗖	Not Present	
2. Is Chain of Custody complete?	Yes 🗹	No	Not Present	
3. How was the sample delivered?	Courier			
<u>Log In</u>				
4. Was an attempt made to cool the samples?	Yes 🗹	No	NA 🗌	
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗹	No.		
6. Sample(s) in proper container(s)?	Yes 🗹	No 🗆		
7. Sufficient sample volume for indicated test(s)?	Yes	No		
8. Are samples (except VOA and ONG) property preserved?	Yes 🗹	No 🗖		
9. Was preservative added to bottles?	Yes 🗌	No 🗹	na 🗔	
10. VOA vials have zero heedspace?	Yes 🔲	No 🗍	No VOA Vials 🗹	
11. Were any sample containers received broken?	Yes	No 🗹	# of preserved	
12 Date stoppingt match holle Jahek?	Yes V	No 🗖	bottles checked for pH:	
(Note discrepancies on chain of custody)			{<2 of	>12 unless note
13. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗌	Adjusted?	
14. Is it clear what analyses were requested?	Yes 🗹	No 📙		
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No L	Checked by:	
Ónn stat Man illen ille sinnlike filó)				
16 Was client notified of all discrepancies with this order?	Yes	No 🗋	NA 🗹	
Person Notified	· / · · · · · · · · · · · · · · · · · ·			
By Whom Via	eMail	Phone Fax	1 In Person	l . N
Regarding			·····	
Client Instructions:				
17. Additional remarks:				2
18. Cooler Information	Seal Date	Signed By		
1 1.0 Good Yes				

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C	hain-of-	Custo	ody Record	Turn-Around Time:		12				NIV	TDC	BIRA		A.F.	
Client:	Blagg Engine	ering, In	IC.	Standard					AN	ALY	SIS	LA	BOR	ATO	RY
	JFJ Landfarn	п		Project Name	E JFJ Landfarn	n				www.h	nallen	viron	mental	.com	
Mailing Add	ress:	PO Bo	x 87					4901	Hawk	ins NF	E - Albuquerque, NM 87109				
		Bloomfi	eld. NM 87413	Project #:			Tel 505-345-3975 Fax 505-345-4			45-4107	7				
Phone #:		(505)32	0-1183					101. 0	00.0	Analy	/sis l	Requ	est		
email or Fax	c#:			Project Mana	ager:			0				T			
QA/QC Packa	age:			1	Jeff Blagg			MR							
Standard			Level 4 (Full Validation)					Q							
Other				Sampler: Jeff Blagg			D/D							Î	
EDD (Ty	pe)			On Ice: XYes INO			C S S S S S S S S S S S S S S S S S S S							5	
				Sample Tem	perature: /.	0	3	B							SS
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO. 1511086	BTEX (80)	TPH 8015						Chloride	Air Bubble
09/30/2015	9:50 AM	Soil	Cell 2F	1x4oz	Cool	-001	x	×				\square		x	
09/30/2015	9:05 AM	Soil	Cell 3H	1x4oz	Cool	-002	x	×						×	
09/30/2015	8:20 AM	Soil	Cell 4F	1x4oz	Cool	-003	x	x						×	
09/30/2015	9:27 AM	Soil	Cell 7B	1x4oz	Cool	-cref	x	×						x	
09/30/2015	8:42 AM	Soil	Cell 8B	1x4oz	Cool	-005	x	x						x	
09/30/2015	13:10:00 PM	Soil	Cell 9C	1x4oz	Cool	-006	x	×						x	
09/30/2015	13:25:00 PM	Soil	Cell 11D	1x4oz	Cool	-007	x	×						x	
09/30/2015	13:35:00 PM	Soil	Cell 12G	1x4oz	Cool	- 008	x	×						x	
09/30/2015	13:58:00 PM	Soil	Cell 13G	1x4oz	Cool	-009	x	×						x	
											+				
			-												
Date:	Time: 1322	Relinquis	hed by: I Blogg	Received by:	Jorte	Date Time	Rem JFJ (arks: Contac	Bill JF t: Ma	J Dire	ctly Marq	uez			
Date: $\left(D \right)_{1} / 15$	Time: 1934		hed by:	Received by:	later 1	Date Time 10/02/15 0800									

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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

RECEIVED OCD

October15, 2015

Mr. Brad Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: JFJ Waste Management Facility: Permit NM-01-0010B 2015 2nd Quarterly Report on Treatment Zone Monitoring

On behalf of JFJ Landfarm L.L.C., Blagg Engineering, Inc. (BEI) is submitting quarterly treatment zone monitoring test results for the JFJ Waste Management Facility pursuant to Permit NM-01-0010B. This report is for the quarterly sample event conducted on June 29, 2015.

The facility permit describes annual cell sampling to be within the treatment zone, defined in the permit as: "A treatment zone not to exceed three (3) feet beneath the landfarm and compost pile native ground surface". This is the interval that was sampled during the sample event. Samples were submitted to Hall Environmental Laboratories in Albuquerque, New Mexico for analytical testing that included total petroleum hydrocarbons (TPH) by U.S. EPA Method 8015D (GRO, DRO and MRO), volatile hydrocarbons (BTEX) by U.S. EPA Method 8015D (GRO, DRO and MRO), volatile hydrocarbons (BTEX) by U.S. EPA Method 8021B, and chlorides by Method 300.0 For this event samples were collected from active cell units 2h, 3e, 4h, 7h, 8f, 9d, 11c, 12g and 13g (see attached figure). No constituents were found to be in excess of landfarm permit standards.

Questions or comments concerning this transmittal may be directed to myself at (505)632-1199 or Jake Hatcher with JFJ Landfarm L.L.C. at (505)632-1786.

Respectfully submitted: *Blagg Engineering, Inc.*

4 C. Bhogy

Jeffrey C. Blagg, P.E. President

Attachments: Site Figure Analytical Test Reports

cc: Brandon Powell, NMOCD Aztec District Office Jake Hatcher, JFJ Farmington



HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

October 15, 2015

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: JFJ Landfarm

OrderNo.: 1507020

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 7/1/2015 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 15, 2015.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Rep	ort
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Lau Uluci 130/020	Lab	Order	1507020
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7/6/2015 3:42:24 PM

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20074

Date Reported: 10/15/2015

CLIENT:	Blagg Engineering	g Client Sample ID: Cell 2H						
Project:	JFJ Landfarm			Collection]	Date: 6/2	9/2015 8:30:00 AM		
Lab ID:	1507020-001	Matrix:	Received]	Received Date: 7/1/2015 7:15:00 AM				
Analyses		Result	RL Qu	al Units	DF	Date Analyzed	Batch	
EPA METI	HOD 300.0: ANIONS					Analyst	LGT	
Chloride		ND	30	mg/Kg	20	7/8/2015 10:00:23 PM	20161	
EPA MET	HOD 8015M/D: DIESEL RA	NGE ORGANIC	S ·			Analyst	: KJH	
Diesel Ra	inge Organics (DRO)	ND	10	mg/Kg	1	7/6/2015 11:57:04 AM	20084	
Motor Oil	Range Organics (MRO)	ND	50	mg/Kg	1	7/6/2015 11:57:04 AM	20084	
Surr: D	NOP	97.8	57.9-140	%REC	1	7/6/2015 11:57:04 AM	20084	
EPA MET	HOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB	
Gasoline	Range Organics (GRO)	ND	4.9	mg/Kg	1	7/6/2015 3:42:24 PM	20074	
Surr: B	FB	86.9	75.4-113	%REC	1	7/6/2015 3:42:24 PM	20074	
EPA MET	HOD 8021B: VOLATILES					Analyst	: NSB	
Benzene		ND	0.049	mg/Kg	1	7/6/2015 3:42:24 PM	20074	
Toluene		ND	0.049	mg/Kg	1	7/6/2015 3:42:24 PM	20074	
Ethylbenz	zene	ND	0.049	mg/Kg	. 1	7/6/2015 3:42:24 PM	20074	
Xvlenes, [•]	Total	ND	0.097	mg/Kg	1	7/6/2015 3:42:24 PM	20074	

80-120

91.8

%REC

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Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

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Qualifiers:	ŧ	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Ĥ	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical	Report
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7/6/2015 5:08:47 PM

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20074

Lau Uluci 1307040	Lab	Order	1507020
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Date Reported: 10/15/2015

CLIENT:	Blagg Engineering			Client Sampl	e ID: Ce	11 3E	
Project: JFJ Landfarm				Collection	Date: 6/2	9/2015 8:50:00 AM	
Lab ID:	1507020-002	Matrix:	SOIL	Received I	Date: 7/1	/2015 7:15:00 AM	
Analyses		Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA MEI	THOD 300.0: ANIONS					Analyst	: LGT
Chloride		ND	30	mg/Kg	20	7/8/2015 10:12:48 PM	20161
EPA MET	THOD 8015M/D: DIESEL RAI	NGE ORGANIC	S			Analyst	: KJH
Diesel R	ange Organics (DRO)	ND	9.9	mg/Kg	1	7/6/2015 1:18:26 PM	20084
Motor Oi	il Range Organics (MRO)	ND	49	mg/Kg	1	7/6/2015 1:18:26 PM	20084
Surr: (DNOP	97.0	57.9-140	%REC	1	7/6/2015 1:18:26 PM	20084
EPA MET	THOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline	e Range Organics (GRO)	ND	4.8	mg/Kg	1	7/6/2015 5:08:47 PM	20074
Surr: I	BFB	85.5	75.4-113	%REC	1	7/6/2015 5:08:47 PM	20074
EPA MEI	THOD 8021B: VOLATILES					Analyst	: NSB
Benzene)	ND	0.048	mg/Kg	1	7/6/2015 5:08:47 PM	20074
Toluene		ND	0.048	mg/Kg	1	7/6/2015 5:08:47 PM	20074
Ethylben	izene	ND	0.048	mg/Kg	1	7/6/2015 5:08:47 PM	20074
Xylenes,	Total	ND	0.095	mg/Kg	1	7/6/2015 5:08:47 PM	20074

80-120

%REC

Hall Environmental Analysis Laboratory, Inc.

Sur: 4-Bromofluorobenzene

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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

89.7

Analyuçal Kepül	A	nalytic	al Re	eport
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Lab Order	1507020
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7/6/2015 5:37:31 PM

7/6/2015 5:37:31 PM

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20074

20074

Date Reported: 10/15/2015

CLIENT: Blagg Engineering		· · · · · · · · · · · · · · · · · · ·	Client Sampl	e ID: Ce	ll 4H	
Project: JFJ Landfarm			Collection	Date: 6/2	.9/2015 9:14:00 AM	
Lab ID: 1507020-003	Matrix:	Received Date: 7/1/2015 7:15:00 AM				
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	7/8/2015 11:14:50 PM	20161
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	s			Analyst	: KJH
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/6/2015 1:45:13 PM	20084
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/6/2015 1:45:13 PM	20084
Sur: DNOP	94.7	57.9-140	%REC	1	7/6/2015 1:45:13 PM	20084
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/6/2015 5:37:31 PM	20074
Surr: BFB	84.6	75.4-113	%REC	1	7/6/2015 5:37:31 PM	20074
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.049	mg/Kg	1	7/6/2015 5:37:31 PM	20074
Toluene	ND	0.049	mg/Kg	1	7/6/2015 5:37:31 PM	20074
Ethylbenzene	ND	0.049	mg/Kg	1	7/6/2015 5:37:31 PM	20074

0.097

80-120

mg/Kg

%REC

ND

86.6

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Hall Environmental Analysis Laboratory, Inc.

Xylenes, Total

Surr: 4-Bromofluorobenzene

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report	
Lab Order 1507020	

Date Reported: 10/15/2015

CLIENT: Blagg Engineering			Client Sampl	e ID: Ce	11 7H			
Project: JFJ Landfarm		Collection Date: 6/29/2015 8:04:00 AM						
Lab ID: 1507020-004	Matrix:	Matrix: SOIL		Received Date: 7/1/2015 7:15:00 AM				
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	t: LGT		
Chloride	ND	30	mg/Kg	20	7/8/2015 11:27:14 PM	20161		
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANIC	S			Analys	t: KJH		
Diesel Range Organics (DRO)	13	9.8	mg/Kg	1	7/6/2015 2:12:36 PM	20084		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/6/2015 2:12:36 PM	20084		
Sur: DNOP	94 .6	57.9-140	%REC	1	7/6/2015 2:12:36 PM	20084		
EPA METHOD 8015D: GASOLINE R	ANGE				Analys	t: NSB		
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/6/2015 6:06:16 PM	20074		
Surr: BFB	84.3	75.4-113	%REC	1	7/6/2015 6:06:16 PM	20074		
EPA METHOD 8021B: VOLATILES					Analys	t: NSB		
Benzene	ND	0.050	mg/Kg	1	7/6/2015 6:06:16 PM	20074		
Toluene	ND	0.050	mg/Kg	1	7/6/2015 6:06:16 PM	20074		
Ethylbenzene	ND	0.050	mg/Kg	1	7/6/2015 6:06:16 PM	20074		
Xylenes, Total	ND	0.099	mg/Kg	1	7/6/2015 6:06:16 PM	20074		

80-120

86.5

Hall Environmental Analysis Laboratory, Inc.

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank В

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7/6/2015 6:06:16 PM

20074

%REC

- Е Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 13 J
- Sample pH Not In Range P
- **Reporting Detection Limit** RL

Analytical Report	
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Date Reported: 10/15/2015

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

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CLIENT:	Blagg Engineering			Client Sampl	e ID: Ce	11 8F	
Project:	JFJ Landfarm			Collection	Date: 6/2	9/2015 7:42:00 AM	
Lab ID:	1507020-005	Matrix:	SOIL	Received I	Date: 7/1	/2015 7:15:00 AM	
Analyses		Result	RL Qua	l Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS					Analysi	: LGT
Chloride		ND	30	mg/Kg	20	7/8/2015 11:39:39 PM	20161
EPA MET	THOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analysi	: KJH
Diesel R	ange Organics (DRO)	ND	9.9	mg/Kg	1	7/6/2015 2:39:49 PM	20084
Motor Oi	I Range Organics (MRO)	ND	49	mg/Kg	1	7/6/2015 2:39:49 PM	20084
Surr: [DNOP	96.9	57. 9 -140	%REC	1	7/6/2015 2:39:49 PM	20084
EPA MET	THOD 8015D: GASOLINE RA	NGE				Analys	: NSB
Gasoline	Range Organics (GRO)	ND	4.8	mg/Kg	1	7/6/2015 9:27:16 PM	20074
Surr: E	BFB	84.4	75.4-113	%REC	1	7/6/2015 9:27:16 PM	20074
EPA MET	THOD 8021B: VOLATILES					Analysi	: NSB
Benzene	3	ND	0.048	mg/Kg	1	7/6/2015 9:27:16 PM	20074
Toluene		ND	0.048	mg/Kg	1	7/6/2015 9:27:16 PM	20074
Ethylben	zene	ND	0.048	mg/Kg	1	7/6/2015 9:27:16 PM	20074
Xylenes,	Total	ND	0.097	mg/Kg	1	7/6/2015 9:27:16 PM	20074

80-120

%REC

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7/6/2015 9:27:16 PM

20074

86.1

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 1507020

Date Reported: 10/15/2015

Hall Environmental Analysis Laboratory, Inc.

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CLIENT: Blagg Engineering			Client Sampl	e ID: Ce	11 9D	
Project: JFJ Landfarm			Collection	Date: 6/2	9/2015 7:20:00 AM	
Lab ID: 1507020-006	Matrix:	Received I	Received Date: 7/1/2015 7:15:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: LGT
Chloride	ND	30	mg/Kg	20	7/8/2015 11:52:04 PM	20161
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: KJH
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/6/2015 3:07:10 PM	20084
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/6/2015 3:07:10 PM	20084
Surr: DNOP	104	57.9-140	%REC	1	7/6/2015 3:07:10 PM	20084
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/6/2015 9:55:58 PM	20074
Surr: BFB	84.9	75.4-113	%REC	1	7/6/2015 9:55:58 PM	20074
EPA METHOD 8021B: VOLATILES					Analys	I: NSB
Benzene	ND	0.049	mg/Kg	1	7/6/2015 9:55:58 PM	20074
Toluene	ND	0.049	mg/Kg	1	7/6/2015 9:55:58 PM	20074
Ethylbenzene	ND	0.049	mg/Kg	1	7/6/2015 9:55:58 PM	20074
Xylenes, Total	ND	0.097	mg/Kg	1	7/6/2015 9:55:58 PM	20074
Surr: 4-Bromofluorobenzene	86.8	80-120	%REC	1	7/6/2015 9:55:58 PM	20074

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	н	Holding times for preparation or analysis exce

- nes for preparation or analysis exceeded ng
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- в Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 13 J
- Sample pH Not In Range Р
- RL Reporting Detection Limit

Analytical Report

Lab Order 1507020

Date Reported: 10/15/2015

CLIENT: Blagg Engineering Project: JFJ Landfarm Lab ID: 1507020-007	Client Sample ID: Cell 11C Collection Date: 6/29/2015 9:25:00 AM Matrix: SOIL Received Date: 7/1/2015 7:15:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	t: LGT		
Chloride	ND	30	mg/Kg	20	7/9/2015 12:37:51 PM	20182		
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	S			Analys	t: KJH		
Diesel Range Organics (DRO)	42	10	mg/Kg	1	7/6/2015 3:34:08 PM	20084		
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/6/2015 3:34:08 PM	20084		
Sur: DNOP	98.9	57.9-140	%REC	1	7/6/2015 3:34:08 PM	20084		

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Hall Environmental Analysis Laboratory, Inc.

82 H 84 84 84 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 7/6/2015 10:24:42 PM 20074 Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 Surr: BFB 86.2 75.4-113 %REC 7/6/2015 10:24:42 PM 20074 1 Analyst: NSB **EPA METHOD 8021B: VOLATILES** Benzene ND 0.049 mg/Kg 7/6/2015 10:24:42 PM 20074 1 7/6/2015 10:24:42 PM 20074 Toluene ND 0.049 mg/Kg 1 20074 Ethylbenzene ND 0.049 mg/Kg 1 7/6/2015 10:24:42 PM Xylenes, Total ND 0.099 mg/Kg 1 7/6/2015 10:24:42 PM 20074 Surr: 4-Bromofluorobenzene 89.0 80-120 %REC 1 7/6/2015 10:24:42 PM 20074

Qualifiers:	٠	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Ε	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 7 of 13
	· ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	•	

Analytical Report	
Lab Order 1507020	

Date Reported: 10/15/2015

7/6/2015 10:53:21 PM 20074

CLIENT: Blagg Enginee	ering		Client Sam	ple ID: Ce	ll 12G		
Project: JFJ Landfarm			Collection	n Date: 6/2	9/2015 9:35:00 AM		
Lab ID: 1507020-008	Matrix	fatrix: SOIL		Received Date: 7/1/2015 7:15:00 AM			
Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: AI	NIONS				Analys	t: LGT	
Chloride	ND	30	mg/Kg	20	7/9/2015 1:15:04 PM	20182	
EPA METHOD 8015M/D	: DIESEL RANGE ORGAN	CS			Analys	t: KJH	
Diesel Range Organics (D	RO) ND	10	mg/Kg	1	7/6/2015 4:01:34 PM	20084	
Motor Oil Range Organics	(MRO) ND	50	mg/Kg	1	7/6/2015 4:01:34 PM	20084	
Sur: DNOP	94.5	57.9-140	%REC	1	7/6/2015 4:01:34 PM	20084	
EPA METHOD 8015D: G	GASOLINE RANGE				Analys	t: NSB	
Gasoline Range Organics	(GRO) ND	4.8	mg/Kg	1	7/6/2015 10:53:21 PM	20074	
Surr: BFB	84.7	75.4-113	%REC	1	7/6/2015 10:53:21 PM	20074	
EPA METHOD 8021B: V	OLATILES				Analys	t: NSB	
Benzene	ND	0.048	mg/Kg	1	7/6/2015 10:53:21 PM	20074	
Toluene	ND	0.048	mg/Kg	1	7/6/2015 10:53:21 PM	20074	
Ethylbenzene	ND	0.048	mg/Kg	1	7/6/2015 10:53:21 PM	20074	
Xylenes, Total	ND	0.095	mg/Kg	1	7/6/2015 10:53:21 PM	20074	

80-120

%REC

1

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Surr: 4-Bromofluorobenzene

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Ε	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 8 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Date Reported: 10/15/2015

7/6/2015 11:22:03 PM

20074

20074

20074

20074

20074

CLIENT: Blagg Engineering Client Sample ID: Cell 13G **Project:** JFJ Landfarm Collection Date: 6/29/2015 9:50:00 AM Lab ID: 1507020-009 Matrix: SOIL Received Date: 7/1/2015 7:15:00 AM **DF** Date Analyzed **RL** Qual Units Batch Analyses Result **EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride ND 30 mg/Kg 7/9/2015 1:27:28 PM 20182 20 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH **Diesel Range Organics (DRO)** 17 9.7 mg/Kg 7/6/2015 4:28:48 PM 20084 1 7/6/2015 4:28:48 PM 20084 Motor Oil Range Organics (MRO) ND mg/Kg 48 1 20084 Sur: DNOP 100 57.9-140 %REC 1 7/6/2015 4:28:48 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 7/6/2015 11:22:03 PM 20074 Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 Surr: BFB 85.1 75.4-113 %REC 1 7/6/2015 11:22:03 PM 20074 **EPA METHOD 8021B: VOLATILES** Analyst: NSB

0.049

0.049

0.049

0.097

80-120

ND

ND

ND

ND

87.5

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%REC

1

1

1

1

1

2.22

Hall Environmental Analysis Laboratory, Inc.

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 9 of 13
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

WO#: 1507020

15-Oct-15

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering **Project:** JFJ Landfarm

Sample ID	MB-20161	SampTy	pe: ME	BLK	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch I	D: 20	161	F	RunNo: 2	7374				
Prep Date:	7/8/2015	Analysis Dat	te: 7/	B/2015	S	SeqNo: 8	21079	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								<u></u>
Sample ID	LCS-20161	SampTy	pe: LC	S	Tes	tCode: El	PA Method	300.0: Anion	s		·
Client ID:	LCSS	Batch I	D: 20	161	F	RunNo: 2	7374				
Prep Date:	7/8/2015	Analysis Dat	te: 7/	8/2015	s	SeqNo: 8	21080	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	15	15.00	0	02.5	00	110			
			1.5	15.00	U	93.0	90	110			
Sample ID	MB-20182	SampTy	pe: ME	BLK	Tesi	tCode: El	PA Method	300.0: Anion	s		
Sample ID Client ID:	MB-20182 PBS	SampTy Batch I	pe: ME	13.00 BLK 182	Tesi F	ICode: El RunNo: 2	PA Method 7409	300.0: Anion	S		······
Sample ID Client ID: Prep Date:	MB-20182 PBS 7/9/2015	SampTy Batch I Analysis Dat	pe: ME	BLK 182 9/2015	Tesi Fi S	tCode: El RunNo: 2 SeqNo: 8	PA Method 7409 22344	300.0: Anion Units: mg/K	s íg		
Sample ID Client ID: Prep Date: Analyte	MB-20182 PBS 7/9/2015	SampTyp Batch I Analysis Dat Result	pe: ME D: 20 te: 7/ PQL	13.00 BLK 182 9/2015 SPK value	Tesi F SPK Ref Val	iCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 7409 22344 LowLimit	300.0: Anion Units: mg/K HighLimit	s (9 %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Chloride	MB-20182 PBS 7/9/2015	SampTyp Batch I Analysis Dat Result ND	Pe: ME D: 20 te: 7/ PQL 1.5	31.00 BLK 182 9/2015 SPK value	Tes F SPK Ref Val	tCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 7409 22344 LowLimit	300.0: Anion Units: mg/K HighLimit	s (g %RPD	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Chloride	MB-20182 PBS 7/9/2015 LCS-20182	SampTyr Batch I Analysis Dat Result ND SampTyr	pe: ME ID: 20 te: 7/ PQL 1.5 pe: LC	3.00 BLK 182 9/2015 SPK value	Tes F SPK Ref Val	tCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 7409 22344 LowLimit PA Method	300.0: Anion Units: mg/K HighLimit 300.0: Anion	s %RPD s	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Chloride Sample ID Client ID:	MB-20182 PBS 7/9/2015 LCS-20182 LCSS	SampTyj Batch I Analysis Dat Result ND SampTyj Batch I	PQL 1.5 PQL 1.5 PQL 1.5 Pe: LC	3.00 BLK 182 9/2015 SPK value S 182	Tes F SPK Ref Val Tes F	tCode: El RunNo: 2 SeqNo: 8 %REC tCode: El RunNo: 2	PA Method 7409 22344 LowLimit PA Method 7409	300.0: Anion Units: mg/K HighLimit 300.0: Anion	s (g %RPD s	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Chloride Sample ID Client ID: Prep Date:	MB-20182 PBS 7/9/2015 LCS-20182 LCSS 7/9/2015	SampTyr Batch I Analysis Dat Result ND SampTyr Batch I Analysis Dat	pe: ME D: 20 te: 7/ PQL 1.5 pe: LC D: 20 te: 7/	3.00 BLK 182 9/2015 SPK value S S 182 9/2015	Tes F SPK Ref Val Tes F S	tCode: El RunNo: 2 SeqNo: 8 %REC tCode: El RunNo: 2 SeqNo: 8	PA Method 7409 22344 LowLimit PA Method 7409 22345	300.0: Anion Units: mg/K HighLimit 300.0: Anion Units: mg/K	s /g %RPD s	RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Chloride Sample ID Client ID: Prep Date: Analyte	MB-20182 PBS 7/9/2015 LCS-20182 LCSS 7/9/2015	SampTyp Batch I Analysis Dat Result ND SampTyp Batch I Analysis Dat Result	PQL PQL 1.5 PQL 1.5 PQL PQL PQL	3.00 BLK 182 9/2015 SPK value S 182 9/2015 SPK value	Tes F SPK Ref Val Tes F SPK Ref Val	tCode: El RunNo: 2 SeqNo: 8 %REC tCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 7409 22344 LowLimit PA Method 7409 22345 LowLimit	300.0: Anion Units: mg/K HighLimit 300.0: Anion Units: mg/K HighLimit	s (9 %RPD s (9 %RPD	RPDLimit RPDLimit	Qual

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Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Ε Value above quantitation range
- Analyte detected below quantitation limits J
- P Sample pH Not In Range
- RL **Reporting Detection Limit**

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QC SUM Hall Envir	IMARY ronmenta	REP Anal	ORT lysis I	Laborat	ory, Inc.					WO#:	1507020 <i>15-Oct-15</i>
Client: Project:	Blagg Eng JFJ Landf	gineering farm									
Sample ID MB	-20084	Samp	Type: MI	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PB	5	Bato	:h ID: 20	084	F	RunNo: 2	7290				,
Prep Date: 7/2	2/2015	Analysis	Date: 7/	6/2015	S	SeqNo: 8	17786	Units: mg/i	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ Motor Oil Range Org	ics (DRO) Janics (MRO)	ND ND	10 50								
Surr: DNOP	_	8.8		10.00		88.0	57.9	140			
Sample ID LCS	5-20084	Samp	Type: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCS	SS	Bato	:h ID: 20	084	م	RunNo: 2	7290				
Prep Date: 7/2	2/2015	Analysis	Date: 7	6/2015	S	SegNo: 8	17787	Units: mg/ł	٢g		
		•				•					
Analyte	_	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte Diesel Range Organ	ics (DRO)	Result 51	<u>PQL</u> 10	SPK value 50.00	SPK Ref Val	%REC 103	LowLimit 57.4	HighLimit 139	%RPD	RPDLimit	Qual
Analyte Diesel Range Organ Sur: DNOP	ics (DRO)	Result 51 5.5	PQL 10	SPK value 50.00 5.000	SPK Ref Val 0	%REC 103 110	LowLimit 57.4 57.9	HighLimit 139 140	%RPD	RPDLimit	Qual
Analyte Diesel Range Organ Surr: DNOP Sample ID 150	ics (DRO) 7020-001AMS	Result 51 5.5 Samp	PQL 10 Type: M:	SPK value 50.00 5.000	SPK Ref Vai 0 Tes	%REC 103 110 tCode: El	LowLimit 57.4 57.9 PA Method	HighLimit 139 140 8015M/D: Di	%RPD	RPDLimit	Qual
Analyte Diesel Range Organ Sur: DNOP Sample ID 150 Client ID: Cel	ics (DRO) 7020-001AMS 2H	Result 51 5.5 Samp Bate	PQL 10 Type: M h ID: 20	SPK value 50.00 5.000 S 084	SPK Ref Val 0 Tes F	%REC 103 110 tCode: El RunNo: 2	LowLimit 57.4 57.9 PA Method 7290	HighLimit 139 140 8015M/D: Di	%RPD	RPDLimit	Quał
Analyte Diesel Range Organ Sur: DNOP Sample ID 150 Client ID: Cel Prep Date: 7/2	ics (DRO) 7020-001AMS I 2H 2/2015	Result 51 5.5 Samp Bato Analysis	PQL 10 Type: M h ID: 20 Date: 7/	SPK value 50.00 5.000 S 084 /6/2015	SPK Ref Val 0 Tes F	%REC 103 110 tCode: El RunNo: 2 SeqNo: 8	LowLimit 57.4 57.9 PA Method 7290 18071	HighLimit 139 140 8015M/D: Di Units: mg/I	%RPD esel Rang	RPDLimit	Qual
Analyte Diesel Range Organ Sur: DNOP Sample ID 150 Client ID: Cel Prep Date: 7/2 Analyte	ics (DRO) 7020-001AMS 1 2H 2/2015	Result 51 5.5 Samp Bato Analysis Result	PQL 10 Type: M: th ID: 20 Date: 7/ PQL	SPK value 50.00 5.000 S 084 76/2015 SPK value	SPK Ref Val 0 Tes F SPK Ref Val	%REC 103 110 tCode: El RunNo: 2 SeqNo: 8 %REC	LowLimit 57.4 57.9 PA Method 7290 18071 LowLimit	HighLimit 139 140 8015M/D: Di Units: mg/l HighLimit	%RPD esel Rang (g %RPD	RPDLimit	Quał
Analyte Diesel Range Organ Sur: DNOP Sample ID 150 Client ID: Cell Prep Date: 7/2 Analyte Diesel Range Organ	ics (DRO) 7020-001AMS 1 2H 2/2015 ics (DRO)	Result 51 5.5 Samp Bato Analysis Result 47	PQL 10 Type: M: th ID: 20 Date: 7/ PQL 9.5	SPK value 50.00 5.000 S 084 76/2015 SPK value 47.66	SPK Ref Val 0 Tes F S SPK Ref Val 6.411	%REC 103 110 tCode: El RunNo: 2 SeqNo: 8 %REC 84.9	LowLimit 57.4 57.9 PA Method 7290 18071 LowLimit 42.3	HighLimit 139 140 8015M/D: Di Units: mg/I HighLimit 146	%RPD esel Rang (g %RPD	RPDLimit	Qual

Sample ID 15	507020-001AMSD	D SampType: MSD TestCode: EPA Method 8015M/						8015M/D: Di	esei Rango	e Organics	
Client ID: Ce	ell 2H	Batch I	D: 20	084	F	RunNo: 2	7290				
Prep Date: 7	7/2/2015	Analysis Dat	e: 7	6/2015	S	SeqNo: 8	18072	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Orga	anics (DRO)	49	9.8	49.21	6.411	85.9	42.3	146	3.79	28.9	
Sur: DNOP		5.1		4.921		103	57.9	140	0	0	

Qualifiers:

- ٠ Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits

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- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL **Reporting Detection Limit**

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Hall Environmental Analysis Laboratory, Inc.

Client:Blagg EngineeringProject:JFJ Landfarm

Sample ID MB-20074	Samp	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	e	
Client ID: PBS	Batc	h ID: 20	074	F	RunNo: 2	7293				
Prep Date: 7/2/2015	Analysis E	Date: 7/	6/2015	5	SeqNo: 8	18229	Units: mg/i	K g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.3	75.4	113			
Sample ID LCS-20074	Samp	Type: LC	s	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	e	
Client ID: LCSS	Batc	h ID: 20	074	F	RunNo: 2	7293				
Prep Date: 7/2/2015	Analysis [Date: 7/	6/2015	5	SeqNo: 8	18230	Units: mg/l	Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.9	64	130			
Sum DED	020		1000		91.9	75.4	113			
	520				••					
Sample ID 1507020-001A	MS Samp	Type: MS	S	Tes	tCode: E	PA Method	8015D: Gase	oline Rang	e	
Sample ID 1507020-001A Client ID: Cell 2H	MS Samp Batc	Type: MS	5 074	Tes F	tCode: E RunNo: 2	PA Method 7293	8015D: Gase	oline Rang	8	
Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015	MS Samp Batc Analysis [Type: M\$ h ID: 20 Date: 7/	6/2015	Tes F S	tCode: E RunNo: 2 SeqNo: 8	PA Method 7293 18235	8015D: Gase	oline Rang	8	
Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte	MS Samp Batc Analysis [Result	Type: M \$ h ID: 20 Date: 7 / PQL	5 074 6/2015 SPK value	Tes F SPK Ref Val	tCode: E RunNo: 2 SeqNo: 8 %REC	PA Method 7293 18235 LowLimit	8015D: Gase Units: mg/l HighLimit	oline Rang Kg %RPD	e RPDLimit	Qual
Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO)	MS Samp Batc Analysis I Result 23	Type: MS h ID: 20 Date: 7/ PQL 4.9	5 074 6/2015 SPK value 24.37	Tes F S SPK Ref Val 0	tCode: E RunNo: 2 SeqNo: 8 %REC 93.9	PA Method 7293 18235 LowLimit 47.9	8015D: Gase Units: mg/l HighLimit 144	oline Rang Kg %RPD	e RPDLimit	Qual
Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO) Sur: BFB	MS Samp Batc Analysis [Result 23 910	Type: MS h ID: 20 Date: 7/ PQL 4.9	6/2015 5 5 5 5 5 5 5 5 5 5 5 5 5	Tes F SPK Ref Val 0	tCode: E RunNo: 2 SeqNo: 8 %REC 93.9 93.0	PA Method 7293 18235 LowLimit 47.9 75.4	8015D: Gase Units: mg/l HighLimit 144 113	oline Rang Kg %RPD	e RPDLimit	Qual
Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO) Surr: BFB	MS Samp Batc Analysis I Result 23 910 MSD Samp	Type: MS h ID: 20 Date: 7/ PQL 4.9 Type: MS	5 074 6/2015 SPK value 24.37 974.7	Tes F SPK Ref Val 0 Tes	tCode: E RunNo: 2 SeqNo: 8 %REC 93.9 93.0 tCode: E	PA Method 7293 18235 LowLimit 47.9 75.4 PA Method	8015D: Gase Units: mg/i HighLimit 144 113 8015D: Gase	oline Rang Kg %RPD oline Rang	e RPDLimit	Qual
Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO) Sur: BFB Sample ID 1507020-001A Client ID: Cell 2H	MS Samp Batc Analysis I Result 23 910 MSD Samp Batc	Type: MS h ID: 20 Date: 7/ PQL 4.9 Type: MS h ID: 20	5 6/2015 SPK value 24.37 974.7 SD 074	Tes F SPK Ref Val 0 Tes F	tCode: E RunNo: 2 SeqNo: 8 %REC 93.9 93.0 tCode: E RunNo: 2	PA Method 7293 18235 LowLimit 47.9 75.4 PA Method 7293	8015D: Gase Units: mg/l HighLimit 144 113 8015D: Gase	oline Rang Kg %RPD oline Rang	e RPDLimit	Qual
Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO) Sur: BFB Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015	MS Samp Batc Analysis [Result 23 910 MSD Samp Batc Analysis [Type: M\$ h ID: 20 Date: 7/ 4.9 Type: M\$ h ID: 20 Date: 7/	5 6/2015 SPK value 24.37 974.7 SD 074 16/2015	Tes F SPK Ref Val 0 Tes F S	tCode: E RunNo: 2 SeqNo: 8 %REC 93.9 93.0 tCode: E RunNo: 2 SeqNo: 8	PA Method 7293 18235 LowLimit 47.9 75.4 PA Method 7293 18236	8015D: Gase Units: mg/l HighLimit 144 113 8015D: Gase Units: mg/l	oline Rang Kg %RPD oline Rang Kg	e RPDLimit	Qual
Suil. BPB Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO) Suir: BFB Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte	MS Samp Batc Analysis I Result 23 910 MSD Samp Batc Analysis I Result	Type: MS h ID: 20 Date: 7/ PQL 4.9 Type: MS h ID: 20 Date: 7/ PQL	5 6/2015 5PK value 24.37 974.7 5D 074 76/2015 SPK value	Tes F SPK Ref Val 0 Tes F SPK Ref Val	tCode: E RunNo: 2 SeqNo: 8 %REC 93.9 93.0 tCode: E RunNo: 2 SeqNo: 8 %REC	PA Method 7293 18235 LowLimit 47.9 75.4 PA Method 7293 18236 LowLimit	8015D: Gase Units: mg/l HighLimit 144 113 8015D: Gase Units: mg/l HighLimit	oline Rang Kg %RPD oline Rang Kg %RPD	e RPDLimit e RPDLimit	Qual
Suir. BPB Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID 1507020-001A Client ID: Cell 2H Prep Date: 7/2/2015 Analyte Gasoline Range Organics (GRO)	MS Samp Batc Analysis I Result 23 910 MSD Samp Batc Analysis I Result 23	Type: MS h ID: 20 Date: 7/ PQL 4.9 Type: MS h ID: 20 Date: 7/ PQL 4.9	5 6/2015 5PK value 24.37 974.7 5D 074 76/2015 SPK value 24.32	Tes F SPK Ref Val 0 Tes F SPK Ref Val 0	tCode: E RunNo: 2 SeqNo: 8 %REC 93.9 93.0 tCode: E RunNo: 2 SeqNo: 8 %REC 93.8	PA Method 7293 18235 LowLimit 47.9 75.4 PA Method 7293 18236 LowLimit 47.9	8015D: Gase Units: mg/l HighLimit 144 113 8015D: Gase Units: mg/l HighLimit 144	oline Rang %g %RPD oline Rang %g %RPD 0.280	e RPDLimit e RPDLimit 29.9	Qual

 $\{ (x,y) \in \mathcal{X}_{\mathcal{F}} \}$

3.31

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- **RL** Reporting Detection Limit

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1507020 15-Oct-15

WO#:

Ha		Envi	ironi	menta	l A	Ana	lysi	is 1	La	bora	tory	,]	lnc.
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Client: Blagg Engineering Project: JFJ Landfarm

Sample ID MB-20074	Samp	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batc	h ID: 20	074	R	RunNo: 27293					
Prep Date: 7/2/2015	Analysis [)ate: 7/	6/2015	S	eqNo: 8	18262	Units: mg/K	g		
Anatyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	80	120			
Sample ID LCS-20074	Samp	ype: LC	s	Test	Code: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	h ID: 20	074	R	unNo: 2	7293				
Prep Date: 7/2/2015	Analysis [Date: 7/	6/2015	s	eqNo: 8	18263	Units: mg/K	g		
Prep Date: 7/2/2015 Analyte	Analysis [Result	Date: 7/ PQL	6/2015 SPK value	SPK Ref Val	eqNo: 8 %REC	18263 LowLimit	Units: mg/K HighLimit	ig %RPD	RPDLimit	Qual
Prep Date: 7/2/2015 Analyte Benzene	Analysis [Result 1.0	Date: 7/ PQL 0.050	6/2015 SPK value 1.000	SPK Ref Val	SeqNo: 8 %REC 102	18263 LowLimit 76.6	Units: mg/K HighLimit 128	íg %RPD	RPDLimit	Qual
Prep Date: 7/2/2015 Analyte Benzene Toluene	Analysis [Result 1.0 0.97	Date: 7/ PQL 0.050 0.050	6/2015 SPK value 1.000 1.000	SPK Ref Val 0 0	eqNo: 8 %REC 102 97.0	18263 LowLimit 76.6 75	Units: mg/K HighLimit 128 124	ig %RPD	RPDLimit	Qual
Prep Date: 7/2/2015 Analyte Benzene Toluene Ethylbenzene	Analysis [Result 1.0 0.97 1.0	Date: 7/ PQL 0.050 0.050 0.050	6/2015 SPK value 1.000 1.000 1.000	SPK Ref Val 0 0 0	SeqNo: 8 %REC 102 97.0 101	18263 LowLimit 76.6 75 79.5	Units: mg/K HighLimit 128 124 126	ig %RPD	RPDLimit	Qual
Prep Date: 7/2/2015 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Analysis [Result 1.0 0.97 1.0 3.1	Date: 7/ PQL 0.050 0.050 0.050 0.10	6/2015 SPK value 1.000 1.000 1.000 3.000	SPK Ref Val 0 0 0 0 0	SeqNo: 8 %REC 102 97.0 101 102	18263 LowLimit 76.6 75 79.5 78.8	Units: mg/K HighLimit 128 124 126 124	úg %RPD	RPDLimit	Qual

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Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not in Range
- **RL** Reporting Detection Limit

Page 13 of 13

1507020

15-Oct-15

WO#:

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albu TEL: 505-345-3975 Webstie: www.hal	Analysis Labord 4901 Hawkbi guerque, NM 8. FAX: 505-3454 llenvironmental	1107y s NĚ 7109 Samp 1107 com	ole Log-In Ch	eck List
Client Name: BLAGG	Work Order Number:	1507020		RcptNo:/	
Received by/date:AG	07/01/15				
Logged By: Lindsay Mangin	7/1/2015 7:15:00 AM		J-ythep		
Completed By: Lindsay Mangin	7/1/2015 12:33:53 PM		Hugo		
Reviewed By:	07/02/15		· · · ·		and a state of the second s
Chain of Custody					
1 Custody seals intact on sample bottles	1 ?	Yës 🗌	No 🗍	Not Present	
2. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	
3. How was the sample delivered?		Courier			
<u>Log In</u>					
4. Was an attempt made to cool the same	ples?	Yes 🗹	No 🗖	NA 🗍	
5. Were all samples received at a temper	rature of >0° C to 6.0°C	Yés 🗹	No 🔲	NA 🗔	
6. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
7. Sufficient sample volume for indicated	test(s)?	Yes 🗹	No 🗔		
8. Are samples (except VOA and ONG) p	roperly preserved?	Yes 🗹	No 🔲	_	
9. Was preservative added to bottles?		Yes 🗌	No 🗹	NA LI	
10.VOA vials have zero headspace?		Yes	No	No VOA Vials 🗹	
11. Were any sample containers received	broken?	Yes	No 🗹	# of preserved	4
				bottles checked	
12. Does papervork match bottle labels? (Note discrepancies on chain of custor	dv)	Yes ⊻		(<2 0)	>12 unless not
13 Are matrices correctly identified on Ch	ain of Custody?	Yes 🕅	No	Adjusted?	648 P., ,,',,,,,,',', -P.
14. Is it clear what analyses were request	ed?	Yes 🗹	No 🗖		
15: Were all holding times able to be met? /// no. notify cuistomer for suthorization	2	Yes 🗹	No 🛄	Checked by:	· . ·
	··· •				
Special Handling (if applicable)	with this antain?	Yes 🗍	Nô 🗖	NA 🔽	
IO. AARS CIGHT HOURIEG OF ALL DISCIEDANCIES		ليا .وتı			gSa manage
Person Notified:		- Mail -	Phone T Fey		1 All and a second s
By whom:	¥13.				
Client Instructions:		<u></u>			promote the building of
17. Additional remarks:					3
18 Cooler Information					
Cooler No Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By		
1 1.3 Good	Yes				

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Chain-of-Custody Record			Turn-Around	Time:	<u> </u>] 🛛			. 8.		a 8	c		ft e	20	.		NIT	· A I		
Client:	TF.	TL	WDFARM	Standard	🗆 Rush					Г Л	IA. Ni	LL Al	E! Vq	N V 2 T 4	2 2		20	712	NTC	AL)d'	V
	Rise	- Fuel		Project Name); ;		1 🖢					n L	lenv	iron.							•
Jailing	Address	:	<u>leerig</u>	JEJ	LAUDFAR	1	4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107														
			<u></u>	Project #:		<u></u>															
hone a	#: 5 0.9	5-32	W-1193	-			Analysis Request														
mail o	r Fax#:			Project Manager:				(yl	Ô					O₄)		_				Τ	
2A/QC	Package:			J.	BIA60		3021	as of	Ř			<u>(</u> 2)		04,S(CB's						
Stan	dard		Level 4 (Full Validation)				1	Ű	ß			SIN		PC -	2 P(
	Accreditation		Sampler: 2	- BLAGG		1	ם		.	,	270		N N	808		(Î	
	EDD (Type)		On Ice: Sample Tem	Perature: 1	<u> </u>	1 Å	+	0 K	1418	ŝ	8 8	als	S N	des /		٩٥ V	Ň			, ∠	
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO. 1507020	BTEX + MATE	BTEX + MTB	TPH 8015B (TPH (Method	EDB (Method	PAH's (8310	RCRA 8 Met	Anions (F,Cl,	8081 Pesticic	8260B (VOA	8270 (Semi-V	CHLDE	v		Air Bubbles (
1/2015	0930	SOIL	CELL 2H	407×1	COOL	-001	×		×									×		T	
10 ⁻	අත	í(CELL JE	1(1(-00Z	×		×									×		Τ	
i(0914	к	CEIL 4H	11	Ц	-003	×		×									×			
Ц	0904	4	CELL 7H	ષ	11	-004	×		×									×		T	
ĸ	0742	4	CEU BF	R.	i)	-005	×		×		·							×			
il.	0720	n,	CEIL 9D	ų	14	-006	×		×									×			
	0925	ų	CELL IC	1(11	-007	×		×									×		Τ	
11	0935	- 11	CELL 12_6	1{	ĸ	-008	R		×				-					x			
1	0950	4	CELL 136	н		-0091	×		×									×			
						1															
Date:	Time: 1136	Relinquishe	d by Blagy	Received by:	Inceles	Date Time	Rer	nark	s: {	Sill	J7 ~~~	: : p	1 <i>ar</i> (ella	r il	Narg).N.2	•			
Pate:	Time: 1837	Relinuishe	ed by: 1st Daelers	Received by: AMMa	llegos	Date Time 07/01/15 07/4															

If necessary, samples submitted to Hall Environmental may be subcontracted to object accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

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RECEIVED OCD

June 29, 2015

Mr. Brad Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

JFJ Waste Management Facility: Permit NM-01-0010B Re: 2015 1st Quarterly Report on Treatment Zone Monitoring

On behalf of JFJ Landfarm L.L.C., Blagg Engineering, Inc. (BEI) is submitting quarterly treatment zone monitoring test results for the JFJ Waste Management Facility pursuant to Permit NM-01-0010B. This report is for the quarterly sample event conducted on March 31, 2015.

The facility permit describes annual cell sampling to be within the treatment zone, defined in the permit as: "A treatment zone not to exceed three (3) feet beneath the landfarm and compost pile native ground surface". This is the interval that was sampled during the sample event. Samples were submitted to Hall Environmental Laboratories in Albuquerque, New Mexico for analytical testing that included total petroleum hydrocarbons (TPH) by U.S. EPA Method 8015D (GRO, DRO and MRO), volatile hydrocarbons (BTEX) by U.S. EPA Method 8021B, and chlorides by Method 300.0 For this event samples were collected from active cell units 2g, 3b, 4e, 7e, 8c, 9h, 11e, 12f and 13e (see attached figure). No constituents were found to be in excess of landfarm permit standards.

Questions or comments concerning this transmittal may be directed to myself at (505)632-1199 or Jake Hatcher with JFJ Landfarm L.L.C. at (505)632-1786.

Respectfully submitted: Blagg Engineering, Inc.

y C. Glogg

Jeffrey C. Blagg, P.E. President

Attachments: Site Figure Analytical Test Reports

cc: Brandon Powell, NMOCD Aztec District Office Jake Hatcher, JFJ Farmington



HALL ENVIRONMENTAL ANALYSIS LABORATORY

April 07, 2015

Jeff Blagg Blagg Engineering P. O. Box 87 Bloomfield, NM 87413 TEL: (505) 320-1183 FAX (505) 632-3903

RE: JFJ Landfarm

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuguergue, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: <u>www.hallenvironmental.com</u>

OrderNo.: 1504089

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 4/2/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

and for

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order 1504089

Date Reported: 4/7/2015

Hall Environmental Analysis Laboratory, Inc.

,

CLIENT: Blagg Engineering	Client Sample ID: Cell 2G								
Project: JFJ Landfarm			C	ollection	Date: 3/3	1/2015 3:25:00 PM			
Lab ID: 1504089-001	Matrix: SOIL			Received Date: 4/2/2015 7:00:00 AM					
Analyses	Result	RL	Qual U	U nits	DF	Date Analyzed	Batch		
EPA METHOD 8015D: DIESEL RANGE	ORGANICS					Analyst	JME		
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/3/2015 10:22:07 PM	18483		
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/3/2015 10:22:07 PM	18483		
Surr. DNOP	98.0	63.5-128		%REC	1	4/3/2015 10:22:07 PM	18483		
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	RAA		
Gasoline Range Organics (GRO)	NÐ	4.9		mg/Kg	1	4/6/2015 1:00:29 PM	18492		
Sun: BFB	81.7	80-120		%REC	1	4/6/2015 1:00:29 PM	18492		
EPA METHOD 8021B: VOLATILES						Analyst:	RAA		
Benzene	ND	0.049		mg/Kg	1	4/6/2015 1:00:29 PM	18492		
Toluene	ND	0.049	ł	mg/Kg	1	4/6/2015 1:00:29 PM	18492		
Ethylbenzene	ND	0.049		mg/Kg	1	4/6/2015 1:00:29 PM	18492		
Xylenes, Total	ND	0.099		mg/Kg	1	4/6/2015 1:00:29 PM	18492		
Surr: 4-Bromofluorobenzene	91.8	80-120		%REC	1	4/6/2015 1:00:29 PM	18492		
EPA METHOD 300.0: ANIONS						Analyst:	LGT		
Chloride	ND	30	I	mg/Kg	20	4/6/2015 3:13:19 PM	18531		

Qualifiers:	•	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank			
	E	Value above quantitation range	н	Holding times for preparation or analysis exceeded				
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 1 of 13			
	0	RSD is greater than RSDlimit	Р	Sample pH Not In Range	1 age 1 01 13			
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit				
	S	Spike Recovery outside accepted recovery limits		,				

Ana	lytical	Report
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Date Reported: 4/7/2015

CLIENT: Blagg Engineering Client Sample ID: Cell 3B Collection Date: 3/31/2015 2:55:00 PM JFJ Landfarm **Project:** 1504089-002 Received Date: 4/2/2015 7:00:00 AM Lab ID: Matrix: SOIL **RL** Qual Units Analyses Result **DF** Date Analyzed Batch **EPA METHOD 8015D: DIESEL RANGE ORGANICS** Analyst: JME 4/3/2015 10:49:06 PM **Diesel Range Organics (DRO)** ND 18483 9.6 mg/Kg 1 Motor Oil Range Organics (MRO) ND 4/3/2015 10:49:06 PM 18483 48 mg/Kg 1 Surr: DNOP 96.0 63.5-128 %REC 1 4/3/2015 10:49:06 PM 18483 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA 4/6/2015 2:26:33 PM 18492 Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 Surr: BFB 84.9 80-120 %REC 1 4/6/2015 2:26:33 PM 18492 EPA METHOD 8021B: VOLATILES Analyst: RAA ND 0.049 mg/Kg 1 4/6/2015 2:26:33 PM 18492 Benzene 4/6/2015 2:26:33 PM 18492 Toluene ND 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 4/6/2015 2:26:33 PM 18492 ND 0.098 mg/Kg 1 4/6/2015 2:26:33 PM 18492 Xylenes, Total %REC 4/6/2015 2:26:33 PM 18492 Surr: 4-Bromofluorobenzene 97.0 80-120 1 **EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride ND mg/Kg 20 4/6/2015 3:25:44 PM 18531 30

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank			
	Е	Value above quantitation range	н	Holding times for preparation or analysis exceeded				
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 2 of 13			
	0	RSD is greater than RSDlimit	Р	Sample pH Not In Range	1 age 2 01 13			
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit				
	S	Spike Recovery outside accepted recovery limits						

Ana	lytical	l Report	
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Date Reported: 4/7/2015

CLIENT: Blagg Engineering Project: JFJ Landfarm Lab ID: 1504089-003	Client Sample ID: Cell 4ECollection Date: 3/31/2015 2:30:00 PMMatrix: SOILReceived Date: 4/2/2015 7:00:00 AM							
Analyses	Result	RL.	Qual Units	DF	Date Analyzed	Batch		
EPA METHOD 8015D: DIESEL RANGE	E ORGANICS				Analyst	JME		
Diesel Range Organics (DRO)	12	10	mg/Kg	¹ 1	4/3/2015 11:16:08 PM	18483		
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/3/2015 11:16:08 PM	18483		
Sur: DNOP	95.2	63.5-128	%REC	1	4/3/2015 11:16:08 PM	18483		
EPA METHOD 8015D: GASOLINE RAI	NGE				Analysi	RAA		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2015 3:52:53 PM	18492		
Surr. BFB	83.1	80-120	%REC	1	4/6/2015 3:52:53 PM	18492		
EPA METHOD 8021B: VOLATILES					Analyst	RAA		
Benzene	ND	0.048	mg/Kg	1	4/6/2015 3:52:53 PM	18492		
Toluene	ND	0.048	mg/Kg	1	4/6/2015 3:52:53 PM	18492		
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2015 3:52:53 PM	18492		
Xylenes, Total	ND	0.097	mg/Kg	1	4/6/2015 3:52:53 PM	18492		
Surr: 4-Bromofluorobenzene	94.5	80-120	%REC	. 1	4/6/2015 3:52:53 PM	18492		
EPA METHOD 300.0: ANIONS					Analyst	: LGT		
Chloride	ND	30	mg/Kg	20	4/6/2015 4:15:21 PM	18531		

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	B Analyte detected in the associated Method Blank		
	Е	Value above quantitation range	н	Holding times for preparation or analysis exceeded		
J Analyte detected below quantitation limits		ND	Not Detected at the Reporting Limit	Page 3 of 13		
	0	RSD is greater than RSD limit	Р	Sample pH Not In Range	1 age 5 01 15	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Analytica	l Report
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Date Reported: 4/7/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering			Client Sam	ple ID: Ce		
Project: JFJ Landfarm			Collection	Date: 3/3	31/2015 2:00:00 PM	
Lab ID: 1504089-004	Matrix:	SOIL	Received	Date: 4/2	2/2015 7:00:00 AM	
Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/3/2015 11:42:45 PM	18483
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/3/2015 11:42:45 PM	18483
Sur: DNOP	84.9	63.5-128	%REC	1	4/3/2015 11:42:45 PM	18483
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2015 4:21:32 PM	18492
Sun: BFB	82.8	80-120	%REC	1	4/6/2015 4:21:32 PM	18492
EPA METHOD 8021B: VOLATILES					Analys	t: RAA
Benzene	ND	0.049	mg/Kg	1	4/6/2015 4:21:32 PM	18492
Toluene	ND	0.049	mg/Kg	1	4/6/2015 4:21:32 PM	18492
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2015 4:21:32 PM	18492
Xylenes, Total	ND	0.097	mg/Kg	1	4/6/2015 4:21:32 PM	18492
Sur: 4-Bromofluorobenzene	92.8	80-120	%REC	1	4/6/2015 4:21:32 PM	18492
EPA METHOD 300.0: ANIONS					Analyst	t: LGT
Chloride	ND	30	mg/Kg	20	4/6/2015 4:27:47 PM	18531

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank		
	E	Value above quantitation range	н	Holding times for preparation or analysis exceeded		
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 4 of 13	
	.0	RSD is greater than RSDlimit	Р	Sample pH Not In Range	1 450 4 01 15	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Hall Environmental Analy	sis Labora	tory, In	с.		Lab Order 1504089 Date Reported: 4/7/201	5
CLIENT: Blagg Engineering			Client Sampl	e ID: Ce	ll 8C	
Project: JFJ Landfarm			Collection	Date: 3/3	31/2015 1:35:00 PM	
Lab ID: 1504089-005	Matrix:	SOIL	Received 1	Date: 4/2	2/2015 7:00:00 AM	
Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analysi	JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/4/2015 12:09:18 AM	18483
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/4/2015 12:09:18 AM	18483
Sur: DNOP	90.0	63.5-128	%REC	1	4/4/2015 12:09:18 AM	18483
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2015 4:50:16 PM	18492
Sur: BFB	81.2	80-120	%REC	1	4/6/2015 4:50:16 PM	18492
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.048	mg/Kg	1	4/6/2015 4:50:16 PM	18492
Toluene	ND	0.048	mg/Kg	1	4/6/2015 4:50:16 PM	18492
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2015 4:50:16 PM	18492
Xylenes, Total	ND	0.096	mg/Kg	1	4/6/2015 4:50:16 PM	18492
Surr: 4-Bromofluorobenzene	90.8	80-120	%REC	1	4/6/2015 4:50:16 PM	18492
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	4/6/2015 4:40:11 PM	18531

Analytical Report

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank		
	E	Value above quantitation range	н	Holding times for preparation or analysis exceeded		
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Dage 5 of 13	
	0	RSD is greater than RSDlimit	Р	Sample pH Not In Range	rage 5 01 15	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Analytical Report

Lab Order 1504089

Date Reported: 4/7/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering	Client Sample ID: Cell 9H								
Project: JFJ Landfarm	Collection Date: 3/31/2015 1:10:00 PM								
Lab ID: 1504089-006	Matrix:	SOIL		Received	Date: 4/2	2/2015 7:00:00 AM			
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch		
EPA METHOD 8015D: DIESEL RANGE	ORGANICS					Analyst	JME		
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/4/2015 12:36:01 AM	18483		
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/4/2015 12:36:01 AM	18483		
Surr: DNOP	80.8	63.5-128		%REC	1	4/4/2015 12:36:01 AM	18483		
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	RAA		
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2015 5:18:57 PM	18492		
Sum BFB	83.0	80-120		%REC	1	4/6/2015 5:18:57 PM	18492		
EPA METHOD 8021B: VOLATILES						Analyst	RAA		
Benzene	ND	0.047		mg/Kg	1	4/6/2015 5:18:57 PM	18492		
Toluene	ND	0.047		mg/Kg	1	4/6/2015 5:18:57 PM	18492		
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2015 5:18:57 PM	18492		
Xylenes, Total	ND	0.094		mg/Kg	1	4/6/2015 5:18:57 PM	18492		
Surr: 4-Bromofluorobenzene	92.5	80-120		%REC	1	4/6/2015 5:18:57 PM	18492		
EPA METHOD 300.0: ANIONS						Analyst	LGT		
Chloride	ND	30		mg/Kg	20	4/6/2015 4:52:36 PM	18531		

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	nod Blank	
	Е	Value above quantitation range	н	Holding times for preparation or analysis exceeded		
J Analyte		Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Dage 6 of 13	
	0	RSD is greater than RSD limit	Р	Sample pH Not In Range		
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Analy	tical R	leport
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20 4/6/2015 5:05:00 PM

18531

Date Reported: 4/7/2015

CLIENT:	Blagg Engineering	<u> </u>		Client	Sample ID: C	cell 11E				
Project:	JFJ Landfarm	Collection Date: 3/31/2015 12:05:00 PM								
Lab ID:	1504089-007	Matrix: SOIL			eived Date: 4/	/2/2015 7:0	0:00 AM			
Analyses	· · · · · · · · · · · · · · · · · · ·	Result	RL	Qual Unit	s Di	F Date Ana	alyzed	Batch		
EPA MET	HOD 8015D: DIESEL RANGI	E ORGANICS	·				Analyst	: JME		
Diesel Ra	ange Organics (DRO)	ND	9.7	mg/l	(g 1	4/4/2015	1:02:46 AM	18483		
Motor Oil	Range Organics (MRO)	ND	48	mg/ł	(g 1	4/4/2015	1:02:46 AM	18483		
Surr: E	NOP	79.9	63.5-128	%R8	C 1	4/4/2015	1:02:46 AM	18483		
EPA MET	HOD 8015D: GASOLINE RAI	NGE)	Analyst	RAA		
Gasoline	Range Organics (GRO)	ND	4.9	mg/ł	(g 1	4/6/2015	5:47:33 PM	18492		
Sur: E	SFB	83.1	80-120	%RE	C 1	4/6/2015	5:47:33 PM	18492		
EPA MET	HOD 8021B: VOLATILES						Analyst	: RAA		
Benzene		ND	0.049	mg/ł	(g 1	4/6/2015	5:47:33 PM	18492		
Toluene		ND	0.049	mg/ł	(g 1	4/6/2015	5:47:33 PM	18492		
Ethylben	zene	ND	0.049	mg/r	(g 1	4/6/2015	5:47:33 PM	18492		
Xyienes,	Total	ND	0.098	mg/h	Kg 1	4/6/2015	5:47:33 PM	18492		
Surr: 4	-Bromofluorobenzene	91.9	80-120	%RE	C 1	4/6/2015	5:47:33 PM	18492		
EPA MET	HOD 300.0: ANIONS						Analyst	: LGT		

ND

30

mg/Kg

Hall Environmental Analysis Laboratory, Inc.

Chloride

Qualifiers:	+	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank	
	Ε	Value above quantitation range	н	Holding times for preparation or analysis exceeded		
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Dage 7 of 13	
	0	RSD is greater than RSD limit	Р	Sample pH Not In Range	rage / 0113	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Anal	ytical	Report
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Date Reported: 4/7/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering			C	lient Samp	le ID: Ce	ll 12F	
Project: JFJ Landfarm	Collection Date: 3/31/2015 12:20:00 PM						
Lab ID: 1504089-008	Matrix: SOIL			Received Date: 4/2/2015 7:00:00 AM			
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE C	ORGANICS					Analyst	JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/4/2015 1:29:22 AM	18483
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/4/2015 1:29:22 AM	18483
Surr: DNOP	88.9	63.5-128		%REC	1	4/4/2015 1:29:22 AM	18483
EPA METHOD 8015D: GASOLINE RANG)E					Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/6/2015 6:16:21 PM	18492
Sum: BFB	83.6	80-120		%REC	1	4/6/2015 6:16:21 PM	18492
EPA METHOD 8021B: VOLATILES						Analyst	RAA
Benzene	ND	0.047		mg/Kg	1	4/6/2015 6:16:21 PM	18492
Toluene	ND	0.047		mg/Kg	1	4/6/2015 6:16:21 PM	18492
Ethylbenzene	ND	0.047		mg/Kg	1	4/6/2015 6:16:21 PM	18492
Xylenes, Total	ND	0.094		mg/Kg	1	4/6/2015 6:16:21 PM	18492
Surr: 4-Bromofluorobenzene	93.2	80-120		%REC	1	4/6/2015 6:16:21 PM	18492
EPA METHOD 300.0: ANIONS						Analyst	LGT
Chloride	ND	30		mg/Kg	20	4/6/2015 5:17:25 PM	18531

Qualifiers:		Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth	od Blank	
	Е	E Value above quantitation range H Holding times for prepara		Holding times for preparation or analys	is exceeded	
	J	Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit		Page 8 of 13	
0		RSD is greater than RSDlimit	Р	Sample pH Not In Range		
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Analytical	Report
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Date Reported: 4/7/2015

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Hall Environmental Analysis Laboratory, Inc.

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CLIENT: Blagg Engineering	ring Client Sample ID: Cell 13E						
Project: JFJ Landfarm	Collection Date: 3/31/2015 12:40:00 PM						
Lab ID: 1504089-009	Matrix:	Received	Received Date: 4/2/2015 7:00:00 AM				
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch	
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analys	st: JME	
Diesel Range Organics (DRO)	18	9.9	mg/Kg	1	4/4/2015 1:55:34 AM	18483	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/4/2015 1:55:34 AM	18483	
Sur: DNOP	85.5	63.5-128	%REC	1	4/4/2015 1:55:34 AM	18483	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: RAA	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2015 6:45:06 PM	18492	
Sur: BFB	83.8	80-120	%REC	1	4/6/2015 6:45:06 PM	18492	
EPA METHOD 8021B: VOLATILES					Analys	st: RAA	
Benzene	ND	0.049	mg/Kg	. 1	4/6/2015 6:45:06 PM	18492	
Toluene	ND	0.049	mg/Kg	1	4/6/2015 6:45:06 PM	18492	
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2015 6:45:06 PM	18492	
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2015 6:45:06 PM	18492	
Sur: 4-Bromofluorobenzene	93.0	80-120	%REC	1	4/6/2015 6:45:06 PM	18492	
EPA METHOD 300.0: ANIONS					Analys	t: LGT	
Chioride	ND	30	mg/Kg	20	4/6/2015 5:29:49 PM	18531	

Qualifiers: *		Value exceeds Maximum Contaminant Level	В	Analyte detected in the associated Method Blank		
	Ε	Value above quantitation range	н	Holding times for preparation or analysis exceed		
J Analy O RSD i		Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page Q of 13	
		RSD is greater than RSDlimit	Р	Sample pH Not In Range	1 age 7 01 15	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Hall Environmental Analysis Laboratory, Inc.

1.5

15.00

14

Client: Project:	Blagg J JFJ Lai	Engineering ndfarm		
Sample ID	ple ID MB-18531 SampType: MBLK		TestCode: EPA Method 300.0: Anions	-
Client ID:	PBS	Batch ID: 18531	RunNo: 25320	
Prep Date:	4/6/2015	Analysis Date: 4/6/2015	SeqNo: 749564 Units: mg/Kg	
Analyte		Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	
Chloride		ND 1.5		_
Sample ID	LCS-18531	SampType: LCS	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 18531	RunNo: 25320	
Prep Date:	4/6/2015	Analysis Date: 4/6/2015	SeqNo: 749565 Units: mg/Kg	
Analvte		Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	

0

92.6

90

110

Chloride

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- Ε Value above quantitation range
- Analyte detected below quantitation limits J
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- S Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- **Reporting Detection Limit** RL

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WO#:

07-Apr-15

1504089
QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client: Bl Project: JF	agg Engineering J Landfarm											
Sample ID LCS-1848: Client ID: LCSS	Batch	SampType: LCS Batch ID: 18483			TestCode: EPA Method 8015D: Diesel Range Organics RunNo: 25271							
Prep Date: 4/2/2015	Analysis Da	ate: 4	/3/2015	8	SeqNo: 7	48608	Units: mg/l	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRC)) 49	10	50.00	0	98.7	67.8	130					
Sur: DNOP	5.1		5.000		102	63.5	128					
Sample ID MB-18483	SampTy	/pe: Mi	BLK	Tes	tCode: Ei	PA Method	8015D: Dies	el Range (Organics			
Client ID: PBS	Batch	ID: 18	483	F	RunNo: 2	5271						
Prep Date: 4/2/2015	Analysis Da	ate: 4/	/3/2015	SeqNo: 748610		48610	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRC)) ND	10										
Motor Oil Range Organics (N	RO) ND	50										
Surr: DNOP	10		10.00		100	63.5	128					

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSD limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - P Sample pH Not In Range
 - RL Reporting Detection Limit

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1504089

WO#:

07-Apr-15

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client:	Blagg Engineering
Project:	JFJ Landfarm

							· · · · ·				
Sample ID	1504089-001AMS	Samp	Type: M	5	Tes	tCode: El	PA Method	8015D: Gas	oline Rang	0	
Client ID:	Cell 2G	Bato	Batch ID: 18492			RunNo: 2	5325				
Prep Date:	4/2/2015	Analysis I	Date: 4	6/2015	5	SegNo: 7	49198	Units: mg/l	٢g		
		- 	001			, NDEO	1	-	- // DDD		0
Analyte		Result		SPK value	SPK Ref Val	%REC		HighLimit	%RPD	RPDLIMIT	Quai
Gasoline Rang	e Organics (GRO)	18	4.9	24.70	U	/1.9	47.9	144			
Sun orb				900.1		0.00	00	120		<u></u>	
Sample ID	1504089-001AMSI	D Samp`	Type: MS	BD	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	9	
Client ID:	Cell 2G	Batc	h ID: 18	492	F	RunNo: 2	5325				
Prep Date:	4/2/2015	Analysis [Date: 4/	6/2015	S	eqNo: 74	49199	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	24	5.0	24.75	0	95.7	47.9	144	28.6	29.9	
Sur: BFB		900		990 1		00.6	90	120	0	0	
				000.1		90.0	00	120	U	v	
Sample ID	LCS-18492	Samp	Type: LC		Tes	tCode: El	PA Method	8015D: Gase	oline Rang		
Sample ID Client ID:	LCS-18492 LCSS	Samp [*] Batc	Type: LC h ID: 18	:S 492	Tes	tCode: El	PA Method 5325	8015D: Gase	oline Rang	9	
Sample ID Client ID: Prep Date:	LCS-18492 LCSS 4/2/2015	Samp Batc Analysis [Type: LC h ID: 18 Date: 4/		Tes F S	tCode: El tunNo: 2:	PA Method 5325 49208	8015D: Gase	bline Rang	9	<u>.</u>
Sample ID Client ID: Prep Date: Analyte	LCS-18492 LCSS 4/2/2015	Samp Batc Analysis [Result	Type: LC h ID: 18 Date: 4/ PQL	6/2015 SPK value	Tes F S SPK Ref Val	tCode: El tunNo: 2 teqNo: 74 %REC	PA Method 5325 49208 LowLimit	8015D: Gase Units: mg/H HighLimit	oline Rang Kg %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang	LCS-18492 LCSS 4/2/2015 Je Organics (GRO)	Samp Batc Analysis [Result 25	Type: LC h ID: 18 Date: 4/ PQL 5.0	6/2015 SPK value 25.00	Tes F S SPK Ref Val 0	50.0 tCode: El RunNo: 24 SeqNo: 74 <u>%REC</u> 98.6	PA Method 5325 49208 LowLimit 64	8015D: Gaso Units: mg/k HighLimit 130	Sine Rang	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Sur: BFB	LCS-18492 LCSS 4/2/2015 le Organics (GRO)	Samp [*] Batc Analysis [<u>Result</u> 25 900	Type: LC h ID: 18 Date: 4/ PQL 5.0	500.1 5 5 5 5 5 5 5 5 5 5 5 5 5	Tes F S SPK Ref Val 0	30.0 tCode: El RunNo: 2 SeqNo: 74 %REC 98.6 89.5	PA Method 5325 49208 LowLimit 64 80	8015D: Gase Units: mg/F HighLimit 130 120	Sg %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID	LCS-18492 LCSS 4/2/2015 le Organics (GRO) MB-18492	Samp Batc Analysis [Result 25 900 Samp	Type: LC h ID: 18 Date: 4/ PQL 5.0 Type: MB	500.11 55 6/2015 5PK value 25.00 1000 3LK	Tes F SPK Ref Val 0 Tes	30.0 tCode: El RunNo: 24 SeqNo: 74 %REC 98.6 89.5	PA Method 5325 49208 LowLimit 64 80 PA Method	Units: mg/r HighLimit 130 120	Sg %RPD %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Sur: BFB Sample ID Client ID:	LCS-18492 LCSS 4/2/2015 e Organics (GRO) MB-18492 PBS	Samp [*] Batc Analysis [Result 25 900 Samp [*] Batc	Type: LC h ID: 18 Date: 4/ PQL 5.0 Type: M8 h ID: 18	500.11 58 6/2015 5PK value 25.00 1000 3LK 492	Tes F SPK Ref Val 0 Tes R	50.0 tCode: El tunNo: 2 %REC 98.6 89.5 tCode: El tunNo: 2	PA Method 5325 49208 LowLimit 64 80 PA Method 5325	8015D: Gase Units: mg/F HighLimit 130 120 8015D: Gase	kg %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date:	LCS-18492 LCSS 4/2/2015 e Organics (GRO) MB-18492 PBS 4/2/2015	Samp Batc Analysis [Result 25 900 Samp Batc Analysis [Type: LC h ID: 18 Date: 4/ PQL 5.0 Type: M8 h ID: 18 Date: 4/	6/2015 5PK value 25.00 1000 3LK 492 6/2015	Tes F SPK Ref Val 0 Tes R S	30.0 tCode: El tunNo: 2 %REC 98.6 89.5 tCode: El tunNo: 2 %eqNo: 74	PA Method 5325 49208 LowLimit 64 80 PA Method 5325 49209	Note: 120 8015D: Gase Units: mg/F HighLimit 130 120 8015D: Gase Units: mg/F	Sg %RPD %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte	LCS-18492 LCSS 4/2/2015 e Organics (GRO) MB-18492 PBS 4/2/2015	Samp Batc Analysis [Result 25 900 Samp Batc Analysis [Result	Type: LC h ID: 18 Date: 4/ PQL 5.0 Type: ME h ID: 18 Date: 4/ PQL	6/2015 5PK value 25.00 1000 3LK 492 6/2015 SPK value	Tes F SPK Ref Val 0 Tes R SPK Ref Val	50.0 tCode: El tunNo: 2 kunNo: 7 %REC 98.6 89.5 tCode: El tunNo: 2 kunNo: 2 keqNo: 74 %REC	PA Method 5325 49208 LowLimit 64 80 PA Method 5325 49209 LowLimit	8015D: Gaso Units: mg/F HighLimit 130 120 8015D: Gaso Units: mg/F HighLimit	oline Rang %RPD oline Rang %g %RPD	e RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte Gasoline Rang	LCS-18492 LCSS 4/2/2015 e Organics (GRO) MB-18492 PBS 4/2/2015 e Organics (GRO)	Samp Batc Analysis [Result 25 900 Samp Batc Analysis [Result ND	Type: LC h ID: 18 Date: 4/ PQL 5.0 Type: ME h ID: 18 Date: 4/ PQL 5.0	500.11 51 52 52 52 52 52 50 1000 52 50 52 52 52 52 52 52 52 52 52 52	Tes F SPK Ref Val 0 Tes R SPK Ref Val	50.0 tCode: El kunNo: 24 %REC 98.6 89.5 tCode: El kunNo: 24 keqNo: 74 %REC	PA Method 5325 49208 LowLimit 64 80 PA Method 5325 49209 LowLimit	8015D: Gaso Units: mg/k HighLimit 130 120 8015D: Gaso Units: mg/k HighLimit	Sg %RPD	e RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
 - P Sample pH Not In Range
 - RL Reporting Detection Limit

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1504089

WO#:

07-Apr-15

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client:Blagg EngineeringProject:JFJ Landfarm

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Sample ID	1504089-002AMS	Samp ⁻	Type: MS	3	Tes	TestCode: EPA Method 8021B: Volatiles							
Client ID:	Cell 3B	Batc	h ID: 18	492	F	RunNo: 2	5325						
Prep Date:	4/2/2015	Analysis [Date: 4/	6/2015	\$	SeqNo: 7	49257	Units: mg/H	(g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		1.1	0.049	0.9756	0	110	69.2	126					
Toluene		1.1	0.049	0.9756	0.01683	107	65.6	128					
Ethylbenzene		1.1	0.049	0.9756	0.01062	112	65.5	138					
Xylenes, Total		3.3	0.098	2.927	0.02851	111	63	139					
Surr: 4-Brom	oflucrobenzene	0.97		0.9756		99.7	80	120					
Sample ID	1504089-002AMS	Samp1	Type: MS	5D	Tes	tCode: E	PA Method	8021B: Vola	tiles				
Client ID:	Celi 3B	Batc	h ID: 18	492	F	RunNo: 2	5325						
Prep Date:	4/2/2015	Analysis [Date: 4/	6/2015	5	SeqNo: 7	49258	Units: mg/k	(g				
Anatyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		1.1	0.049	0.9766	0	110	69.2	126	0.170	18.5			
Toluene		1.0	0.049	0.9766	0.01683	106	65.6	128	0.969	20.6			
Ethylbenzene		1.1	0.049	0.9766	0.01062	111	65.5	138	1.44	20.1			
Xylenes, Total		3.2	0.098	2.930	0.02851	110	63	139	1.15	21.1			
Surt: 4-Brom	ofluorobenzene	0.97	<u></u>	0.9766	<u></u>	99.4	80	120	0	0			
Sample ID	LCS-18492	SampT	Type: LC	S	Tes	tCode: E	PA Method	8021B: Volat	tiles				
Client ID:	LCSS	Batcl	h ID: 18 4	492	F	RunNo: 2	5325						
Prep Date:	4/2/2015	Analysis D	Date: 4/	6/2015	8	SeqNo: 7	49267	Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		1.2	0.050	1.000	0	118	76.6	128					
Toluene		1.1	0.050	1.000	0	115	75	124					
Ethylbenzene		1.2	0.050	1.000	0	117	79.5	126					
Xylenes, Total		3.5	0.10	3.000	0	116	78.8	124					
Surr: 4-Brom	ofluorobenzene	0.98		1.000		98.0	80	120			··		
Sample ID	MB-18492	Samp1	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	lies				
Client ID:	PBS	Batcl	h ID: 18 4	192	F	RunNo: 2	5325						
Prep Date:	4/2/2015	Analysis C	Date: 4/	6/2015	5	SeqNo: 7	49268	Units: mg/K					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		ND	0.050				·						
Toluene		ND	0.050										
Ethylbenzene		ND	0.050										
Xylenes, Total		ND	0.10										
Surr: 4-Brom	ofluorobenzene	0.94		1.000		94.2	80	120					

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

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1504089

WO#:

07-Apr-15

HALL Hall Environmental ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-3:15- Website: www	ental Analysis Labora 4901 Hawkin Albuquerque, NM 8 3975 FAX: 505-345- w.hallenvironmental	atory 15 NE 17109 Sam 4107 Leom	Sample Log-In Chec					
Client Name: BLAGG Work Order Nun	nber: 1504089		ReptNo:	1				
Received by/date: AT C21/02/15			a false produktion da an la particular de la companie and a companie de la companie de la companie de la compa					
Logged By: Lindsay Mangin 4/2/2015 7:00:00 /	AM	July Mago						
Completed By: Lindsay Mangin 4/2/2015 9:36:29 /	AM	guy the go						
Reviewed By: (S OLUZIS	5		anaanaa ji kaasaanaa maaanaa ta ji 2 - adagaana aada a					
Chain of Custody								
1. Custody seals intact on sample bottles?	Yes 📋	No 🗆	Not Present 🗹					
2. Is Chain of Custody complete?	Yes 🗹	No. 🗔	Not Prësent 🗌					
3. How was the sample delivered?	Courier							
Log În								
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗍	na 🗇					
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗔					
6. Sample(s) in proper container(s)?	Yes 🖌	No 🔲		I				
7. Sufficient sample volume for indicated test(s)?	Ýes 🗹	No.		Ι				
8. Are samples (except VOA and ONG) property preserved?	Yes 🕅	No 🗔	_					
9. Was preservative added to bottles?	Yes 🗌	No 🗹	NA []					
10. VOA vials have zero headspace?	Yes	No 🗔	No VOA Vials 🗹					
11. Were any sample containers received broken?	Yes	No 🗹	# of preserved bottles checked	444. (**********************************				
12. Does paperwork match bottle labels?	Yes 🗹	No 🗋	for pH:	x >12 µnle				
(Note discrepancies on chain of custody)	Yas 🗸	No 🗔	Adjusted?					
13. Are matrices contextly localized on Chain of Custody?	Yes 🗹	No 🗔						
15, Were all holding times able to be met? (If no, notify customer for authorization.)	Yes. 🗹	No 🗌	Checked by:	11 m to 200				
Special Handling (if applicable)								
16. Was client notified of all discrepancies with this order?	Yes	No 🗆	NA 📈					
Person Notified: De	ate /		n an annaichteannaichteannaichtean an a					
By Whom: Vie	a: 🚺 eMail 📋	Phone 🗌 Fax	In Person					
Regarding:								
Client Instructions:								
17. Additional remarks:								
18. Cooler Information								

	Page 1	of l

Chain-of-Custody Record Client: JFJ LANFAM BLAGG Enchagerin Mailing Address: P-0. Box 87		Turn-Around Time:						الح		F	ŇV	TE	10	NA	AF!	NT/			
						ANALYSTS LABORATORY													
		Project Name			1 🖢			~		aller:	inn	nont							
		JE	T LAN	DEARM	www.hallenvironmental.com														
		Der E/	Project #:			4901 Hawkins NE - Albuquerque, NM 87109													
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Accredit ⊐ NEL/	tation AP	🗆 Othe	۲	Sampler: J	- BAG	6 □ No		+ TPH	Q/D	18.1)	04.1) 8270		ON.6	/ 808		¥			Î Z
	(Type)			Sample Tem	perature:	0		Ш Ш	Ű	4 b		tals	N,	ides	2	Ŝ,	4		Įž
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO. 150-089	BTEX + HI	BTEX + MT	TPH 8015B	TPH (Metho	EDB (Metho	RCRA 8 Me	Anions (F,C	8081 Pestic	8260B (VO/	8270 (Semi-	CHURD		Air Bubbles
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.