NM1 - ___10 B____

APPROVALS

YEAR(S):

2011 - 2012____

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey
Division Director
Oil Conservation Division



November 6, 2012

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm - Permit # NM1-010-B

Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) email request, dated November 6, 2012, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized to build up the area along the eastern boundary of and within the existing permitted facility property, located in NW/4 SE/4 of Section 2, Township 29 North, Range 12 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

Pile # 563 Pile # 791 Pile # 815

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations s_i ecified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse:

Ms. Marquez JFJ Landfarm, LLC Permit NM1-010-B November 6, 2012 Page 2 of 2

- 3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface water, and protects human health and the environment; and
- 4. If JFJ reuses the remediated soils within the surface waste management facility permitted boundary, as proposed and considered in this approval, at closure JFJ shall comply with Conditions 2d and 2f of the Closure section of your February 3, 2004 surface waste management facility permit (NM1-010-B).

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey Director

JB/baj

cc: OCD District III Office, Aztec



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

November 6, 2012

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re: JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

This letter is being submitted to you as a request to reuse/recycle treated soils. We are requesting approval to reuse/recycle treated soils within our property boundaries. The treated soils would be utilized to "build up" the East portion of the property (see attached map).

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

- o Pile 563
- o Pile 791 (DRO passed 09/28/12, GRO/BTEX/Chloride passed 07/25/12)
- o Pile 815

Marceleamarque

Respectfully Submitted,

Marcella Marquez

HSE Administrator

Enclosures-Analytical Reports, Map

Jones, Brad A., EMNRD

From: Marcella Marquez <marcella@industrialecosystems.com>

Sent: Monday, November 05, 2012 2:30 PM

To: Jones, Brad A., EMNRD

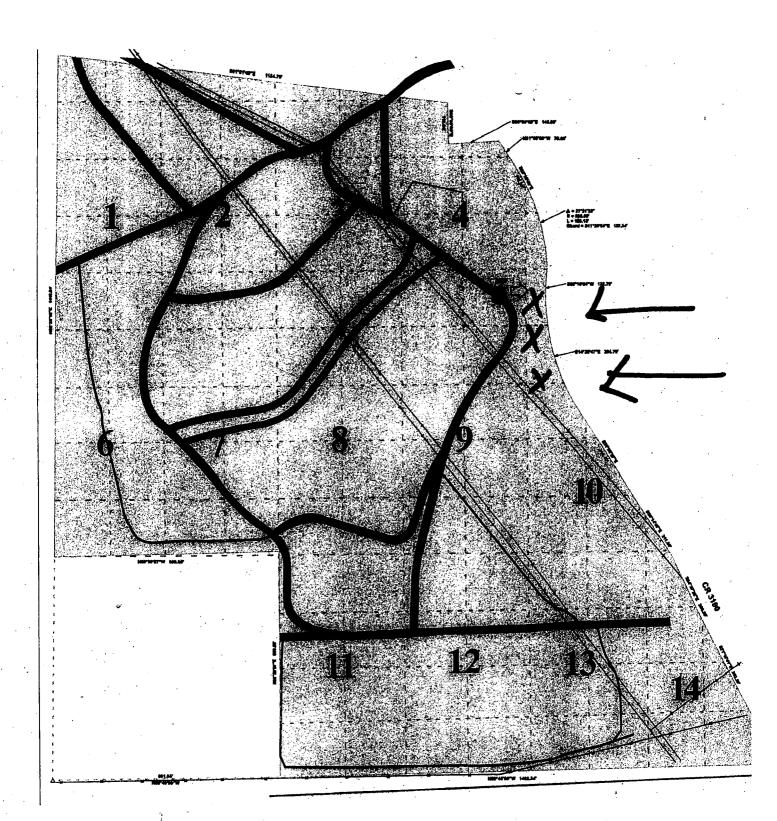
Attachments: Letter to request reuse of treated soils on facility.doc; 4021_0001.pdf

Brad:

Please see attached letter to spread remediated soils, along with the analytical reports and map of area where the soils will be spread.

Thanks, Marcella Marquez, HSE Administrator Industrial Ecosystems, Inc. Phone: (505) 632-1782

Fax: (505) 632-1876 or (505) 334-1003



INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

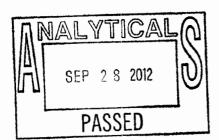
Reported:

28-Sep-12 12:36

PILE 563

H202330-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories					
Inorganic Compounds									
Chloride	32.0	16.0	mg/kg	4	2092803	НМ	28-Sep-12	4500-CI-B	
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	1	2092601	MS	26-Sep-12	8015M	
DRO >C10-C28	ND	10.0	mg/kg	1	2092601	MS	26-Sep-12	8015M	
Surrogate: 1-Chlorooctane		86.1 %	65.2	-140	2092601	MS	26-Sep-12	8015M	
Surrogate: 1-Chlorooctadecane		92.1 %	63.6	-154	2092601	MS	26-Sep-12	8015M	
Volatile Organic Compounds by EPA N	1ethod 8021								
Benzene*	ND	0.050	mg/kg	.50	2092605	AP	26-Sep-12	8021B	
Toluene*	ND	0.050	mg/kg	:50	2092605	AP	26-Sep-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	:50	2092605	AP	26-Sep-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	:50	2092605	AP	26-Sep-12	8021B	
Surrogate: 4-Bromofluorobenzene (P1D)		100 %	89.5	-126	2092605	AP	26-Sep-12	8021B	



Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Lebity and Damages. Cardinal's Malatiny and clearth scalable remody for any claim animal, whister based in contact or taxt, shall be limited to the amount paid by cleart for analyses. All claims, including those for negligence and any other cause whistonews shall be determed weived unless made in writing and received by Cardinal within thry (20) days after completes; of the applicable service. In no event shall Cardinal be labele for incidental or consequential demages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subdellaties, suffiliates or auccessors arising out of or related to the performance of the services hereunder by Cardinal, reparchess of whether such claim is based upon any of the slover stated reserves or otherwise. Results relate only to the samples identified above. This report shall not be reproducted except in fall wall written approved of Cardinal Laboratorias.

Celeg D. Keine



September 28, 2012

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 09/25/12 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 860

28-Sep-12 12:36

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE S63	H202330-01	Soil	24-S∋p-12 10:10	25-Sep-12 1 0:30
PILE 752	H202330-02	Soil	24-Sep-12 10:30	25-Sep-12 10:30
PILE 755	H202330-03	Soil	24-Sep-12 10:35	25-Sep-12 10:30
PILE 761	H202330-04	Soil	24-Sep-12 10:50	25-Sep-12 10:30
PILE 789	H202330-05	Soil	24-Sep-12 11:20	25-Sep-12 10:30
PILE 791	H202330-06	Soil	24-Sep-12 11:35	25-Sep-12 10:30
PILE 792	H202330-07	Soil	24-Sep-12 11:50	25-Sep-12 10:30
PILE 795	H202330-08	Soil	24-Sep-12 13:15	25-Sep-12 10:30
PILE 814	H202330-09	Soil	24-Sep-12 13:30	25-Sep-12 10:30
PILE 815	H202330-10	Soil	24-Sep-12 13:55	25-Sep-12 10:30

Cardinal Laboratories

PLEASE NOTE: Liability and Demages. Direinal's liability and client's exchanive remody for any claim anising, whistner based in contract or text, shall be limited to the amount peol by client for analyses. All claims, including those for negligence and any other cause viviationever shall be decimed nerved unless made in writing and nectived by Cardinal within thirty (20) days after completely in the applicable senders. In no award shall Cardinal be labele for including, willows limitation, business interruptions, loss of use, or loss or jurish incurred by client, its autoidates, arithmets or successors arising out of or related to the performance of the services hereunder by Cardinal, repartiess of whether suct clients have under the performance of the services hereunder by Cardinal, reparties so whether suct clients have under the performance of the services hereunder by Cardinal, reparties so whether suct clients have under the performance of the services hereunder by Cardinal, reparties and whether suct clients have under the performance of the services hereunder by Cardinal, reparties and whether such clients have under the performance of the services hereunder by Cardinal, reparties and whether such clients have under the performance of the services hereunder by Cardinal, reparties and the performance of the services hereunder by Cardinal, reparties and the performance of the services hereunder by Cardinal, reparties and the performance of the services hereunder by Cardinal, and the performance of the services hereunder by Cardinal, and the performance of the services hereunder by Cardinal, and the services here and the performance of the services hereunder by Cardinal, and the performance of the services hereunder by Cardinal, and the performance of the services here and the performance of the services here and the performance of the services here.

Celeg D. Kena

Celey D. Keene, Lab Director/Quality Manager



*=Accredited Analyte



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 28-Sep-12 12:36

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Rosult	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2092803 - 1:4 DI Water	······································				·		· · · · · · · · · · · · · · · · · · ·			
Blank (2092803-BLK1)				Prepared &	Analyzed:	28-Sep-12				
Chloride	ND	16.0	mg/kg							
LCS (2092803-BS1)				Prepared &	: Analyzed:	28-Sep-12				
Chloride	400	16.0	mg/kg	400		100	80-120			
LCS Dup (2092803-BSD1)				Prepared &	Analyzed:	28-Sep-12				
Chloride	400	16.0	mg/kg	400		100	80-120	0.00	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Curdinal's liability and client's exclusive remody for any claim arising, whether beased in certainch or lost, shall be linked to the amount paid by client for analyses. All claims, including those for negligance and any other cause whethereover shall be deemed service unless made in vertical and received by Curdinal within theiry (30) days after completion of the applicable service. In no event shall Curdinal be liable for incloants or consequential damages, whether including, without limitation, believes the performance of the services invested by Curdinal, reportless of whether such claims to bead upon any of the above attend research or otherwise. Readly shall be services in the services in the service of Curdinal Laboratories.

Celey D. Keine





INDUSTRIAL ECOSYSTEMS

49 CR 3150 **AZTEC NM, 87410** Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 28-Sep-12 12:36

Organic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2092601 - General Prep - Organics										
Blank (2092601-BLK1)				Prepared &	Analyzed:	26-Sep-12				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
Surrogate: 1-Chloroociane	45.9		nig/kg	50.0		91.7	65.2-140			
Surrogate: 1-Chlorooctadecane	47.8		mg/kg	50.2		94.7	63.6-154			
LCS (2092601-BS1)				Prepared &	Analyzed:	26-Sep-12				
GRO C6-C10	190	10.0	mg/kg	200		95.1	66.4-124		23.4	
DRO >C10-C28	192	10.0	mg/kg	200		95.8	61.6-132		23.1	
Surrogate: 1-Chlorooctane	46.5		mg/kg	50.0		92.9	65.2-140			
Surrogate: 1-Chlorooctadecane	45.6		nig/kg	50.5		90.3	63.6-154			
LCS Dup (2092601-BSD1)				Prepared &	Analyzed:	26-Sep-12				
GRO C6-C10	178	10.0	mg/kg	200		88.8	66.4-124	6.93	23.4	
DRO >C10-C28	158	10.0	mg/kg	200		79.1	61.6-132	19.1	23.1	
Surrogate: 1-Chlorooctane	43.4		mg/kg	50.6		86.8	65.2-140			
Surrogate: 1-Chlorooctadecane	41.7		mg/kg	50.5		82.6	63.6-154			

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Kenne





INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

28-Sep-12 12:36

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limita	RPD	Limit	Notes
Batch 2092605 - Volatiles			···	?*****			·			
Blank (2092605-BLK1)				Prepared &	Analyzed:	26-Sep-12				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg∕kg							
Total Xylenes	ND	0.150	mg/kg							
Surrogaie: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0500		100	89.5-126			
LCS (2092605-BS1)				Prepared &	: Analyzed:	26-Sep-12				
Benzene	1.70	0.050	mg/kg	2.00		85.2	80.7-116			
Toluene	1.88	0.050	mg/kg	2.00		94.0	89.7-121			
Ethylbenzene	1.87	0.050	mg/kg	2.00		93.4	91.4-124			
Total Xylenes	5.67	0.150	mg/kg	6.00		94.6	93.4-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0500		99.6	89.5-126			
LCS Dup (2092605-BSD1)				Prepared &	: Analyzed:	26-Sep-12				
Benzene	2.03	0.050	mg/kg	2.00		102	80.7-116	17.7	16.4	
Toluene	2.25	0.050	mg/kg	2.00		112	89.7-121	17.9	16.6	
Ethylbenzene	2,23	0.050	mg/kg	2.00		111	91.4-124	17.6	16.1	
Total Xylenes	6.76	0.150	mg/kg	6.00		113	93,4-130	17.5	15.8	
Surragate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0500		99.6	89.5-126			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Leading and Demogras. Cardinal's fability and client's exclusive remoty for any cleim faring, whether based in contract or tart, shall be limited to the amount paid by client for sentyess. All cleims, including those for nephysics and any other cause vehicleners shall be deemed vehicle unless made in vetting and received by Cardinal vebbs there; (20) days after completion of the applicable service. In no event shall Continue to listed for incidental or corresponded damages, including, without limitation, business interruptions, losis of use, or loss of profits incurred by client, a subsedient, efficients or related to the performance of the services hereunder by Cardinal, respections of whather such client is based upon any of the store stated massions or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in fall with whitein approval of Cardinal Libertories.

Celeg D. Keine





Notes and Definitions

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 SM4500Cl-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

Cardinal Laboratories

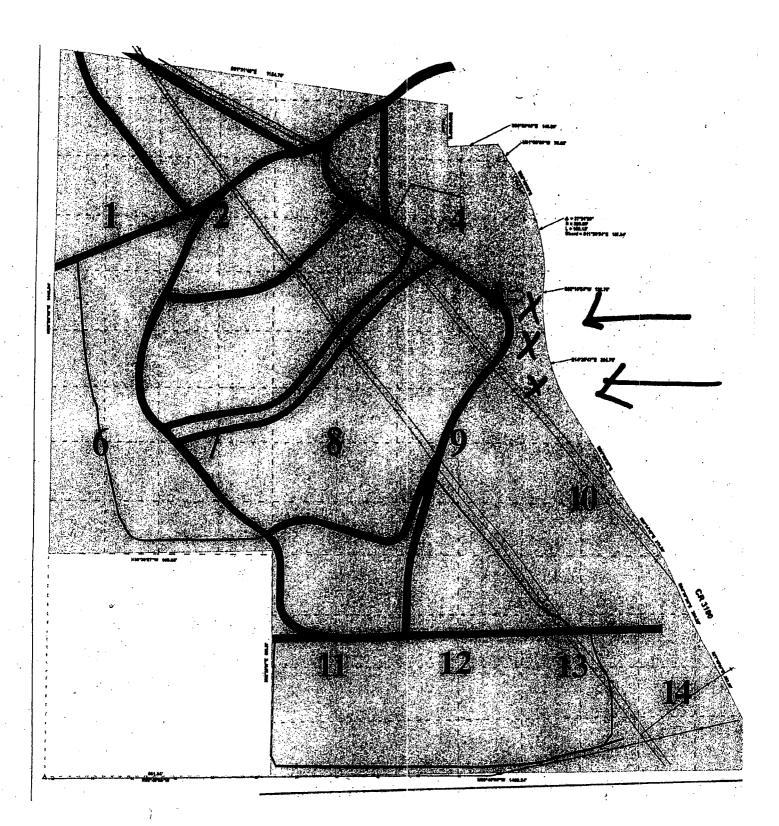
*=Accredited Analyte

PLEASE MOTE: Liability and Dawages. Cardinal's liability and clients exclusive remedy for any claim arising, whether based in contract of text, shall be limited to the amount paid by client for analyses. All claims, including those for neglegence and any other couse ventroover shall be demined network unless miscs to weiting and received by Cardinal within thirty (30) days after completed in the applicable service. In no event shall Cardinal be labele for incidental or consequential demands including, without intended in the applicable service. In no event shall Cardinal be labele for incidental or consequential demands including, without miscally because of the same consequential demands or successors trials quit of or related to the purformance of the same(see investment or the above stated resource or charmides. Results relate only to the same consequential demands of Cardinal Libourosters.

Celey D. Keine



0/151/b POR GAL USE ONLY GAL YOB # Comments [NICHT 3 = Soil/Sediment, 4 = Rinsate, 5 = Oil 1 = Surface Water, 2 = Ground Water Table 1. - Matrix Type 6 = Waste, 7 = Other (Specify) Analyses Required Samplers Signature: **,** > CHAIN OF CUSTODY RECORD > Other (Specify) 2) Ship samples promptly following collection. HOYN Preservative(s) (970) 247-4220. FAX (970) 247-4227 www.greenanalytical.com 3) Designate Sample Reject Disposition. PO# 8 6 HZSO4 1) Ensure proper container packaging. TOF CONH Unpreserved (Ice Only) Project Name: Miscellaneous 100 jo E CODY LEST EN SNOTES edyl xinaM W Sample Reject: [] Return ([] Dispose 1] Store (30 Days) 75 Suttle Street, Iturango, CO 81303 10:30 10.50 11:20 6.60 11.35 11:50 10:35 .30 Time : 15 Green Analytical Laboratories Collection 65/12/13 Date Chart Restrict Contact MACUTER 793 ر ا ا 5 FAX Number: 50 5 100 Sample ID Relinguished by Relinquished by: Phone Number: 10. t. t. Lab Name. Address: - なる ナルカトカム





September 28, 2012

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 09/25/12 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/iab accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Reported:

28-Sep-12 12:36

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150 **AZTEC NM, 87410** Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

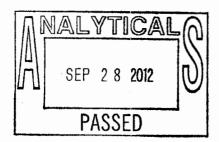
Fax To: (505) 632-1876

PILE 791 H202330-06 (Soil)

		D							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes

Cardinal Laboratories

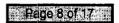
Organic Compounds								
DRO >C10-C28	93.8	10.0	mg/kg I	2092601	MS	26-Sep-12	8015M	
Surrogate: 1-Chlorooctane		88.3 %	65.2-140	2092601	MS	26-Sep-12	8015M	
Surrogate: 1-Chlorooctadecane		95.5 %	63.6-154	2092601	MS	26-Sep-12	8015M	



Cardinal Laboratories

*=Accredited Analyte

Celey D. Kreena





INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 860

AZTEC NM, 87410

28-Sep-12 12:36

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE 563	H202330-01	Soil	24-Sep-12 10:10	25-Sep-12 10:30
PILE 752	H202330-02	Soil	24-Sep-12 10:30	25-Sep-12 10:30
PILE 755	H202330-03	Soil	24-Sep-12 10:35	25-Sep-12 10:30
PILE 761	H202330-04	Soil	24-Sep-12 10:50	25-Sep-12 10:30
PILE 789	H202330-05	Soil	24-Sep-12 11:20	25-Sep-12 10:30
PILE 791	H202330-06	Soil	24-Sep-12 11:35	25-Sep-12 10:30
PILE 792	H202330-07	Soil	24-Sep-12 11:50	25-Sep-12 10:30
PILE 795	H202330-08	Soil	24-Sep-12 13:15	25-Sep-12 10:30
PILE 814	H202330-09	Soil	24-Sep-12 13:30	25-Sep-12 10:30
PILE 815	H202330-10	Soil	24-Sep-12 13:55	25-Sep-12 10:30

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine





Reported: 28-Sep-12 12:36

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCEL_A MARQUEZ

Fax To: (505) 632-1876

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spik:	Source Result	%REC	%REC	RPD	RPD Limit	Notes

Batch 2092803 - 1:4 DI Water										
Blank (2092803-BLK1)				Prepared &	Analyzed:	28-Sep-12				
Chloride	ND	16.0	mg/kg							
LCS (2092803-BS1)				Prepared &	Analyzed:	28-Sep-12				
Chloride	400	16.0	mg/kg	400		100	80-120			
LCS Dup (2092803-BSD1)				Prepared &	k Analyzed:	28-Sep-12				
Chloride	400	16,0	mg/kg	400		100	80-120	0.00	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's Bability and client's exclusive reasody for any claim arising, whether based in contract or text, shall be limited to the amount peak by client for analyses. All claims, including those for negligence and any other Cuses whethoever shall be desired welved unless made in writing and received by Cardinal within thirty. (30) days after completely of this applicables service. In no event shall Cardinal be labele for inclaimed or consequential distinguishment, without limitation, business interruptions, loss of use, or loss of profits, incurred by client, its authorisations, affection or successors shall set of or relabed to the performance of the services themselves the client in based used made of shall be limited to the performance of the services themselves the client in based used in the limit to happen of Cardinal Liaboratories.

Celey D. Keine





%REC

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Source

Reported:

28-Sep-12 12:36

RPD

Organic Compounds - Quality Control

Cardinal Laboratories

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2092601 - General Prep - Organics			ruth, in a w							
Blank (2092601-BLK1)				Prepared &	Analyzed:	26-Sep-12				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	1,0.0	mg/kg							
Surrogate: 1-Chlorooctane	45.9		mg/kg	50.0		91.7	65.2-140			
Surrogate: 1-Chlorooctadecane	47.8		mg/kg	50.5		94.7	63.6-154			
LCS (2092601-B\$1)				Prepared &	Analyzed:	26-Sep-12				
GRO C6-C10	190	10.0	mg/kg	200		95.1	66.4-124		23.4	
DRO >C10-C28	192	10.0	mg/kg	200		95.8	61.6-132		23.1	
Surrogate: 1-Chlorooctane	46.5		mg/kg	50.0		92.9	65.2-140			
Surrogate: 1-Chlorooctadecane	45.6		mg/kg	50.5		90.3	63.6-154			
LCS Dup (2092601-BSD1)				Prepared &	k Analyzed:	26-Sep-12				
GRO C6-C10	178	10.0	mg/kg	200		88.8	66.4-124	6,93	23.4	
DRO >C10-C28	158	10.0	mg/kg	200		79.1	61.6-132	19.1	23.1	
Surrogate: 1-Chlorooctane	43.4		mg/kg	50.0		86.8	65.2-140			
Surrogate: 1-Chlorooctadecane	41.7		mg/kg	50.5		82.6	63.6-154			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Commeyor. Confinal's Bability and clearth exhibity and clearth exhibity and clearth exhibition arising, whether based in central tot, shall be deemed waived unless made in vertical and recipied by Confinal within thirty (20) days after completion of the applicable sention. In no event shall Confinal be lable for incidental or consequenced confined by clearing and recipied within thirty (20) days after completion and the applicable sention. In no event shall Confinal be lable for incidental or consequenced confined and confined and

Celey D Keina



INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

28-Sep-12 12:36

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2092605 - Volatiles										
Blank (2092605-BLK1)			.,	Prepared &	Analyzed:	26-Sep-12				
Benzene	ND	0 050	nıg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0560		100	89.5-126			
LCS (2092605-BS1)				Prepared &	Analyzed:	26-Sep-12				
Benzene	1.70	0.050	mg/kg	2.00		85.2	80.7-116			
Toluene	1.88	0.050	mg/kg	2.00		94.0	89.7-121			
Ethylbenzene	1.87	0.050	mg/kg	2.00		93.4	91.4-124			
Total Xylenes	5.67	0.150	mg/kg	6.00		94.6	93.4-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0300		99.6	89.3-126			
LCS Dup (2092605-BSD1)				Prepared &	Analyzed:	26-Sep-12				
Benzene	2.03	0.050	mg/kg	2.00		102	80.7-116	17.7	16.4	
Toluene	2.25	0.050	mg/kg	2,00		112	89.7-121	17.9	16.6	
Ethylbenzene	2.23	0.050	mg/kg	2.00		111	91.4-124	17.6	16.1	
Total Xylenes	6.76	0.150	mg/kg	6.00		113	93.4-130	17.5	15.8	
Surrogate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0507		99.6	89.5-126			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Changes. Durdhalls liability and chem's exclusive remark for any claim artists, whether based in contract or tors, athal bis infrited to the amount paid by client for analyses. All claims, including those for negligence an any other cause whatchorver shall be deemed neived unless made in writing and naceled white which play (30) days effor complisation of the applicable service. In no event shall Curdinal be liable for incidental or consequential demands including, without limitation, business interruptions, base of use, or loss of year, or loss should be liable for incidental or completely claim. It is expected to the performance of the services haracter by Clarifinal, reparticles of whether successors arising out of or related to the performance or the services haracter only to the slower stated reserves or otherwise. Measure related only to the services haracter or otherwise. All claims, including those for profits incurred by client, its subsidiaries, efficiency and profit of the applicable service. In no event shall Curdinal be liable for incidental or consequential demands in the performance of the services have not been completely consequential.

Celey D. Kuna





Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usbliky and Demapes. Cardinal's labelity and cleant's exclusive namedy for any claim arising, whether besed in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for neplegence and any other cause vehabones shall be desented without unless made in versing and received by Cardinal within Betty (20) days after completion of the applicable service. In no event shall Deplace the limits for incidental or consequential demapes, without similarious, business intemplatens, loss of use, or loss of profits incurred by Cardinal, reparties or auccessors brising out of or related to the performance of the services hereunder by Cardinal, reparties or whether such claim is based upon any of the above attent reasons or otherwise. Results relate only to the services intermediate demonstrate or control to the services intermediate or control to the services intermediate.

Celey D. Keine



CHAIN OF CUSTODY RECORD 3) Designate Sample Reject Disposition. $p_{O\#} \delta = \delta$ 1) Entaine proper container packaging. Project Name: Phone Number: 505-63 2-17 3 Chant Lhewstrial Contact WA CARE FAX Number: 50 5 Address 4 C. C.A

GAL JOB # 3 = Soil/Sediment, 4 = Rinsate, 5 = Oil 1 = Surface Water, 2 = Ground Water Table 1. - Matrix Type 6 = Waste, 7 = Other (Specify) Samplers Signature: 2) Ship samples promptly following collection.

Lab Name: Green Analytical Laboratories	n Analytica	d Labora	tories	(97	(970) 247-4220	4220	FAX	FAX (970) 247-4227	747-7	1227			₹	Analyses Required	Require	Ţ,			
Address: 75.5	75 Suttle Street, Durango, CO 81303	, Durang	o, CO 813	93		www.greenanalytical.com	reen	ınaly	ical,	(JOC)				C					
		Collection	ion	Σ	Miscellaneous	STOOL		F.	Preservative(s)	tive(s)	130477		8) _(
Sample D WICH 350) di	-Jime	Collected by: (Init.)	l oldrī (mn.)	Mc, of Containing	Sample Filtered 3 VAI Unpresenved (Ice Only)	(Aug cal) Parmonduc	וּוכִּיד	HOSCH	Other (Specify)	महाल्डे एमत	BLEX ROSH	CHRUP 300				Communication (Communication (Commun	Comments York
رج الجاري	543 109 101 10 154	10 Mg	0.0				Z					1		>)
አይነኒ ባ)sal .		18.30									70	•						
* Dr.le 7	355		10:35								<u></u>	7							
4 0' K 741			10.50	dau'ara			ندسد	,				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	***	1					
1.0.3	184		11.20									7	د 	1					
ه 1:18 م	الطاا		11:35					-				·							
1.6. h	193		09://									>	,	``>					
8. 10; 1e Tu	3		51:)									>	**	1					
2. P: 10 814)		1.30			****						``							
10 to Pile 8	\$15	>	1.55	Ş	<u> </u>	>	•		_~	-		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3	>					
Relinquished by:	77	Alexa &	13	=' 	13/1/20	=	PV	0.00	P	Red by	\leq	227	X				In Capid	7	Of itsung
Relingulished by:		1		G	- : - :		E	900) }- :	Regelyco by	1	\	2.	1,3			102/201	1	子なる
			0.00000.000			1					1								

21 Sendon 92418

*Sample Reject [] Return () Dispose [] Store (30 Days)



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 25-Jul-12 10:20

PILE 791 H201672-09 (Soil)

l .									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Labora	ories					
Inorganic Compounds									
Chloride	656	16.0	mg/kg	4	2072304	НМ	23-Jul-12	4500-CI-B	
Organic Compounds		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
GRO C6-C10	ND	10.0	mg/kg	1	2072306	MS	24-Jul-12	8015M	
DRO >C10-C28	455	10.0	mg/kg	1	2072306	MS	24-Jul-12	8015M	
Surrogate: 1-Chlorooctane		82.9 %	65.2	-140	2072306	MS	24-Jul-12	8015M	
Surrogate: 1-Chlorooctadecane		120 %	63, 6	-154	2072306	MS	24-Jul-12	8015M	
Volatile Organic Compounds by EPA	Method 8021								
Benzene*	0.053	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Toluene*	0.086	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	50	2072403	ΑP	24-Jul-12	8021B	
Total Xylenes*	0.287	0.150	mg/kg	50	2072403	AР	24-Jul-12	8021B	
Surrogate: 4-Bromoshiorobenzene (PID)		103 %	89.4	-126	2072403	AP	24-Jul-12	8021B	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Customin's legislating and client's exclusive remore for any claim ansieg, whether bessed in context or lant, shall be limited to the innovant paid by dilent for analyses. All distants, including those for mappings and any other causes whatcaver shall be desemed vestioned used in certain the liability of the shall be desemed vestioned by client, and received by Curdinal which thirty (30) days after completion of the applicable service. In no event, shall Certifical be liability for indications, and the completion of the applicable service. In no event, shall Certifical be liability for indications, and the completion of the applicable service. In no event, shall be desired by client, its substitutions, followed to or related to the performance of the services harmander by Certifical, reportless of whether sections is absent to the performance of the services harmander by Certifical and the completion of the approximation of the store stated research or shall be desired to the services harmander by client, it is applicable and the completion of the approximation of the application of the approximation of the application of the application of the application of the application of the application

Celey D. Keine





July 25, 2012

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 07/20/12 10:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tcea.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Reported:

25-Jul-12 10:20

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Sample ID Laboratory ID Matrix **Date Sampled Date Received** PILE 13 H201672-01 Soil 19-Jul-12 06:40 20-Jul-12 10:35 PILE 14 H201672-02 Soil 19-Jul-12 07:10 20-Jul-12 10:35 PILE 603 H201672-03 Soil 19-Jul-12 07:35 20-Jul-12 10:35 **PILE 633** H201672-04 Soll 19-Jul-12 07:40 20-Jul-12 10:35 PILE 752 Soil 19-Jul-12 08:20 20-Jul-12 10:35 H201672-05 **PILE 755** H201672-06 Soil 19-Jul-12 09:00 20-Jul-12 10:35 **PILE 761** 19-Jul-12 09:40 H201672-07 Soil 20-Jul-12 10:35 **PILE 790** Soil 19-Jul-12 10:15 20-Jul-12 10:35 H201672-08 **PILE 791** 19-Jul-12 10:30 20-Jul-12 10:35 H201672-09 Soil **PILE 814** 19-Jul-12 11:10 Soil 20-Jul-12 10:35 H201672-10

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usbelly and Desingers, Condition's bability and client's exclusive remarks for any chains arising, whether bessed in contract or text, shall be limited to the amount paid by client for sindysess. All claims, including those for negligence and any other cause whitcomer shall be deemed variety unless made in writing and nacived by Cardinal valiety (20) days after completion of the applicable services. In no event shall Cardinal be lated for includent or consequential damages including, without lambstorm, bushess interruptions, loss of use, or best of graphs incurred by client, has passed entered and the preformance of the services hereunder by Cardinal, reportless of whether soci

Celig D Kuna





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

25-Jul-12 10:20

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Unite	Spice Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2072304 - 1:4 DI Water										
Blank (2072304-BLK1)				Prepared &	Analyzed:	23-Jul-12				
Chloride	ND	16.0	mg/kg							
LCS (2072304-BS1)				Prepared &	: Analyzed:	23-Jul-12				
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (2072304-BSD1)				Prepared &	Analyzed:	23-Jul-12				
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usbflag and Dawages. Confirm's Bability and cleart's exclusive ramage for any claim setting, whether bread in cartrict or lant, shell be the amount paid by client for amplitude and one of the confirmation of the c

Celey D. Keine





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 25-Jul-12 10:20

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2072306 - General Prep - Organics										
Blank (2072306-BLK1)				Prepared &	Analyzed:	23-Jul-12				
GRO C6-C10	ND	10,0	mg/kg							
DRO >C10-C28	ND	10,0	mg/kg							
Surrogate: 1-Chlorooctane	38.6		mg/kg	30.0		77.2	65.2-140			
Surrogate: J-Chlorooctadecane	51.3		mg/kg	30.0		103	63.6-154			
LCS (2072306-BS1)				Prepared &	: Analyzed:	23-Jul-12				
GRO C6-C10	169	10,0	mg/kg	200		84,3	66.4-124		23.4	
DRO >C10-C28	181	10. 0	mg/kg	200		90.4	61,6-132		23.1	
Surrogate: 1-Chlorooctans	42.7		mg/kg	30.0		85.4	65.2-140			
Surrogate: 1-Chlorooctadecane	54.7		mg/kg	50.0		109	63.6-154			
LCS Dup (2072306-BSD1)				Prepared &	: Analyzed:	23-Jul-12			·	
GRO C6-C10	174	10.0	mg/kg	200		87.1	66,4-124	3.19	23,4	
DRO >C10-C28	180	10.0	mg/kg	200		89.8	61.6-132	0.622	23.1	
Surrogate: 1-Chlorooctane	44.4		mg/kg	50.0		88.8	65.2-140			
Surrogate: 1-Chlorooctadecane	<i>55.1</i>		mg/kg	50.0		110	63.6-154			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Demagns. Curdinal's lability and client's exclusive remoty for any claim ectains, whether beand in contract or tart, shall be limited to the amount paid by client for enabyeas. All claims, including those for negligance and or contract or tart, shall be limited to the amount paid by client for enabyeas. All claims, including those for negligance and or consequential damagnet including, without included, behavior including, without included by client, bus accounts of profits incurred by client, by subsidiaries, difficults or aucressors triving and of or related to the performance or the sandess hereundar by Cordinal, reported so of whether such critical houses one was filled above. The proof in the bear quite to the performance or the sandess hereundar by client, bus accounts the performance of Cordinal Laboratories.

Clay D. Kinn





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876 Reported:

25-Jul-12 10:20

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spilce	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Rosult	%REC	Limite	RPD	Limit	Notes
Batch 2072403 - Volatiles	· · · · · · · · · · · · · · · · · · ·									
Blank (2072403-BLK1)				Prepared &	Analyzed:	24-Jul-12				
Benzene	ND	0,050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0,050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0519		mg/kg	0.0570		104	89.4-126			
LCS (2072403-BS1)				Prepared &	Analyzed:	24-Jul-12				
Benzene	1.87	0.050	mg/kg	2.00		93.6	80.7-116			
Toluene	1,91	0.050	mg/kg	2.00		95.5	89.7-121			
Ethylbenzene	1.97	0.050	mg/kg	2.00		98.4	91.4-124			
Total Xylenes	6.00	0.150	mg/kg	6,00		100	93.4-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0525		mg/kg	0.05:20		105	89.4-126			
LCS Dup (2072403-BSD1)				Prepared &	Analyzed:	24-Jul-12				
Benzene	1.83	0,050	rng/kg	2,00		91.7	80,7-116	2.04	16.4	
Toluene	1,83	0.050	mg/kg	2.00		91.7	89.7-121	4.10	16.6	
Ethylbenzens	1.87	0.050	rng/kg	2.0()		93.4	91.4-124	5.17	16.1	
Total Xylenes	5.64	0.150	rng/kg	6.00		94.0	93.4-130	6.27	15.8	
Surrogate: 4-Bromofluorobenzene (PID)	0,0517		mg/kg	0.0500		103	89.1-126			

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Uability and Compass. Condent's backluster remotely for any claim arising, whether beand in contract or bur, shall be limited to the amount paid by clear for insulyase. All claims, including those for negligance and any other cause whatesover shall be decreased waived unless made in vertical and received by Cardinal widths 16th; (20) days after completed in if the applicable service. In no owner, shall Cardinal be labele for inclosing, whether the contract of the services intervance of the services laterature by Cardinal, reportions such including, whither such claims in based upon any of the above stated reasons or otherwise. Assets release only to the sumpless between the contractions of whither such claims is based upon any of the above stated reasons or otherwise. Assets release only to the sumpless between the contract above the samples therefore the samples therefore above the samples therefore the contract of the services harmonic or of the samples therefore the samples therefore the contract of the services harmonic or of the samples therefore the samples the samples the samples the samples therefore the samples the samples the

Celeg & Kenna





Notes and Definitions

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 SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wer) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Liability and Disseque. Cardinal's lability and client's exclusive remote for any claim arising, whether begold in contract or text, shall be limited to the amount paid by client for analyses. All claims, including those for negligence are any other cause whitmener shall be desired velved unless made in verticing and received by Cardinal within 99th (20) days after course whitmener shall be desired velved unless made in verticing and received by Cardinal within 99th (20) days after course whitmeners and the applicable services. In no event shall Cardinal be liable for including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its applicables or successors entiring out or related to the performance of the services hereunder by Cardinal, reported to the course of the services hereunder by Cardinal, reported to the course of the services hereunder by Cardinal, reported to the course of the services hereunder by Cardinal, reported to the course of the services hereunder by Cardinal, reported to the course of the services hereunder by Cardinal, reported to the course of the services hereunder by Cardinal, reported to the course of the services hereunder by Cardinal, reported to the course of the services of the services hereunder by Cardinal, reported to the services of the services hereunder by Cardinal, reported to the services of the services here and the services here and the services are services and the services here are services and the services are services and the services are services and the services are services are services and the services are services are services and the services are services.

Clay D. Kenne



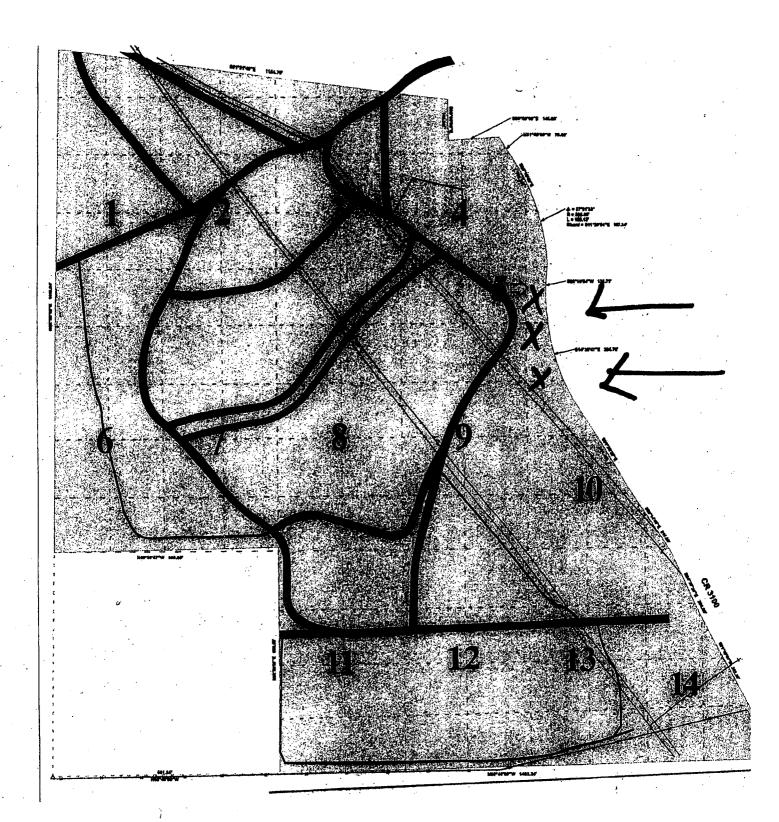
2) Ship samples promptly following collection. 1) Ensure proper coolsing packaging. Project Name: NOTES: FAX Number Phone Number

	•			
		1		•
	- 1			
	1			
				è
۰		٩	ì	ı
		i	ı	ł
		ż	ŀ	ł
	2	8	i	ţ
	41111	•	ŀ	ı
	RECORD	٦	۱	ł
		è	ľ	ł
		ζ	į	ſ
	· (: .	J	ì	l
•	_	•		Ļ
	T+	٦	ı	ľ
	1	ď	ŀ	Ł
	100	J	ı	ľ
	\sim	٠,		ı
		٠	ľ	ľ
				l
	N :		j	ľ
		٩	ì	I
	7.		Ì	ŀ
		٤	į	ı
	1	3	ł	ŀ
		۱	Ļ	ŀ
		ŧ	۶	ľ
			ŀ	r
	7.	•		ŀ
		4	t	ł
•	-	7	۱	ł.
	~ >	١	å	۱
	J.	ï	d	Ŀ
	نكندو	ı	Š	l.
	-)	ì	ſ
		:	Ü	1
	T	٦	í	ŀ
		i	ļ	ı
			Ī	ŀ
	74		4	l
	ښينا	d	l	ı
•		ċ	ï	Ŀ
	D HO	1	١	ľ
	•	d	Ċ	i
		ď		ı
	-		ė	ļ
	_	1	í	ì
	Media	á	ŧ	t

3 = Soit/Sediment, 4 = Rinsate, 5 = Oil 1 = Surface Water, 2 = Ground Water Table 1. - Mateix Type 6 = Waste, 7 = Other (Specify) Samplers Signature:

Lab Name: Green Analytical Laboratories	lytical Laboraton	ies ies	2 (076)	(970) 247 4220	FAX	(970) 2	FAX (970) 247-4227	2		•	Ā	Analyses Required	Requ	irred				
Address 75 Suitle 3	75 Suitle Street, Durango, CO	CO 81303	3	MAM	www.greenanalytical.com	malytic	al.cor	n					desp.	,	- Print			
	Coffection		Misce	Miscellaneous		H.	Preservative(s)	(\$)							(
a h) (1	į	Collecced by: (Init;] PageT xive v T sideT mor?	emojetnozila eM	Simple Fiftered J Y/N Unprecessed (Ica-Only)	нава	¥ 08 3.H 12.H	HOYN	Oilet (Specify)	736) 377	رويا ١٨٠	TAPLE DATES						
	TIME IS	₩ O II	K				-		-	``> `>	>	>			-	-	2	1
2p. lo 1.⊄				•					*	•	-45	7					J	
14: 10 CO3	`&`	1 23							*	>	`	7			****			}
(2)	*	0/2					-		-	<u>د</u> د	h							
14. C.	P-3									*								T
461,0 755	10:5	90						102 X	Ž	>	Z	,						T
7.file 116.i	9:4	98							•	7	Ż	7						
89:16 79 D		N.K										2						
1 5 L 3 ! ! D's	2	0 8.00							***	1	Ž	X						Γ

* Sauple Reject [] Return [] Dispose +]





INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 860

AZTEC NM, 87410

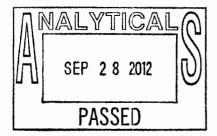
Project Manager: MARCELLA MARQUEZ

28-Sep-12 12:36

Fax To: (505) 632-1876

PILE 815 H202330-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Labora	ories					
Inorganic Compounds									
Chloride	16.0	16.0	mg/kg	4	2092803	НМ	28-Sep-12	4500-C1-B	
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	1	2092601	MS	26-Sep-12	8015M	
DRO >C10-C28	17.4	10.0	mg/kg	1	2092601	MS	26-Sep-12	8015M	
Surrogate: 1-Chlorooctane		89.4 %	65.2	-140	2092601	MS	26-Sep-12	8015M	
Surrogate: 1-Chlorooctadecane		94.4 %	63.6	-154	2092601	MS	26-Sep-12	8015M	
Volatile Organic Compounds by EPA M	lethod 8021								
Benzene*	ND	0.050	mg/kg	50	2092605	AP	26-Sep-12	8021B	
Toluene*	ND	0.050	mg/kg	50	2092605	AP	26-Sep-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	50	2092605	AP	26-Sep-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	50	2092605	AP	26-Sep-12	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		101 %	89.5	-126	2092605	AP	26-Sep-12	8021B	



Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine



September 28, 2012

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 09/25/12 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Reported:

28-Sep-12 12:36

Fax To: (505) 632-1876

Sample ID	Laboratory ID	Matrix	Date :Sampled	Date Received
PILE 563	H202330-01	Soil	24-Sep-12 10:10	25-Sep-12 10:30
PILE 752	H202330-02	Soil	24-Sep-12 10:30	25-Sep-12 10:30
PILE 755	H202330-03	Soil	24-Sep-12 10:35	25-Sep-12 10:30
PILE 761	H202330-04	Soil	24-Sep-12 10:50	25-Sep-12 10:30
PILE 789	H202330-05	Soil	24-Sep-12 11:20	25-Sep-12 10:30
PILE 791	H202330-06	Soil	24-Sep-12 11:35	25-Sep-12 10:30
PILE 792	H202330-07	Soil	24-Sep-12 11:50	25-Sep-12 10:30
PILE 795	H202330-08	Soil	24-Sep-12 13:15	25-Sep-12 10:30
PILE 814	H202330-09	Soil	24-Sep-12 13:30	25-Sep-12 10:30
PILE 815	H202330-10	Soil	24-Sep-12 13:55	25-Sep-12 10:30

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTTE: Liability and Desrague. Confands fability and cleants exclusive remody for any claim arising, whether beautif in contract or text, shall be limited to the amount paid by cleant for analyses. All claims, including those for negligence and any other cause whatcomer shall be decreased watered unless made in writing and received by Cardinal within lifety (20) days after completion of the applicable services. In no event shall Cardinal be lable for incidental or consequential decreases including, without influence, business interrustions, loss of use, or loss of profits incurred by Clarch, to subsidiaries, efficience accessors arising out of or related to the performance of the services hereunder by Cardinal, requireless of whisther such claim is based upon any of the above stated nearous or otherwise. Results values only to the survices between control of claims is based upon any of the above stated nearous or otherwise. Results values only to the survices between control of claims is based upon any of the above stated nearous or otherwise. Results values only to the survices between the control of claims in the control of cardinal Laboratories.

Celey D. Keine





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 860

TOJECCINGINDEL 600

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 28-Sep-12 12:36

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2092803 - 1:4 DI Water										
Blank (2092803-BLK1)				Prepared &	Analyzed:	28-Sep-12				
Chloride	ND	16.0	mg/kg			,				
LCS (2092803-BS1)				Prepared &	Analyzed:	28-Sep-12				
Chloride	400	16.0	mg/kg	400		100	80-120			
LCS Dup (2092803-BSD1)				Prepared &	Analyzed:	28-Sep-12				
Chloride	400	16.0	mg/kg	400		100	80-120	0.00	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Dameges. Cardinal's Sability and client's exclusive remarkly for any claim arising, whether based in contract or tart, shall be limited to the amount paid by client for analyses. All clients, including those for negligance are any other cause whatevower shall be deserved velocity unless mode in writing and received by Cardinal within thirty (20) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential classages including, without intelligent, business interruptions, base or tose, or boss of profits incurred by client, its automaticates, writings or successors arising out of or relatest to the performance of the services hermanism by Cardinal, repartitions of whether sucles in a based upon any of this shows stated measons or otherwise. Results related only to the samples (destribed shows. This report half not be reproduced except in fail with written approved of Cardinal Luboratories.

Celey D. Keine



%REC



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

50 I

AZTEC NM, 87410

Project: JFJ

Project Number: 860

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 63:2-1876

Reported:

28-Sep-12 12:36

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Limit	Units	Leve	Result	%REC	Limits	RPD	Limit	Notes
Batch 2092601 - General Prep - Orga	inics							· · · · · · · · · · · · · · · · · · ·		
Blank (2092601-BLK1)				Prepare i &	k Analyzed:	26-Sep-12				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	45.9		mg/kg	50.0		91.7	65.2-140			
Surrogate: 1-Chlorooctadecane	47.8		mg/kg	50.5		94.7	63.6-154			
LCS (2092601-BS1)				Prepare i &	Analyzed:	26-Sep-12				
GRO C6-C10	190	10,0	mg/kg	200		95.1	66,4-124	.,	23.4	
DRO >C10-C28	192	10.0	mg/kg	200		95.8	61.6-132		23.1	
Surrogate: 1-Chlorooctane	46.5		mg/kg	50.0		92.9	65.2-140			
Surrogate: 1-Chlorooctadecane	45.6		mg/kg	50.5		90. 3	63.6-154			
LCS Dup (2092601-BSD1)				Prepared &	k Analyzed:	26-Sep-12				
GRO C6-C10	178	10.0	mg/kg	200		88.8	66.4-124	6.93	23,4	
DRO >C10-C28	158	10.0	mg/kg	200		79.1	61.6-132	19.1	23.1	
Surrogate: 1-Chlorooctane	13.1		mg/kg	50.0		86.8	65.2-140			
Surrogate: 1-Chlorooctadecane	41.7		mg/kg	50.5		82.6	63.6-154			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Dameges. Curdinal's Bability and cleants exchanter contact or sort, whether based in contract or test, shall be Binitud to the amount peld by cleant for analyses. All dalers, including those for negligance and any other course unbassorer shall be deemed watered unbass made in vesting and received by Curdinal vestin tisty (33) days after completed or the applicable service. In no event shall Curdinal be labele for includental or consequential damages without Relation, business interruptions, loss of use, or loss of profits incurred by cleant, a substitution of successors relating or rulated to the performance of the services harvander by Circlinal, regardless of whether succident to based upon any of the above stated research or otherwise, Results relation on the services interruptions, loss of the services interruptions.

Celey D. Keine





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 860

28-Sep-12 12:36

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2092605 - Volatiles				*,*						
Blank (2092605-BLK1)				Prepared &	: Analyzed:	26-Sep-12				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0500		100	89.5-126			
LCS (2092605-BS1)	÷			Prepared &	Analyzed:	26-Sep-12				
Benzene	1.70	0.050	mg/kg	2.00		85.2	80.7-116			
Toluene	1.88	0.050	mg/kg	2.00		94.0	89.7-121			
Ethylbenzene	1.87	0.050	mg/kg	2.00		93.4	91.4-124			
Total Xylenes	5.67	0.150	mg/kg	6.00		94.6	93.4-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0500		99.6	89.5-126			
LCS Dup (2092605-BSD1)				Prepared &	Analyzed:	26-Sep-12				
Benzene	2.03	0.050	mg/kg	2.00		102	80.7-116	17.7	16.4	
Toluene	2.25	0.050	mg/kg	2,00		112	89.7-121	17.9	16.6	
Ethylbenzene	2.23	0.050	mg/kg	2.00		111	91.4-124	17.6	16.1	
Total Xylenes	6.76	0.150	mg/kg	6.00		113	93.4-130	17.5	15.8	
Surrogate: 4-Bromosluorobenzene (PID)	0.0498		mg/kg	0.0500		99.6	89.5-126			

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Uability and Damages. Curdinal's tability and client's explaints considered in contract or tart, shall be finited to the amount poid by cherk for analyses. All clients, including those for nephysicism and other cause whistopower shall be deemed welved unless made in writing and received by Cardinal within theiry (20) days after completion of the applicable service. In no event shall Cardinal be labele for including, without limitators, business interruptions, toking of use, or loss of profits incurred by claims, as substantials, self-less of accessors arising out of or related to the performance of the services hermander by Cardinal, reportdess of whether auch

Celey D. Keine





Notes and Definitions

	Samples reported on an as received basis (wet) unless otherwise pohed on repor
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
***	Insufficient time to reach temperature.
**	Samples not received at proper temperature of 6°C or below.
RPD	Relative Percent Difference
ND	Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Uability and Damages. Cardinal's labelity and client's exclusive remedy for any claim arising, whether based in contract of text, shall be limited to the amount petit by client for analyses. All claims, including those for negligence an any other course whitehouse shall be deemed neived unless made in verting and marked by Cardinal within thirty (20) days after coordisation of the applicable service. In no event shall Cardinal be state for incidental or consequential demanges including, without incidents, without protection, without incidents, without protection, business interruptions, loss of use, or loss of profits incurred by client, is autoidated, affiliates or successors shall perform a provided contract of the services hereunder by Cardinal, regardless of whether successors shall perform approved to Cardinal Listoproteories.

Celing D. Keene

FOR GAL UNE DINLY GAL JOB # Community Citorite 3 = Soil/Sediment, 4 = Rinsate, 5 = Oil 1 = Surface Water, 2 = Ground Water Table 1. - Matrix Type 6 = Waste, 7 = Other (Specify) Analyses Required Samplers Signature: CHAIN OF CUSTODY RECORD Other (Specify) 2) Ship samples promptly following collection. HOYN Preservative(s) www.greenanalytical.com (970) 247-4220 FAX (970) 247-4227 3) Designate Sample Reject Disposition. **POSCH** 1) Edsure proper container packaging. EONH Project Name: Z Miscellaneous **entynotes** eqqT xiusM I sidaT morT 75 Suttle Street, Imrango, CO 81303 10:50 10:30 0,0 11:20 11:50 11:35 10:35 7.55 .. 30 Time .. S Green Analytical Laboratories Collection E/12/150 Date Chart New Stria 563 Contact: M. Correct 153 100 FAX Number: 50 5-H10230 الحا Sample ID Phone Number: Lab Name. Address: のもりのしゃな

艺艺

slimplished by:

Sample Reject [] Return [] Dispose [] Store (30 Days)

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

John Bemis Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey Division Director Oil Conservation Division



October 1, 2012

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm - Permit # NM1-010-B

Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) email request, dated October 1, 2012, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized to build up the area along the eastern boundary of and within the existing permitted facility property, located in NW/4 SE/4 of Section 2, Township 29 North, Range 12 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

Pile # 13

Pile # 14

Pile # 603

Pile # 790

Pile # 765

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations specified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse;

Oil Conservation Division

- 3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface water, and protects human health and the environment; and
- 4. If JFJ reuses the remediated soils within the surface waste management facility permitted boundary, as proposed and considered in this approval, at closure JFJ shall comply with Conditions 2d and 2f of the Closure section of your February 3, 2004 surface waste management facility permit (NM1-010-B).

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey Director

JB/baj

cc: OCD District III Office, Aztec

Jami Galy

Jones, Brad A., EMNRD

From:

Marcella Marquez <marcella@industrialecosystems.com>

Sent:

Monday, October 01, 2012 10:45 AM

To:

Jones, Brad A., EMNRD

Subject:

Passed Piles

Attachments:

3902_0001.pdf; 3909_0001.pdf

Importance:

High

Brad:

Attached please find the QA/QI for the analytical reports for each pile along with the map of the area that the soils will be spread.

Please let me know if you have any questions.

Thanks, Marcella Marquez, HSE Administrator Industrial Ecosystems, Inc. Phone: (505) 632-1782 Fax: (505) 632-1876 or (505) 334-1003



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

September 27, 2012

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

This letter is being submitted to you as a request to reuse/recycle treated soils. We are requesting approval to reuse/recycle treated soils within our property boundaries. The treated soils would be utilized to "build up" the East portion of the property (see attached map).

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

- o Pile 13
- o Pile 14
- o Pile 603
- o Pile 765 (06/21/<u>11</u> DRO @ 129, 02/01/<u>12</u> DRO @ <10)
- o Pile 790

Marcella Marquez

Respectfully Submitted,

Marcella Marquez

HSE Administrator

Enclosures-Analytical Reports, Map



July 25, 2012

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 07/20/12 10:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150 **AZTEC NM, 87410** Project: JFJ

Project Number: 701

Project Manager: MARCE_LA MARQUEZ

Fax To: (505) 632-1876

Reported: 25-Jul-12 10:20

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE 13	H201672-01	Soil	19-Jul-12 06:40	20-Jul-12 10:35
PILE 14	H201672-02	Soil	19-Jul-12 07:10	20-Jul-12 10:35
PILE 603	H201672-03	Soil	19 ul-12 07:35	20-Jul-12 10:35
PILE 633	H201672-04	Soil	19 ul-12 07:40	20-Jul-12 10:35
PILE 752	H201672-05	Soil	19-, ul-12 08:20	20-Jul-12 10:35
PILE 755	H201672-06	Soil	19-Jul-12 09:00	20-Jul-12 10:35
PILE 761	H201672-07	Soil	19-Jul-12 09:40	20-Jul-12 10:35
PILE 790	H201672-08	Soil	19-Jul-12 10:15	20-Jul-12 10:35
PILE 791	H201672-09	Soil	19-Jul-12 10:30	20-Jul-12 10:35
PILE 814	H201672-10	Soil	19-Jul-12 11:10	20-Jul-12 10:35

Cardinal Laboratories

*=Accredited Analyte

Celay D. Keine



Reported: 25-Jul-12 10:20



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

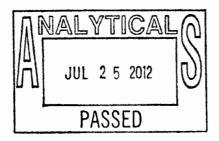
Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

PILE 13 H201672-01 (Soil)

Analyte	Result	Reporting	Units	Dilution	Batch	Amulaurt	Analyzed	Method	Notes
Analyte	Result	Limit	———	Distion	Baten	Analyst	Anatyzeu	MELIO	Notes
		Cardina	l Laborat	ories					
Inorganic Compounds									
Chloride	32.0	16.0	mg/kg	4	2072304	НМ	23-Jul-12	4500-CI-B	
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	i	2072306	MS	23-Jul-12	8015M	
DRO >C10-C28	10.4	10.0	mg/kg	i	2072306	MS	23-Jul-12	8015M	
Surrogate: 1-Chlorooctane		81.7%	65.2	-140	2072306	MS	23-Jul-12	8015M	
Surrogate: 1-Chlorooctadecane		107 %	63.6	-154	2072306	MS	23-Jul-12	8015M	
Volatile Organic Compounds by EPA Meth	od 8021								
Benzene*	ND	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Toluene*	ND	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Ethylbenzene*	· ND	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		101%	89.4	-126	2072403	AP	24-Jul-12	8021B	



Cardinal Laboratories

*=Accredited Analyte

PLEXE MOTE: Uability and Danages. Cardinal's liability and client's enchaine remedy for any claim anusing, whether based in contract or but, shall be limited to the amount paid by deem for analyses. All disms, including those for negligence and any other rouse whatabover that be deemed waved wheter made in writing and received by Cardinal worth thirty (20) days after consequences of the applicable service. In no evert shall be found to be for indicating the services of the performance of the services to transport of the performance of the services to the services to the performance of the services to the services to the performance of the services to the se

Celey D. Keine

Reported:

25-Jul-12 10:20

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

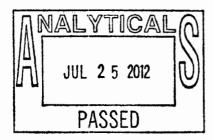
Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

PILE 14 H201672-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories					
Inorganic Compounds									
Chloride	16.0	16.0	mg/kg	4	2072304	HM	23-Jui-12	4500-CI-B	
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	1	2072306	MS	23-Jul-12	8015M	
DRO >C10-C28	ND	10.0	mg/kg	1	2072306	MS	23-Jul-12	8015M	
Surrogate: 1-Chlorooctane		79.6 %	65.2	-140	2072306	MS	23-Jul-12	8015M	
Surrogate: 1-Chlorooctadecane		102 %	63.6	-154	2072306	MS	23-Jul-12	8015M	
Volatile Organic Compounds by EPA Me	thod 8021								
Benzene*	ND	0.050	mg/kg	:0	2072403	AP	24-Jul-12	802 LB	
Toluene*	ND	0.050	mg/kg	:0	2072403	AP	24-Jul-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	.i0	2072403	AP	24-Jul-12	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		104%	89.4	-126	2072403	AP	24-Jul-12	802IB	



Cardinal Laboratories

*=Accredited Analyte

OCENCE NOTE: Uability and Demages. Caronal's labelity and cleant's exclusive ramecy for any claim arising, whiteher bissed in contract or lost shall be finited to the amount paid by cleant for analyses. All cleans, including those for negigence and any other course whitesomer shall be derived waved unless made in vetting and increased by Caronal within thinty. ((ii) days after complete in the acceptable service. In no event shall Caronal be liable for incidental or consequential diarrages, nethod inectation, business interruptions, loss of use, or loss of prefix increased by cleans, and the contract of the services hereunder by Caronal, regardless of whether such clean is based upon any of the above stated reasons or otherwise. Massive states only to the samples denoted above. This report shall not be reproduced except in full with written approval of Caronal Laboratories.

Celeg D. Keene

Reported:

25-Jul-12 10:20



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

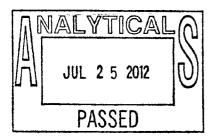
Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

PILE 603

H201672-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories			,		
Inorganic Compounds									
Chloride	32.0	16.0	mg/kg	4	2072304	НМ	23-Jul-12	4500-Cl-B	
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	1	2072306	MS	23-Jul-12	8015M	
DRO >C10-C28	ND	10.0	mg/kg	1	2072306	MS	23-Jul-12	8015M	
Surrogate: 1-Chloroociane		81.6%	65.2	-140	2072306	MS	23-Jul-12	8015M	
Surrogate: 1-Chlorooctadecane		103 %	63.6	-154	2072306	MS	23-Jul-12	8015M	
Volatile Organic Compounds by EPA M	lethod 8021						****		
Benzene*	0.050	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Toluene*	0.071	0.050	mg/kg	50	2072403	ΑP	24-Jul-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Surrogate: 4-Bromofluorohenzene (PID)		102 %	89.4	1-126	2072403	AP	24-Jul-12	8021B	



Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usblifty and Demagos. Cardinal's liability and client's exclusive ramedy for any claim arising, whether based in contract or bort, shall be finned to the amount paid by client for analysis. All claims, including those for negligence and any other cause whethershore shall be deemed waitered unless makes in writing and received by Cardinal widths thirty (20) days after controlection of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without interest by cardinal, loss of use, or keep or loss of or related to the performance of the services hereunder by Cardinal, regardess of whether such claims to be support that not be reproduced except in NA with written approval of Cardinal Laboratores.

Celecy D. Keens

Reported:

25-Jul-12 10:20

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JF3

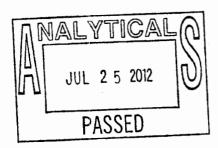
Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

PILE 790 H201672-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	i Laborat	ories					
Inorganic Compounds									
Chloride	32.0	16.0	mg/kg	4	2072304	НМ	23-Jul-12	4500-CI-B	
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	1	2072306	MS	24-Jul-12	8015M	
DRO >C10-C28	17.6	10.0	mg/kg	1	2072306	MS	24-Jul-12	8015M	
Surmgate: 1-Chlorooctane		84.8 %	65.2	-140	2072306	MS	24-Jul-12	8015M	
Surrogate: 1-Chlorooctadecane		109 %	63.6	-154	2072306	MS	24-Jul-12	8015M	
Volatile Organic Compounds by EPA	Method 8021								
Benzene*	ND	0.050	mg/kg	50	2072403	ΑP	24-Jul-12	8021B	
Toluene*	ND	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	50	2072403	AP	24-Jul-12	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		100 %	89.4	1-126	2072403	ΑP	24-Jul-12	8021B	



Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

25-Jul-12 10:20

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2072304 - 1:4 DI Water										
Blank (2072304-BLK1)				Prepared &	Analyzed:	23-Jul-12				
Chloride	ND	16.0	mg/kg							
LCS (2072304-BS1)				Prepared &	: Analyzed:	23-Jul-12				
Chloride	432	16,0	mg/kg	400		108	80-120			
LCS Dup (2072304-BSD1)				Prepared &	: Analyzed:	23-Jul-12				
Chloride	432	16.0	mg/kg	400		108	80-120	0,00	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NUTE: Liability and Damagés. Cardinal's liability and clienth suckulary armody for any claim arising, whether based in contract or tort, shall be limited to the amount palls by client for analyses. All claims, including those for negligence and any other cause whethere tails be deemed walved unless made in veiting and received by Cardinal within thirty (20) days after completen of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by claims, a subsidiaries, attitudes or uncessor serving out or or related to the performance of this services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated measure or otherwise. Results relate only to the samples identified shows. This application that find the regretated strength is figure to the performance or otherwise. Results relate only to the samples identified shows. This application that find the regretated strength is figure.

aleg & Keine





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876 Reported:

25-Jul-12 10:20

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spi ce Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2072306 - General Prep - Organics										
Blank (2072306-BLK1)		-		Prepared &	Analyzed:	23-Jul-12				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	38.6		mg/kg	50.0		77.2	65.2-140			
Surrogate: 1-Chloroociadecane	51.3		mg∕kg	50.0		103	63.6-154			
LCS (2072306-BS1)				Prepared &	Analyzed:	23-Jul-12				
GRO C6-C10	169	10.0	mg/kg	20()		84.3	66.4-124		23.4	
DRO >C10-C28	181	10.0	mg/kg	200		90.4	61.6-132		23.1	
Surrogate: 1-Chlorooctane	42.7		mg/kg	50.7		85.4	65.2-140			
Surrogate: 1-Chlorooctadecane	54.7		mg/kg	50.7		109	63.6-154			
LCS Dup (2072306-BSD1)				Prepared &	Analyzed:	23-Jul-12				
GRO C6-C10	174	10.0	mg/kg	200		87.1	66.4-124	3.19	23.4	
DRO >C10-C28	180	10.0	mg/kg	200		89.8	61.6-132	0.622	23.1	
Surrogate: 1-Chlorooctane	44.4		mg/kg	50.0		88.8	65.2-140			
Surrogate: 1-Chlorooctadecane	55.1		rng/kg	50.17		110	63.6-154			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Demages. Cardinal's Sabbitsy and clients exclusive remedy for any claim arising, whether based in contract or lar, shall be limited to the amount paid by client, for snelyess. All clients, including those for nepligence and any other cause wheteover shall be deemed welved unless made in writing and received by Cardinal within thirty (30) days other couplets or of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its actualdance, administrator out on the performance of the services hereunder by Cardinal, reported on whether such claim is based upon any of the above stated measure or otherwise. Results related only to the semples identified above. This reported of control of control informations.

Celey & Kuna





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 701

Project Manager: MARCELLA MARQUEZ Fax To: (505) 632-1876

Reported:

25-Jul-12 10:20

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2072403 - Volatiles	· · · · · · · · · · · · · · · · · · ·									
Blank (2072403-BLK1)				Prepared &	Analyzed:	24-Jul-12				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0,150	mg/kg			1				
Surrogate: 4-Bromofluorobenzene (PID)	0.0519		mg/kg	0.0500		104	89.4-126			
LCS (2072403-BS1)				Prepared &	Analyzed:	24-Jul-12				
Benzene	1.87	0.050	mg/kg	2.00		93.6	80.7-116			
Toluene	1.91	0.050	mg/kg	2.00		95.5	89.7-121			
Ethylbenzene	1.97	0.050	mg/kg	2.00		98.4	91.4-124			
Total Xylenes	6.00	0.150	mg/kg	6.00		100	93.4-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0525		tng/kg	0.0500		103	89.4-126			
LCS Dup (2072403-BSD1)				Prepared &	Analyzed:	24-Jul-12				
Benzene	1.83	0.050	mg/kg	2.00		91.7	80.7-116	2.04	16.4	
Toluene	1.83	0.050	mg/kg	2.00		91.7	89.7-121	4.10	16.6	
Ethylbenzene	1.87	0.050	mg/kg	2.00		93.4	91.4-124	5.17	16.1	
Total Xylenes	5,64	0,150	mg/kg	6.00		94.0	93.4-130	6.27	15.8	
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	89.4-126			-

Cardinal Laboratories

*=Accredited Analyte

Celay & Keine





Notes and Definitions

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usbling and Dumages. Cardinal's Bability and client's exclusive remoney for any claim shaling, whether leaded in contract or text, shall be limited to the amount paid by client for enalyses. All claims, including those for negligance any copy country cause vehaclosers shall be desired wathed without writing and received by Cardinal valids whithy (30) days after completion of the applicable service. In no avent shall Cardinal be Sable for Indidensal or consequential demanages including, without initiation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, particular out of or related to the performance of the services hereunder by Cardinal, inspections of whether such claims is based upon any of the above stated reasons or otherwise. Results related only the services descript in All is this witten approval of Cardinal Libertatries.

Celey D. Keena



Phone Number: FAX Number:

CHAIN OF CUSTODY RECORD

Table 1. - Matrix Type

FOR GAL USE ONLY GAL JOB#

> 3 = Soil/Sediment, 4 = Rinsate, 5 = Oil 1 = Surface Water, 2 = Ground Water 6 = Waste, 7 = Other (Specify)

2) Ship samples promptly following collection. 1) Ensure proper container packaging.

3) Designate Sample Reject Disposition.

Project Name:

Samplers Signature:

			Commutents	I CE ON 108	J									7		
			\$	2										子グイ	1/6//	110011
Analyses Required																
Analys			(हार्य श्रीहरू स्वाकाका	`.	1	1/1	<u>د</u> د	ī,	ング	11/1	アクレ	× ×	100	2	1 600	0 " 1
			Other (Specify)	>	3		\	5	\	Š		Ž	\		77	9 9
4227	com	itive(s)	NOAH H2SO4											Reprived	Referred by	UL
FAX (970) 247-4227	www.greenanalytical.com	Preservative(s)	HCF HM Ö 3											の変	This Co	•
. :	greenar.		Sample Filtered (1 Y/N Unpreserved (1 cc Only)											P.	1 2 Z	
(970) 247-4220	WWW	Miscellaneous	No. of Containers	Ų	•		-						>	C (b) (1-12)	
(970)	13	Misc	Collected by: (Init.) Matrix Type Promote 1	$\Gamma \nabla \Gamma$,,								> >	(L)) due g	Davel
tatories	75 Suttle Street, Durango, CO 81303	ction	Time	1.40	7:12	7.35	7.40	6.3	9.90	04:6	10.15	10:30	07:11	1		L 1 Store (30)
lytical Labor	Street, Duran	Collection	Date	11/11/13										100	0	1 Dienoce
Lab Name: Green Analytical Laboratories	Address: 75 Suffle S		Sample ID 1900 1672	p: 6 13	\$p: 0 14	1.10 603	49:16 622	0.10 752	43, 755	7Pile 16	1.p. 1.d.	16 7 9 1.0%	418 00/1/00	Relinquished by:	Relinquished by:	Comple Daison F. Destine F. Diensch L. 1-Core (34) Davel



June 28, 2011

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

RECEIVED

Enclosed are the results of analyses for samples received by the laboratory on 06/22/11 10:30.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method 5W-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410**

Fax To: (505) 632-1875

Received:

06/22/2011

Reported: Project Name: 06/28/2011

Project Number:

JFJ

Project Location:

9780

NOT GIVEN

Sampling Date:

06/21/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: (PILE 765)(H101287-05)

STEX \$2608

Analyzed By: CMS

Analyte	A b								
Averyce	Result	Reporting Limit	Analyzed	Method Bank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.050	0.050	06/24/2011	ND	2.10	105	2.00	21.9	
Toluene*	0.274	0.050	06/24/2011	ND	2.01	101	2.00	20.1	
Ethylbenzene*	0.078	0.050	06/24/2011	ND	1.94	97.2	2.00	23.2	
Total Xylenes*	0.721	0.150	06/24/2011	ND	5.B4	97. 4	6.00	24.8	

Surrogate: Dibromofluoromethane

82.8 %

80-120

'urrogate: Toluene-d8

96.8 %

80-120 80-120

Surrogate: 4-Bromofluorobenzene Chloude SMATROCL D

108 %

Chloride, SM4500CI-B	mg	/kg	Analyze	d By; HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/22/2011	ND	448	112	400	0.00	
TPH 8015M	PH 8015M mg/kg		Analyzed By: ab			·			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/24/2011	ND	171	85.4	200	5.18	
DRO >C10-C28	129	10.0	06/24/2011	ND	170	85.1	200	5.11	
Surrogate: 1-Chlorooctane	105	% 70-130)						

Surrogate: 1-Chlorooctadecane

119 %

70-130

Cardinal Laboratories

*=Accredited Analyte

alex & Kime







Notes and Definitions

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 SM4500Cl-8 does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Denogra. Cardinal's leptity and cleants exclusive namedy for any claim arising, whether beard in contract or taxt, shall be limited to the amount pold by client for analyses. All claims, including these for negleponce and any other cause whitesower shall be deemed velved unless in writing and received by Cardinal within tiety (20) days after completen of the applicable service. In no event shall Cardinal be lettle for including, without lampletes, business interruptions, lose of use, or loss of use, or loss of profiles including, without lampletes, business interruptions, lose of use, or loss of use, or loss of profiles accordance to the services strains on the performance and the services of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services of the services have not used to the performance of the services and the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services have not used to the performance of the services of the services have not used to the performance of the services of the services have not used to the performance of the services of the services have not used to the performance of the services of

Clay D. Kins



7.50 J. 30	FORCELLING COREY GALL TOB #	Maker	27		Ø€ (1) Commente				
CORD	Table 1, - Matrix Type 1 = Surface Water, 2 = Ground Water 3 = Sold/Sediment, 4 = Rhouse, 5 = On	6= Waste, 7=Other (Specify) Samplers Signature:		Analyses Required	1980 8015M 6R0 8015M 8168 8015M 8167 300.				Margary Bell
CHAIN OF CUSTODY RECORD	Entains proper canadiver packaging. Ship samples premptly following collection. Medianate Sanule Release Proceeding.				Miscolaria Type Tho a Table 1 An of Continuera Sample Friend 7 VA HCL HCL Another (Specify)	2 7 W			Bright Trist Person
alytical coacortes	3 NO 2 D	-1087 1896	Erreen Analytical Establishmen	75 Suttle Street, Durango, CO 81303	Collected by: (thit)	0 4 21 1 1 25 C		78.11	U. B. A. Control (30 Days)
	Someth Marcella Mange 4G Ca 31 Marce 11 M P	Phone Number (633)	Lab Name Green Anak		Classical Control of the Control of	1. # 536 # 1536	16 # 747 16 # 7147	16. X 7165	A Sample Reject [] Rotury



February 9, 2012

Marcella Marquez Industrial Ecosystems 49 CR 3150 Aztec, NM 87410

Re: JFJ 10309

Enclosed are the results of analyses for samples received by the laboratory on 02/02/12 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 www.tceq.texas.gov/field/qa/lab accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.2

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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.

Thank you,

Celev D/Reene

Laboratory Director/Quality Manager



CHAIN OF CUSTODY RECORD

GAL JOB#

FOR GAL USE ONLY

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil 1 = Surface Water, 2 = Ground Water Table 1. - Matrix Type 6 = Waste, 7 = Other (Specify)

2) Ship samples promptly following collection.

1) Ensure proper container packaging.

Samplers Signature:	Project Name:
6 = Waste, 7 = Other (Specify)	PO# 10309
3 = Soil/Sediment, 4 = Rinsate,	3) Designate Sample Reject Disposition.

FAX Number: 505-639-

Phone Number:

	Comments										13	11/2 Times do	76# 21/B/B
Analyses Required	18K 805	10 8 5	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ノノノノ	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<i>></i>	ノくくく	777	ンシン	May (1) 800 M	Clare 1	godi stinson
Lab Name: Green Analytical Laboratories (970) 247-4220 FAX (970) 247-4227 Address: 75 Suttle Street, Durango, CO 81303 Miscellaneous Preservative(s)	904	7 Ргог	022 1 74 7:50 1 1 1 03.50 03. 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8.35	05 5. v. 765 9:10	00 6. 11 770 A:40 1 10 10 10 10 10 10 10 10 10 10 10 10	00 2 1 July 10:36	S 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 % 1, 7X4 11:10 W W	(0 10 79.3 1 11:40 1 1.	Kehnquished by Control of The 110 Received by	Kelinjon purple of The Dail III They on beer the the	* Sample Reject Return Dispose [A] Store (30 Days)



ANALYTICAL RESULTS FOR INDUSTRIAL ECOSYSTEMS ATTN: MARCELLA MARQUEZ 49 CR 3150 AZTEC, NM 87410

Receiving Date: 02/02/12 Reporting Date: 02/08/12 Project Owner: NOT GIVEN

Project Name: JFJ 10309
Project Location: NOT GIVEN

Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

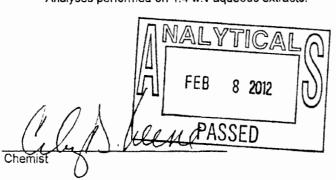
Sample Received By: JH

Analyzed By: MS

	GRO	DRO
	$(C_{6}-C_{10})$	(>C ₁₀ -C ₂₈)
LAB NUMBER SAMPLE ID	(mg/kg)	(mg/kg)

ANALYSIS DATE	02/03/12	02/03/12
H200256-05 PILE 765	<10.0	<10.0
01.		
Quality Control	203	244
True Value QC	200	200
% Recovery	102	122
Relative Percent Difference	20.1	24.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Std. Methods 4500-CFB *Analyses performed on 1:4 w:v aqueous extracts.

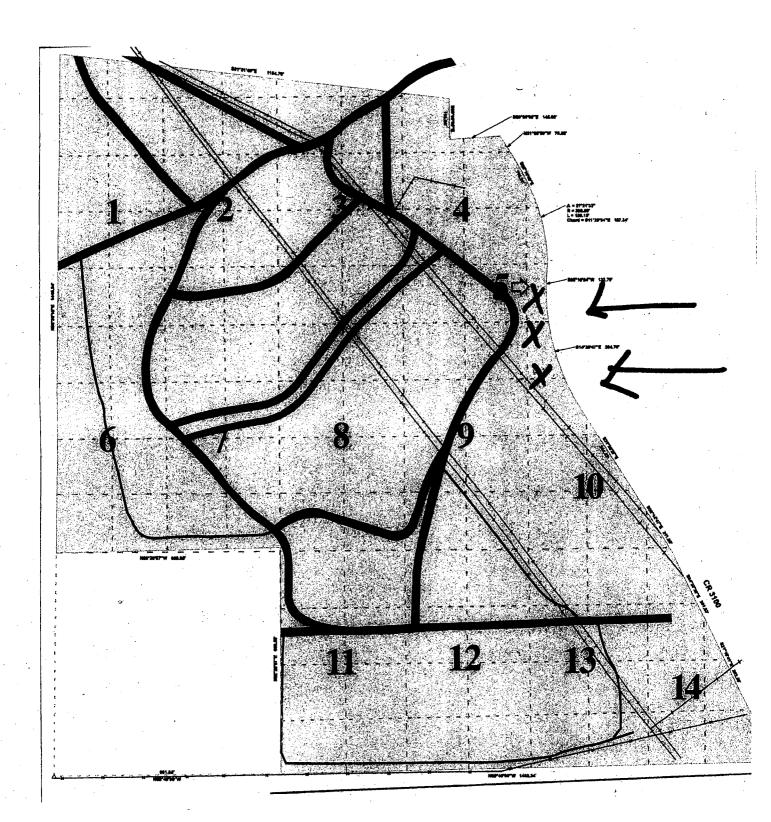


Date

H200256TCL IEI

1

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount peid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, difficients or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such 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.



State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

John Bemis Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



July 2, 2012

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm - Permit # NM1-010-B

Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) request, dated June 5, 2012 and the clarification email of June 28, 2012, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized to level the area along the eastern boundary of and within the existing permitted facility property, located in NW/4 SE/4 of Section 2, Township 29 North, Range 12 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

Pile # 9 Pile # 18

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations specified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse;

Ms. Marquez JFJ Landfarm, LLC Permit NM1-010-B July 2, 2012 Page 2 of 2

- 3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface water, and protects human health and the environment; and
- 4. If JFJ reuses the remediated soils within the surface waste management facility permitted boundary, as proposed and considered in this approval, at closure JFJ shall comply with Conditions 2d and 2f of the Closure section of your February 3, 2004 surface waste management facility permit (NM1-010-B).

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey Director

JB/baj

cc: OCD District III Office, Aztec

- Bil

Jones, Brad A., EMNRD

From:

Terry <terry@industrialecosystems.com>

Sent:

Thursday, June 28, 2012 3:21 PM

To:

Jones, Brad A., EMNRD; 'Marcella Marquez'; Bailey, Jami, EMNRD

Cc:

Gerholt, Gabrielle, EMNRD; VonGonten, Glenn, EMNRD; AGrankin@hollandhart.com

Subject:

RE: Letter to request reuse of treated soils

Brad,

Treated soils will be spread on property adjacent to our permited facility, both properties owned by JFJ, but not on the permited

property for the landfarm, we will be using the soil to level the property. August 18th 2011 Ms. Marquez and myself had a meeting

with Lt Govenor John Sanchez, Secretary Bemis, Division Director Jami Bailey, at that time it was my understanding that as long as we

had the legal authority of the property we were able to spread remediated soils per NMAC 19.15.36.15.G, with NMOCD Approval!

This is not a request to spread or dispose of remediated soil on the JFJ Permited LandFarm.

Let me know if there are any other questions or concerns?

Terry L. Lattin
Pres/Gm
Industrial Ecosystems Inc
505-860-2885cell
505-632-1782 off
505-632-1876 fx
Terry@industrialecosystems.com

Oil and Gas Feeds my Family and Pays My Taxes!!

Drill Baby Drill !!

From: Jones, Brad A., EMNRD [mailto:brad.a.jones@state.nm.us]

Sent: Thursday, June 28, 2012 2:23 PM **To:** Marcella Marquez; Bailey, Jami, EMNRD

Cc: terry@industrialecosystems.com; Gerholt, Gabrielle, EMNRD; VonGonten, Glenn, EMNRD

Subject: RE: Letter to request reuse of treated soils on facility

Marcella,

OCD's Assistant General Counsel has asked me to pose the following questions, in order to complete her legal analysis. Please provide answers for the following questions:

- 1. What is the purpose of spreading the treated soils on the property?
- 2. The attached map has 2 X's marked on it. Are these the two areas upon which the soil will be spread? Or is the soil being spread between the 2 X's?

Brad

Brad A. Jones

Environmental Engineer Environmental Bureau NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

E-mail: brad.a.jones@state.nm.us

Office: (505) 476-3487 Fax: (505) 476-3462

From: Marcella Marquez [mailto:marcella@industrialecosystems.com]

Sent: Wednesday, June 27, 2012 9:37 AM

To: Jones, Brad A., EMNRD; Bailey, Jami, EMNRD

Cc: terry@industrialecosystems.com

Subject: FW: Letter to request reuse of treated soils on facility

Importance: High

Brad:

Can you please provide me with an update on the status of this request?

Thanks.

Marcella Marquez, HSE Administrator

Industrial Ecosystems, Inc. Phone: (505) 632-1782

Fax: (505) 632-1876 or (505) 334-1003

From: Marcella Marquez [mailto:marcella@industrialecosystems.com]

Sent: Tuesday, June 05, 2012 2:15 PM

To: 'brad.a.jones@state.nm.us'

Cc: 'Terry'

Subject: Letter to request reuse of treated soils on facility

Importance: High

Brad:

Please see attached letter to spread remediated soils, along with the analytical reports and map of area where the soils will be spread.

Thanks, Marcella Marquez Industrial Ecosystems, Inc.

No virus found in this message. Checked by AVG - www.avg.com

Version: 2012.0.2179 / Virus Database: 2437/5098 - Release Date: 06/28/12

Jones, Brad A., EMNRD

From:

Marcella Marquez <marcella@industrialecosystems.com>

Sent:

Tuesday, June 05, 2012 2:15 PM

To:

Jones, Brad A., EMNRD

Cc:

'Terry'

Subject:

Letter to request reuse of treated soils on facility

Attachments:

Letter to request reuse of treated soils on facility.doc; Pile 9.pdf; Pile 18.pdf; 3460_

0001.pdf

Importance:

High

Brad:

Please see attached letter to spread remediated soils, along with the analytical reports and map of area where the soils will be spread.

Thanks, Marcella Marquez Industrial Ecosystems, Inc.



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

July 2, 2012

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re: JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

This letter is being submitted to you as a request to reuse/recycle treated soils. We are requesting approval to reuse/recycle treated soils within our property boundaries. The treated soils would be spread on IEI property (see attached map with X marking the spot).

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

o Pile 9

o Pile 18

Respectfully Submitted,

Marcella Marquez

HSE Administrator

Enclosures-Analytical Reports

marcelea marquez



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 452

17-Apr-12 10:49

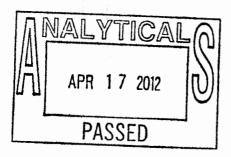
AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

PILE 9 H200825-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories					
Inorganic Compounds				(a					
Chloride	32.0	16.0	mg/kg	4	2041304	AP	16-Apr-12	4500-CI-B	
Organic Compounds									
DRO >C10-C28	56.3	10.0	mg/kg	1	2041208	MS	13-Apr-12	8015M	
Surrogate: 1-Chlorooctane		94.1 %	55.5	-154	2041208	MS	13-Apr-12	8015M	
Surrogate: 1-Chlorooctadecane		118 %	57.6	-158	2041208	MS	13-Apr-12	8015M	



Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients exclusive remedy 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 and any other cause whatsoever shall be deemed welved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, 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 such claims to based upon any of the above stated reasons or otherwise. Results relate only to this samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Liboratories.

Celey D. Keine



April 17, 2012

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 04/11/12 10:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accred certif.html

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 17-Apr-12 10:49

Į.				
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE 9	H200825-01	Soil	10-Apr-12 07:20	11-Apr-12 10:40
PILE 13	H200825-02	Soil	10-Apr-12 07:45	11-Apr-12 10:40
PILE 14	H200825-03	Soil	10-Apr-12 08:20	11-Apr-12 10:40
PILE 18	H200825-04	Soll	10-Apr-12 08:50	11-Apr-12 10:40
PILE 576	H200825-05	Soil	10-Apr-12 09:05	11-Apr-12 10:40
PILE 619	H200825-06	Soil	10-Apr-12 10:05	11-Apr-12 10:40

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usability and Dameges. Cardinal's Bability and client's exclusive remedy for any claim arising, whether based in contract or cort, shall be limited to the amount pold by client for analyses. All claims, including those for negligence and any other clause whetoever shall be deemed valved unless made in writing and received by Cardinal within highly (20) days after completion of the applicable service. In no event shall Cardinal be labels for including, without limitation, business interruptions, loss of use, or loss of profess incurred by client, its subsidiaries, stiffsites or auctensions straining out of or related to the performance of the services harmonized contractions of the services and contractions of the services harmonized contractions of the services and contractions and of the services harmonized contractions.

Celey & Keens

FIFTE FOR MENTE



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Reported: 17-Apr-12 10:49

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spile Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2041304 - General Prep - Wet Chem										
Blank (2041304-BLK1)				Prepared &	Analyzed:	13-Apr-12				
Chloride .	ND	16.0	mg/kg							
LCS (2041304-BS1)				Prepared &	Analyzed:	13-Apr-12				
Chloride	416	16.0	mg/kg	40C		104	80-120			
LCS Dup (2041304-BSD1)				Prepared &	Analyzed:	13-Apr-12				
Chloride	416	16,0	mg/kg	4DC		104	80-120	0.00	20	
Duplicate (2041304-DUP1)	Sou	rce: H200809-	-12	Prepared &	Analyzed:	13-Apr-12				
Chloride	560	16.0	ing/kg		640			13.3	20	
Matrix Spike (2041304-MS1)	Sou	rce: H200809-	-12	Prepared &	Analyzed:	13-Apr-12				
Chloride	912	16.0	mg/kg	400	640	68.0	80-120			QM-0

*=Accredited Analyte Cardinal Laboratories

any other cause whatsoever shall be deemed welved unless made in welting and received by Cardinal within fairty (30) days after completion of the applicable service. In no event shall Cardinal be including, without limited on, bushness interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising cut of or related to the performance of the services hen 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 All with written approved of Cardinal Laboratories.

Celey D. Kuna







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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Reported: 17-Apr-12 10:49

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spiks Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2041204 - General Prep - Organics										
Blank (2041204-BLK1)				Prepared: 1	2-Apr-12 A	nalyzed: 1	4-Apr-12			
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	47.2		mg/kg	50.0		94.5	55.5-154			
Surrogate: 1-Chlorooctadecane	49.5		mg/kg	50.0		99.0	57.6-158			
LCS (2041204-BS1)				Prepared: 1	2-Apr-12 A	nalyzed: 1	4-Apr-12			
GRO C6-C10	191	10.0	mg/kg	200		95.6	63.5-131	· · · · · · · · · · · · · · · · · · ·		
DRO >C10-C28	208	10.0	mg/kg	200		104	52.3-130			
Total TPH C6-C28	399	10.0	mg/kg	400		99,7	62-129			
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		99.9	35.5-154		······································	
Surrogate: 1-Chloroociadecane	47.9		mg/kg	50 .0		95.8	57.6-158			
LCS Dup (2041204-BSD1)				Prepared: 1	2-Apr-12 A	nalyzed: 1	4-Apr-12			
GRO C6-C10	205	10.0	mg/kg	200		102	63.5-131	6.82	13.9	
DRO >C10-C28	216	10.0	mg/kg	200		108	52.3-130	3.99	18.1	
Total TPH C6-C28	421	10.0	mg/kg	400		105	62-129	5.36	16.2	
Surrogate: 1-Chlorooctane	54.9		mg/kg	50.0		110	55.5-154			
Surrogate: 1-Chlorooctadecane	51.7		mg/kg	30.0		103	<i>57.6-158</i>			
Matrix Spike (2041204-MS1)	Sou	rce: H200825-	0\$	Prepared: 1	2-Apr-12 A	Analyzed: 1	4-Apr-12			
GRO C6-C10	190	10.0	mg/kg	200	ND	95.2	46.4-144			
DRO >C10-C28	268	10.0	mg/kg	200	81.7	93.2	33.5-141			
Total TPH C6-C28	459	10.0	mg/kg	400	82.5	94.0	52.7-131			
Surrogate: 1-Chlorooctane	50.7		mg/kg	50.0		101	55.5-154			
Surrogate: 1-Chlorooctadecane	47.6		mg/kg	50.0		95.2	57.6-158			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's Nability and client's exc as interruptions, loss of use, or loss of profits incurred by client, its subsid

Celey D. Keine





INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 17-Apr-12 10:49

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	D la	Reporting	11-4-	Spike	Source	e/pro	%REC	DDD	RPD	Mari
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2041204 - General Prep - Organics				 					·	
Matrix Spike Dup (2041204-MSD1)	Sou	rce: H200825-	05	Prepared: 1	12-Apr-12 A	analyzed: 1	4-Apr-12			
GRO C6-C10	188	10.0	mg/kg	200	ND	94.1	46.4-144	1.23	46.5	
DRO >C10-C28	273	10.0	mg/kg	200	81.7	95.8	33.5-141	2.69	933	
Total TPH C6-C28	461	10.0	mg/kg	400	82.5	94.7	52.7-131	0.733	55,4	
Surrogate: 1-Chlorooctane	50.2		mg/kg	50.0		100	55.5-154			
Surrogote: 1-Chlorooctadecane	49.6		mg/kg	50.0		99,2	57.6-158			
Batch 2041208 - General Prep - Organics										
Blank (2041208-BLK1)				Prepared &	Analyzed:	12-Apr-12	2			
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	58.4		mg/kg	50.0		117	55.5-154			
Surrogate: 1-Chloroociadecane	73.8		mg/kg	50.0		148	57.6-158	-		
LCS (2041208-BS1)				Prepare i &	Analyzed:	12-Apr-12	2			
GRO C6-C10	218	10.0	mg/kg	200		109	63.5-131			
DRO >C10+C28	257	10.0	mg/kg	200		129	52.3-130			
Total TPH C6-C28	475	10.0	mg/kg	400		119	62-129			
Surragate: 1-Chlorooctane	58.8		mg/kg	50.0		118	55.5-154			
Surrogute: 1-Chlorooctadecane	61.9		mg/kg	50.0		124	57.6-158			
LCS Dup (2041208-BSD1)				Prepared:	12-Apr-12 A					
GRO C6-C10	200	10.0	mg/kg	200		99.8	63,5-131	8.64	13.9	
DRO >C10-C28	241	10.0	mg/kg	200		121	52.3-130	6.33	18.1	
Total TPH C6-C28	441	10.0	mg/kg	400		110	62-129	7.38	16.2	
Surrogate: 1-Chloroctane	55.2		mg/kg	50.0		110	35.5-134			
Surrogate: 1-Chlorooctadecane	63.2		mg/kg	50.0		126	37.6-138			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Userilky and Damages. Cardinal's Bability and client's evolutive remody for any claim arising, whether beard in contract or test, shall be limited to the amount pold by claim for analyses. All claims, including those for negligence an any other clause whatsonew shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be labels for incidental or consequential damages including, without Biritation, bushess interruptions, loss of use, or loss of profits incurred by claim, its subsidiaries are accessors attitled out or related to the performance of the services hereunder by Cardinal, regardless of whether suc

Celeg D. Keens





INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 452

17-Apr-12 10:49

AZTEC NM, 87410 Project Manager: MARCELLA MARQUEZ

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 2041208 - General Prep - Organics	· · · · · · · · · · · · · · · · · · ·				***************************************					
Matrix Spike (2041208-MS1)	Sou	rce: H200825	-01	Prepared:	12-Apr-12 A	Analyzed: 1	3-Apr-12			
GRO C6-C10	214	10.0	mg/kg	200	ND	107	46.4-144			
DRO >C10-C28	350	10.0	mg/kg	200	56.3	147	33.5-141			
Total TPH C6-C28	564	10.0	mg/kg	400	56.6	127	52.7-131			
Surrogale: 1-Chloroociane	60.0		mg/kg	50.0		120	55.5-154			
Surrogate: 1-Chlorooctadecane	70.7		nig/kg	50.0		141	57.6-158			
Matrix Spike Dup (2041208-MSD1)	Sou	ce: H200825	-01	Prepared:	12-Apr-12 A	nalyzed: 1	3-Apr-12			
GRO C6-C10	212	10,0	mg/kg	200	ND	106	46.4-144	1.07	46.5	
DRO >C10-C28	352	10.0	mg/kg	2,00	56.3	148	33.5-141	0.849	933	
Total TPH C6-C28	564	10.0	mg/kg	400	56.6	127	52.7-131	0.0452	55.4	
Surrogate: 1-Chlorooctane	59.2		mg/kg	50.0		118	55.5-154			
Surrogate: 1-Chlorooctadecane	68.6		mg/kg	50.0		137	57.6-158			
Batch 2041307 - General Prep - Organics										
Blank (2041307-BLK1)			 	Prepared:	13-Apr-12 A	Analyzed: 1	4-Apr-12			
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-Chloroactane	49.5		mg/kg	50.0		99.0	55.5-154			
Surrogate: 1-Chlorooctadecane	51.0		mg/kg	50.0		102	57.6-158			
LCS (2041307-BS1)				Prepared:	13-Apr-12 A	Analyzed: 1	4-Apr-12			
GRO C6-C10	190	10.0	mg/kg	200		95.0	63.5-131			
DRO >C10-C28	211	10.0	mg/kg	200		105	52,3-130			
Total TPH C6-C28	401	10.0	mg/kg	400		100	62-129			
Surrogate: 1-Chlorooctane	49.9		mg/kg	50.0		99.9	55.5-154			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardina's Bability and client's exclusive remarky for any claim arising, whisher based in contract or tort, shall be any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within theiry (30) days after completion of the including, without Binkedon, business interruptions, loss of use, or loss of profits incurred by client, its applications, and profits arising out of client is based upon any of the above spiced reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in All with writina as

Celey D. Kuna





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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 17-Apr-12 10:49

Organic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2041307 - General Prep - Organics			-							
LCS Dup (2041307-BSD1)				Prepared: 1	3-Apr-12 A	Analyzed: 1	4-Apr-12			
GRO C6-C10	185	10.0	mg/kg	200		92.6	63.5-131	2.55	13.9	
DRO >C10-C28	187	10.0	mg/kg	200		93.7	52.3-130	11.8	18.1	
Total TPH C6-C28	372	10.0	mg/kg	400		93.1	62-129	7.30	16.2	
Surrogate: 1-Chlorooctane	47.1		mg/kg	50.0		94,2	55.5-154			
Surrogaie: 1-Chloroociadecane	41.4		mg/kg	50.0		82.8	57.6-158			
Matrix Spike (2041307-MS1)	Sou	rce: H200859-	-01	Prepared:	13-Apr-12	Analyzed: 1	4-Арг-12			
GRO C6-C10	186	\$0.0	mg/kg	200	ND	93.2	46.4-144			
DRO >C10-C28	236	50.0	mg∕kg	200	264	NR	33.5-141			
Total TPH C6-C28	422	50.0	mg/kg	400	272	37.6	52.7-131			
Surrogate: 1-Chlorooctane	51.1		mg/kg	50.C		102	55.5-154			
Surrogate: 1-Chloroociadecane	49.9		mg/kg	50.C		99.7	<i>57.6-158</i>			
Matrix Spike Dup (2041307-MSD1)	Sou	rce: H2008 \$ 9-	-01	Prepared:	13-Apr-12 A	Analyzed: 1	4-Apr-12			
GRO C6-C10	181	50.0	mg/kg	200	ND	90.3	46.4-144	3.12	46.5	
DRO >C10-C28	375	50.0	mg/kg	200	264	55.3	33.5-141	NR	933	
Total TPH C6-C28	555	50.0	mg/kg	400	272	70.9	52.7-131	61.4	55.4	
Surrogate: 1-Chlorooctane	49.2		mg/kg	50.C		98.4	55.5-154			
Surrogate: 1-Chloroociadecane	46.9		mg/kg	50.G		93.9	57.6-158			

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Liability and Clamages. Cardinal's Bability and client's exclusive remedy for any claim ansing, whisthar based in contract or tort, shell be betted to the amount paid by clent for analyses. All dalma any other cause whistoever shell be deemed welved unless made in wetting and received by Cardinal wettin thirty (30) days after completin of the applicable service. In no event shall Cardinal be Bable for including, without Remission business interruptions, loss of use, or loss of profits incurred by client, its audicalities, affects or successors atting out of or related to the performance of the services hereunder by client, its audicalities, affects or successors atting out of or related to the performance of the services hereunder by client in the services interest upon any of the above stated resons or otherwise. Results relate only to the samples identified above. This report shall not be regroduced except in full with verifican approval of Cardinal Laboratories.

Celey D. Kune





INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Reported: 17-Apr-12 10:49

Fax To: (505) 632-1876

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2041601 - Volatiles										
Blank (2041601-BLK1)				Prepared &	Analyzed:	16-Apr-12				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Surragate: 4-Braniofluorobenzene (PID)	0.0519		mg/kg	0.0500		104	64.4-134			
LCS (2041601-BS1)				Prepared &	Analyzed:	16-Apr-12	:			
Benzene	2.08	0.050	mg/kg	2.00		104	65.2-126			
Toluene	2.15	0.050	mg/kg	2.00		108	73.2-126			
Ethylbenzene	2.14	0.050	mg/kg	2.00		107	74.4-131			
Total Xylenes	6.61	0.150	mg/kg	6.00		110	73.5-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	64.4-134			
LCS Dup (2041601-BSD1)				Prepared &	Analyzed:	16-Apr-12				
Benzene	2,14	0.050	mg/kg	2.00		107	65.2-126	2.80	26.9	
Toluene	2.21	0.050	mg/kg	2.00		111	73.2-126	2.84	27.9	
Ethylbenzene	2.21	0.050	mg/kg	2.00		110	74.4-131	2.99	28.5	
Total Xylenea	6.78	0.150	mg/kg	6,00		113	73.5-130	2.53	27.7	
Surrogate: 4-Bromofluorobenzene (PID)	0.0512		ing/kg	0.0500		102	64.4-134			
Matrix Spike (2041601-MS1)	Sou	rce: H200818-	-07	Prepared &	Analyzed:	16-Apr-12				
Benzene	2.09	0.050	mg/kg	2.00	ND	105	38.5-146			
Toluene	2.14	0.050	mg/kg	2.00	ND	107	43.8-145			
Ethylbenzene	2.21	0.050	mg/kg	2.00	ND	111	38.7-154			
Total Xylenes	7.02	0.150	mg/kg	6.00	0.089	116	46.4-151			
Surrogate: 4-Bromofluorobenzene (PID)	0.0569		mg/kg	0.0300		114	64.4-134			
Matrix Spike Dup (2041601-MSD1)	Sou	rce: H200818	-07	Prepared &	Analyzed:			.,,		
Benzene	2.08	0.050	mg/kg	2.00	ND	104	38.5-146	0.371	51.6	
Toluene	2.13	0.050	mg/kg	2.00	ND	107	43.8-145	0.461	56.1	
Ethylbenzene	2.20	0.050	mg/kg	2.00	ND	110	38.7-154	0,670	59.8	
Total Xylenes	6.94	0.150	mg/kg	6.00	0.089	114	46.4-151	1.21	61.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine





I'HONE (575) 393-2326 * 101 E. MARLAND * HOBBS, NM 88240

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 17-Apr-12 10:49

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spiks	Source		%REC		RPD	-
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

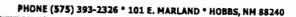
Batch 2041601 - Volatiles

Matrix Spike Dup (2041601-MSD1)	Source: I	[200818-07	Prepared & Ana	alyzed: 16-Apr-12			
Surrogate: 4-Bromofluorobenzene (PID)	0.0588	mg/kg	0.0500	118	64.4-134	The second section of the section of	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine





Notes and Definitions

QM-07

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liab

Celey D. Keens





CHAIN OF CUSTODY RECORD

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition. PO# 452

011410 1-689-505

FAX Number: 505

Phone Number:

Address: 49 CR 3150 Contact: Marcella

Aztec

Project Name JF.

1 = Surface Water, 2 = Ground Water Table 1. - Matrix Type

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)Samplers Signature:

FOR GAL USE ONLY GAL JOB#

pa			Comments											71 The Color	T	4:01 as 2111/h
Analyses Required			DRO(8015)448- 5R 8 80 51 8 3 TEX 80 51 B 5 Ioride 1 (30)	_	\ \ \ \	7	ノン	ノダノ	ノンソノ					M. Maraux	Slam O	i Stevisor
FAX (970) 247-4227	-	Preservative(s)	Her (Specify) NO3 NO3 Thereserved (Ice Only)	CH CH CH CH									7	Tipp://	TIP3:05 Control by t	do do
(970) 247-4220 F		Miscellaneous	of ected by: (Init.) strix Type oin Table 1 o. of Containers miple Filtered ? Y/N	М С 74 С				, , , , , , , , , , , , , , , , , , ,						E1/01/100	8×110/12	ays) ((
Green Analytical Laboratories	75 Suttle Street, Durango, CO 81303	Collection	Date Time	84/1.91 S. 30 S		8.30	०इ:१	₹ :₩) 90.00 [•	& Deenst		1 puspose [] Store (30 Days)
Lab Name: Green Anal	Address: 75 Suttle S		Sample ID	19:10 9	2 0	3 spile 14	4 Pile 18	5 Pile 576	26. P: le 619	7.	.	9.	10.	Relinquished by:	Reding Por ton	* Sample Reject [] Return



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 562

Project Manager: MARCELLA MARQUEZ

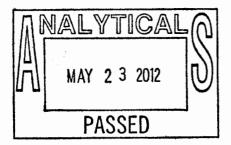
Fax To: (505) 632-1876

Reported:

25-May-12 10:56

PILE #9 H201168-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	tories					
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	1	2052401	MS	24-May-12	8015B	
Surrogate: 1-Chlorooctane		83.7 %	65.2	-140	2052401	MS	24-May-12	8015B	
Surrogate: 1-Chlorooctadecane		88.9 %	63.6	-154	2052401	MS	24-May-12	8015B	
Volatile Organic Compounds by EPA M	ethod 8021								
Benzene*	ND	0.050	mg/kg	50	2052402	AP	24-May-12	8021B	
Toluene*	ND	0.050	mg/kg	50	2052402	ΑP	24-May-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	50	2052402	AP	24-May-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	50	2052402	AP	24-May-12	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		109 %	89.4	-126	2052402	AP	24-May-12	8021B	



Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's Bability 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 and any other cause whetaporer shall be deemed walved unless made in verting and neceived by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages 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 sucl claims is besed 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 vettors approval of Cardinal Liboratories.

Celey D. Keens



May 25, 2012

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 05/23/12 11:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accred certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

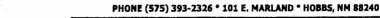
Celey S. Kune

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. Keene

Lab Director/Quality Manager





INDUSTRIAL ECOSYSTEMS

Project; JFJ

Reported:

49 CR 3150

25-May-12 10:56

AZTEC NM, 87410

Project Number: 562

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE #9	H201168-01	Soil	22-May-12 08:40	23-May-12 11:15
PILE #13	H201168-02	Soil	22-May-12 08:55	23-May-12 11:15
PILE #14	H201168-03	Soil	22-May-12 09:20	23-May-12 11:15
PILE #18	H201168-04	Soil	22-May-12 09:40	23-May-12 11:15
PILE #765	H201168-05	Soil	22-May-12 10:00	23-May-12 11:15
PILE #776	H201168-06	Soil	22-May-12 10:50	23-May-12 11:15

Cardinal Laboratories

*=Accredited Analyte

within thirty (30) days after completion of the applicable service. In no event shall Cardinal be Sable schoolderies, efficiency accessors brising out of or related to the performance of the services hereunder

Celey D. Keine



INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 562

25-May-12 10:56

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Organic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spile	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2052401 - General Prep - Organics										
Blank (2052401-BLK1)				Prepared &	Analyzed:	24-May-12	2			
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	41.6		mg/kg	50.()		83.2	65.2-140			
Surrogate: 1-Chlorooctadecane	46.2		mg/kg	50.0		92.3	63.6-154			
LCS (2052401-BS1)				Prepared &	Analyzed:	24-May-12	2			
GRO C6-C10	176	10.0	mg/kg	200		88,1	66.4-124			
DRO >C10-C28	176	10.0	mg/kg	200		88.2	61.6-132			
Total TPH C6-C28	352	10,0	mg/kg	400		88.1	69.7-122			
Surrogate: 1-Chlorooctane	43.6		mg/kg	50.0		87.1	65.2-140			
Surrogate: 1-Chlorooctadecane	48.5		mg/kg	50.C		97.0	63.6-154			
LCS Dup (2052401-BSD1)				Prepared &	k Analyzed:	24-May-12	2			
GRO C6-C10	173	10.0	mg/kg	200		86.7	66.4-124	1.55	23.4	
DRO >C10-C28	169	0.01	mg/kg	200		84.7	61.6-132	3.97	23.1	
Total TPH C6-C28	343	10,0	mg/kg	400		85.7	69.7-122	2.75	20.6	
Surrogate: 1-Chlorooctane	43.6		mg/kg	50.6		87.2	65.2-140			
Surrogate: 1-Chlorooctadecane	46.5		mg/kg	50.6		92.9	63.6-154			
Matrix Spike (2052401-MS1)	Sou	rce: H201168-	-01	Prepared &	Analyzed:	24-May-12	2			
GRO C6-C10	196	10.0	mg/kg	200	ND	98.0	17.7-179			
DRO >C10-C28	188	10.0	mg/kg	200	3.74	92.0	21.3-172			
Total TPH C6-C28	384	10.0	mg/kg	400	4,60	94.8	24.3-163			
Surrogate: 1-Chlorooctane	46.6		mg/kg	50.0		93.3	65.2-140			
Surrogate: 1-Chlorooctadecane	48.3		mg/kg	50.0		96.6	63.6-154			

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Liability and Damages. Cardwaln's Solitiky and client's exclusive ramedy for any client arising, whether besed in contract or text shall be ferrised to the amount paid by client for analyses. All claims, including those for inaplicance an any other cause whethoever shall be determed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be Stable for Indiontical Cardinal which the participations, business interruptions, loss of use, or loss of prufts incurred by client, its subsistances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether succitain 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 AM with written approval of Cardinal Laboratories.

Celeg D. Keine





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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 562

25-May-12 10:56

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Organic Compounds - Quality Control

Cardinal Laboratories

Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Source	e: H201168	01	Prepared &	Analyzed:	24-May-12	2			
190	10.0	mg/kg	200	ND	95.0	17.7-179	3.03	80.9	
180	10.0	mg/kg	200	3.74	88.0	21.3-172	4.39	104	
370	10.0	mg/kg	400	4.60	91.3	24.3-163	3.70	62.6	
44.6		mg/kg	50.0		89.2	65.2-140			
46.0		mg∕kg	50.0		92.0	63.6-154			
	Source 190 180 370	Result Limit Source: H201168- 190 10.0 180 10.0 370 10.0 44.6	Result Limit Units	Result Limit Units Level	Result Limit Units Level Result	Result Limit Units Level Result %REC Source: H201168-01 Prepared & Analyzed: 24-May-1: 190 190 10.0 mg/kg 200 ND 95.0 180 10.0 mg/kg 200 3.74 88.0 370 10.0 mg/kg 400 4.60 91.3 44.6 mg/kg 50.0 89.2	Result Limit Units Level Result %REC Limits	Result Limit Units Level Result %REC Limits RPD	Result Limit Units Level Result %REC Limits RPD Limit

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usability and Demages. Cardinal's Bability and client's exclusive ramady for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including any other cause whetherways that be deemed welved unless made in verting and received by Cardinal within thirty (20) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or corresponded demages, including, without familiation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiations, efficient in the performance of the services herounder by Cardinal, repartiess of whether such client is based upon any of the absorptions. Baselian relate only to the services territinal above. This propositional descript in fill with written approval of Cardinal Laboratories.

Celey D. Kuna



INDUSTRIAL ECOSYSTEMS

49 CR 3150 **AZTEC NM, 87410** Project: JFJ

Project Number: 562

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

25-May-12 10:56

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spile	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limita	RPD	Limit	Notes
Batch 2052402 - Volatiles										
Blank (2052402-BLK1)				Prepared &	Analyzed:	24-May-1	2			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Surrogate: 4-Bromofluorobenzene (FID)	0.0579		mg/kg	0.0500		116	89.4-126			
LCS (2052402-BS1)				Prepared &	Analyzed:	24-May-1	2			
Benzene	1.98	0,050	mg/kg	2.00		99.0	80.7-116			
Toluene	2.06	0.050	mg/kg	2.00		103	89.7-121			
Ethylbenzeoe	2.07	0.050	mg/kg	2.00		104	91.4-124			
Total Xylenes	6.41	0.150	mg/kg	6.00		107	93.4-130			
Surrogale: 4-Bromofluorobenzene (FID)	0.0550		mg/kg	0.0500		110	89.4-126			
LCS Dup (2052402-BSD1)				Prepared &	Analyzed:	24-May-1	2			
Benzene	1.68	0.050	mg/kg	2.00	-	84.1	80,7-116	16.3	16.4	
Toluene	1.77	0.050	mg/kg	2.00		88.6	89,7-121	15.2	16.6	
Ethylbenzene	1.77	0.050	mg/kg	2,00		88.7	91.4-124	15.5	16.1	
Total Xylenes	5.53	0.150	mg/kg	6.00		92.2	93.4-130	14.7	15.8	
Surrogate: 1-Bromofluorobenzene (PID)	0.0570		mg/kg	0.05(0		114	89.4-126			
Matrix Spike (2052402-MS1)	Sou	rce: H201148	-01	Prepared &	Analyzed:	24-May-1				
Benzene	2.06	0.050	mg/kg	2.00	ND	103	69.9-119			
Toluene	2.13	0.050	mg/kg	2.00	ND	106	67.5-131			
Ethylbenzene	2.11	0.050	mg/kg	2.00	ND	105	46.7-157			
Total Xylenes	6.50	0.150	mg/kg	6.00	ND	108	45.1-161			
Surrogate: 4-Bromofluorobenzene (PID)	0.0550		mg/kg	0.0500		110	89.4-126			
Matrix Spike Dup (2052402-MSD1)	Sou	rce: H201148	-01	Prepared 8	Analyzed:	24-May-1				
Behzene	1.93	0.050	mg/kg	2.00	ND	96.4	69,9-119	6.86	22	
Toluene	2.00	0.050	mg∕kg	2.00	ND	99.9	67.5-131	6.15	17.9	
Ethylbenzene	1.99	0.050	mg/kg	2.00	ND	99.4	46.7-157	5.92	21.5	
Total Xylenes	6,11	0.150	mg/kg	6.00	ND	102	45.1-161	6.32	27	

Cardinal Laboratories

*=Accredited Analyte

any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal with including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its auto-claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report

Celey D. Keena





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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 562

25-May-12 10:56

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2052402 - Volatiles										

 Matrix Spike Dup (2052402-MSD1)
 Source: H201148-01
 Prepared & Analyzed: 24-May-12

 Surrogate: 4-Bromofluorobenzene (PID)
 0.0552
 mg/kg
 0.0500
 110
 89.4-126

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Cameges. Cardinal's bability and client's exclusive remody for any claim strising, whether bessel in certract or tart, shall be limited to the amount paid by claim for analyses. All claims, including those for negligence and any other cause whatsower shall be deemed velved unless made in vetting and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be Bable for incidental or consequential demograp. Including, without limitation, bushess interruptions, loss of use, or loss of profits incurred by client, its audistilents, ambiguitents, and or related to the performance of the services hereunder by Cardinal, regardless of whether such clients to be performed. Readles refered to the performance of the services hereunder by Cardinal, regardless of whether such clients to be performed. Readles refered to the performance of the services hereunder by Cardinal regardless of whether such

Celey D. Keine



Notes and Definitions

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 SM4S00Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients exclusive remady for any daim strising, whether based in contract or tori, shall be limited to the amount peld by client for analyses. All claims, including those for neighbornous and any other cause whitespreve shall be deemed vestiond unless made in vesting and received by Cardinal within thirty (33) days after completors of the applicable service. In no event, shall Cardinal be liable for incidental or consequential demages, including, without limitation, business interruptions, loss of use, or lo

Celey D. Keens



CHAIN OF CUSTODY RECORD

Table 1. - Matrix Type 2). Ship samples promptly following collection.

1) Ensure proper container packaging.

Hote Nm

1 = Surface Water, 2 = Ground Water

FOR GALLISE ONLY GAL JOB#

> 3 = Soil/Sediment, 4 = Riusate, 5 = Oil 6 = Waste, 7 = Other (Specify)

Project Names FJ Landfad L Samplers Signature: Att 3) Designate Sample Reject Disposition. PO# 55 6 2-FAX Number: 505-632-1976 Phone Number: 505" - 32.772

			3	:.									o				
	S	Collection	*	Misoellaneous	meous		a	reserva	Preservative(s)		1	1	90		 	köller.	
Sample ID	Date) H	Collected by: (Init.)	əqYT ximaM i əldri moti	No. of Containers	N/Y S beneitid elgms2	Unpreserved (Ice Only)	нсг ниоз	H2SO4	Other (Specify)	DB0 118	SIP JA5	25 200/16/A)				Comments
b # 011	05/21/2 8-40	8.40	SA	3	7	N						7		, , , , , , , , , , , , , , , , , , ,			
1/6# 13		8.25-										3					
1/6 # 14		7:20										7	_				
1/e# 18		0 h: 6	•									*					
16# 765		10:01									**	7					
7/1 # 1/2		25:0(À	>	>	→					7						
		N.															
										J]						
Relinquished My.	4	To the same of the	The second	\$2 \frac{1}{2}	5/10		7. as	C	Received by		74	2	10 K	, ,		Ce/520	20

Reported:

17-Apr-12 10:49



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

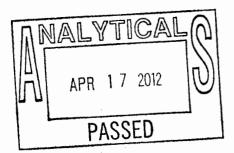
Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

PILE 18 H200825-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories					
Inorganic Compounds									
Chloride	48.0	16.0	ing/kg	4	2041304	AP	16-Apr-12	4500-Cl-B	
Organic Compounds									
GRO C6-C10	ND	10.0	mg/kg	1	2041307	MS	14-Apr-12	8015M	
DRO >C10-C28	51.3	10.0	mg/kg	1	2041307	MS	14-Apr-12	8015M	
Surrogate: 1-Chlorooctane		92.1 %	55.5	-154	2041307	MS	14-Apr-12	8015M	
Surrogate: 1-Chlorooctadecane		95.5 %	57.6	-158	2041307	MS	14-Apr-12	8015M	



Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages.

Celeg D. Kenne



April 17, 2012

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 04/11/12 10:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab-accred-certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey & Keene

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. Keene

Lab Director/Quality Manager



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 452

AZTEC NM, 87410

17-Apr-12 10:49

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE 9	H200 82 5-01	Soil	10-Apr-12 07:20	11-Apr-12 10:40
PILE 13	H200825-02	Soil	10-Apr-12 07:45	11-Apr-12 10:40
PILE 14	H200825-03	Soil	10-Apr-12 08:20	11-Apr-12 10:40
PILE 18	H200825-04	Soil	10-Apr-12 08:50	11-Apr-12 10:40
PILE 576	H200825-05	Soil	10-Apr-12 09:05	11-Apr-12 10:40
PILE 619	H200825-06	Soil	10-Apr-12 10:05	11-Apr-12 10:40

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

- Page 2 of 17



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 17-Apr-12 10:49

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spilte Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2041304 - General Prep - Wet Chem										
Blank (2041304-BLK1)				Prepared &	Analyzed:	13-Apr-12				
Chloride .	ND	16.0	mg/kg							
LCS (2041304-BS1)				Prepared &	Analyzed:	13-Apr-12				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (2041304-BSD1)				Prepared &	Analyzed:	13-Apr-12				
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	
Duplicate (2041304-DUP1)	Sou	rce: H200809-	-12	Prepared &	Analyzed:	13-Apr-12				
Chloride	560	16.0	mg/kg		640			13.3	20	
Matrix Spike (2041304-MS1)	Sou	rce: H200809-	-12	Prepared &	Analyzed:	13-Apr-12				
Chloride	912	16.0	mg/kg	40(640	68.0	80-120			QM-07

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usability and Demoges. Cardinals liability and client's evolusive remedy for any claim arising, whether based in contract or tor., shall be limited to the amount paid by client for analyses. All claims, including those for negligence an eny other cause whatsoever shall be deemed welved unless made in writing and received by Cardinal within thisty (33) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits included by Cardinal, antibilities or successors arising out of or releted to the performance of the services hereundar by Cardinal, regardless of whether successors are consequently and the profit of the performance of the services hereundar by Cardinal, regardless of whether successors are consequently and the profit of the performance of the services hereundar by Cardinal, regardless of whether successors are client to the performance of the services hereundar by Cardinal, regardless of whether successors are client to the performance of the services hereundar by Cardinal about the performance of the services hereundar by Cardinal about the performance of the services hereundar by Cardinal about the performance of the services hereundar by Cardinal about the performance of the services hereundar by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the services hereundary by Cardinal about the performance of the servi

Celey D. Keine



INDUSTRIAL ECOSYSTEMS

49 CR 3150 **AZTEC NM, 87410** Project: JFJ

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 17-Apr-12 10:49

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Notes
Batch 2041204 - General Prep - Organics										
Blank (2041204-BLK1)				Prepared:	12-Apr-12 A	Analyzed: 1	14-Apr-12			
GRO C6-C10	ND	10.0	mg/kg	J. Lopulou.			, , , , , , , , , , , , , , , , , , ,			
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-Chloroociane	47.2		mg/kg	50.0		94.5	55.5-154			
Surrogate: 1-Chlorooctadecone	49.5		mg/kg	50.0		99.0	57.6-158			
LCS (2041204-BS1)				Prepared:	12-Apr-12 A	nalyzed: 1	4-Apr-12			
GRO C6-C10	191	10.0	mg/kg	200		95.6	63.5-131			
DRO >C10-C28	208	10.0	mg/kg	200		104	52.3-130			
Total TPH C6-C28	399	10.0	mg/kg	400		99.7	62-129			
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		99.9	55.5-154			
Surrogate: 1-Chlorooctadecane	47.9		mg/kg	50.0		95.8	57.6-158			
LCS Dup (2041204-BSD1)				Prepared:	12-Apr-12 A	Analyzed: 1	14-Apr-12			
GRO C6-C10	205	10.0	mg/kg	200		102	63.5-131	6.82	13.9	
DRO >C10-C28	216	10.0	mg/kg	200		108	52.3-130	3.99	18.1	
Total TPH C6-C28	421	10.0	mg/kg	400		105	62-129	5.36	16.2	
Surrogate: 1-Chlorooctane	54.9		mg/kg	50.0		110	55.5-154			
Surrogate: 1-Chlorooctadecane	51.7		mg/kg	30.0		103	<i>57.6-158</i>			
Matrix Spike (2041204-MS1)	Sou	rce: H200825-	-05	Prepared:	12-Apr-12 A	Analyzed: 1	14-Apr-12			
GRO C6-C10	190	10.0	mg/kg	200	ND	95.2	46.4-144			
DRO >C10-C28	268	10.0	mg/kg	200	81.7	93.2	33.5-141			
Total TPH C6-C28	459	10.0	mg/kg	400	82.5	94.0	52.7-131			
Surrogate: 1-Chlorooctane	50.7		mg/kg	50.0		101	55.5-154			
Surrogate: 1-Chlorooctadecane	47.6		mg/kg	50.0		95.2	57.6-158			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Kuna



INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 452

17-Apr-12 10:49

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spile Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2041204 - General Prep - Organics										
Matrix Spike Dup (2041204-MSD1)	Soui	ce: H200825-	05	Prepared: 1	2-Apr-12	analyzed: 1	4-Apr-12			
GRO C6-C10	188	10.0	mg/kg	200	ND	94.1	46.4-144	1.23	46.5	
DRO >C10-C28	273	10.0	mg/kg	200	81.7	95.8	33.5-141	2.69	933	
Total TPH C6-C28	461	10.0	mg/kg	400	82.5	94.7	52.7-131	0.733	55.4	
Surrogate: 1-Chlorooctane	50.2		mg/kg	50.0		100	55.5-154			
Surrogate: 1-Chlorooctadecane	49.6		mg/kg	50.0		99.2	<i>57.6-158</i>			
Batch 2041208 - General Prep - Organics										
Blank (2041208-BLK1)				Prepared &	Analyzed:	12-Apr-12				
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	58.4		mg/kg	50.0		117	55.5-154			
Surrogate: 1-Chlorooctadecane	73.8		mg/kg	50.0		148	<i>57.6-158</i>			
LCS (2041208-BS1)				Prepared &	Analyzed:	12-Apr-12	!			
GRO C6-C10	218	10.0	mg/kg	200		109	63.5-131			
DRO >C10-C28	257	10.0	mg/kg	200		129	52,3-130			
Total TPH C6-C28	475	10.0	mg/kg	400		119	62-129			
Surrogute: 1-Chlorooctane	58.8		mg/kg	50.C		118	55.5-154			
Surrogate: 1-Chlorooctadecane	61.9		mg/kg	50.0		124	57.6-158			
LCS Dup (2041208-BSD1)				Prepared:	12-Apr-12 /	Analyzed: 1	3-Apr-12			
GRO C6-C10	200	10.0	mg/kg	200		99.8	63.5-131	8.64	13.9	
DRO >C10-C28	241	10.0	mg/kg	200		121	52.3-130	6.33	18.1	
Total TPH C6-C28	441	10.0	mg/kg	400		110	62-129	7.38	16.2	
Surrogate: 1-Chlorooctane	55.2		mg/kg	30.C		110	55.5-154			
Surrogate: 1-Chlorooctadecane	63.2		mg/kg	30.6		126	<i>57.6-158</i>			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Uability and Dameges. Cardinal's Bability and client's exclusive remedy for any claim arising, whether besed in contract or tan, shall be limited to the amount paid by any other cause whatboover shall be deemed welved unless made in writing and received by client's white thirty (31) days after complete or of the applicable service. In no even including, without finitedom, business interruptions, loss of use, or loss of profits incurred by client, its auditional, a milliones or successors aftering out of or related to the performance client is based upon any of the above stated measure or otherwise. Results relate only to the sampless identified above. This report shall not be improduced except in full with written approval of Cardinal Laboratories.

Celeg D. Kuna



INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 452

17-Apr-12 10:49

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

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 2041208 - General Prep - Organics			·	· · · · · · · · · · · · · · · · · · ·						
Matrix Spike (2041208-MS1)	Sour	ce: H200825	01	Prepared: 1	2-Apr-12 A	Analyzed: 1	3-Apr-12			
GRO C6-C10	214	10.0	mg/kg	200	ND	107	46.4-144			
DRO >C10-C28	350	10.0	mg/kg	200	56.3	147	33.5-141			
Total TPH C6-C28	564	10.0	mg/kg	400	56.6	127	52.7-131			
Surrogate: 1-Chlorooctane	60.0		mg/kg	50.0		120	55.5-154			
Surrogate: 1-Chlorooctadecane	70.7		mg/kg	50.0		141	57.6-158			
Matrix Spike Dup (2041208-MSD1)	Sour	ce: H200825	01	Prepared: 1	2-Apr-12 A	Analyzed: 1	3-Apr-12			
GRO C6-C10	212	10.0	mg/kg	200	ND	106	46.4-144	1.07	46.5	
DRO >C10-C28	352	10.0	mg/kg	200	56.3	148	33.5-141	0.849	933	
Total TPH C6-C28	564	10.0	mg/kg	400	56.6	127	52.7-131	0.0452	55.4	
Surrogate: 1-Chlorooctane	59.2		mg/kg	50.0		118	55.5-154			
Surrogate: 1-Chlorooctadecane	68.6		mg/kg	50.0		137	57.6-158			
Batch 2041307 - General Prep - Organics										
Blank (2041307-BLK1)				Prepared: 1	3-Apr-12 A	Analyzed: 1	4-Apr-12			
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	49.5		mg/kg	50.0		99.0	55.5-154			
Surrogate: 1-Chlorooctadecane	51.0		mg/kg	50.0		102	<i>57.6-158</i>			
LCS (2041307-BS1)				Prepared: 1	3-Apr-12 A	analyzed: 1	4-Apr-12			
GRO C6-C10	190	10.0	mg/kg	200		95.0	63,5-131			
DRO >C10-C28	211	10.0	mg/kg	200		105	52.3-130			
Total TPH C6-C28	401	10.0	mg/kg	400		100	62-129			
Surrogate: 1-Chloroocione	49.9		mg/kg	50.0		99.9	55.5-154			
Surrogate: 1-Chlorooctadecane	47.7		mg/kg	50.0		95.3	57.6-158			

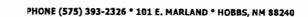
Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Uability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shelf be Emited to the amount paid by client for analyses. All claims, including those for negligence and any other clause whatsoever shalf be deemed waived unless made in writing and resched by Cardinal within thirty (30) days after consideration of the applicable service. In no event shalf Cardinal be listle for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its aubsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stipled 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.

Celey & Kenne







INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project: Ji

Project Number: 452

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 17-Apr-12 10:49

Organic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spile	Source		%REC		RPD	
Analyte	Result	Limit	Units	Lev:1	Result	%REC	Limits	RPD	Limit	Notes
Batch 2041307 - General Prep - Organics			·····			<u> </u>				
LCS Dup (2041307-BSD1)				Prepared:	13-Apr-12 A	nalyzed: 1	4-Apr-12			
GRO C6-C10	185	10.0	mg/kg	200		92.6	63.5-131	2.55	13.9	
DRO >C10-C28	187	10.0	mg/kg	200		93.7	52.3-130	11.8	18.1	
Total TPH C6-C28	372	10.0	mg/kg	400		93.1	62-129	7.30	16.2	
Surrogate: 1-Chlorooctane	47.1		mg/kg	50.1)		94.2	55.5-154			
Surrogate: 1-Chlorooctadecane	41.4		mg/kg	50.0		82.8	57.6-158			
Matrix Spike (2041307-MS1)	Sou	rce: H200859	-01	Prepared:	13-Apr-12 A	Analyzed: 1	4-Apr-12			
GRO C6-C10	186	50.0	mg/kg	200	ND	93.2	46.4-144			
DRO >C10-C28	236	50.0	mg/kg	200	264	NR	33.5-141			
Total TPH C6-C28	422	50.0	mg/kg	400	272	37.6	52.7-131			
Surrogate: 1-Chlorooctane	51.1		mg/kg	50.0		102	55.5-154			
Surrogate: 1-Chlorooctadecane	49.9		mg/kg	50.0		99.7	57.6-1 5 8			
Matrix Spike Dup (2041307-MSD1)	Sou	rce: H200859	-01	Prepared:	13-Apr-12 A	Analyzed: 1	14-Apr-12			
GRO C6-C10	181	50.0	mg/kg	200	ND	90.3	46,4-144	3.12	46,5	
DRO >C10-C28	375	50.0	mg/kg	200	264	55.3	33.5-141	NR	933	
Total TPH C6-C28	555	50.0	mg/kg	400	272	70.9	52.7-131	61.4	55.4	
Surrogate: 1-Chlorooctane	49.2		mg/kg	50.0		98.4	55.5-154			
Surrogate: 1-Chlorooctadecane	46.9		mg/kg	50.C		93.9	57.6-158			

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinalis liability and client's exclusive remedy for any claim arising, whether based in contract or tort shell be limited to the amount paid by client for analyses. All claims, including those for nephpence and any other cause whatsoever shell be deemed waived unless made in writing and received by Cardinal within thiny (30) days after completion of the applicable service. In no event shell Cardinal be liable for incidental or consequential damages, 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 such claims is based upon any of the above stated reasons or otherwise. Results related only to the samples identified above. This report shell not be reproduced except in full with written approval of Cardinal Laboratories.

Celey & Frence





INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 452

17-Apr-12 10:49

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits .	RPD	Limit	Notes
Batch 2041601 - Volatiles										
Blank (2041601-BLK1)				Prepared &	Analyzed:	16-Apr-12	2			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	nıg/kg							
Total Xylenes	ND	0.150	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0519		mg/kg	0.0500		104	64.4-134			
LCS (2041601-BS1)				Prepared &	Analyzed:	16-Apr-12	!			
Benzene	2.08	0.050	mg/kg	2.00		104	65.2-126			
Toluene	2.15	0.050	mg/kg	2.00		108	73.2-126			
Ethylbenzene	2.14	0.050	mg/kg	2.00		107	74.4-131			
Total Xylenes	6.61	0.150	mg/kg	6.00		110	73.5-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	64.4-134			
LCS Dup (2041601-BSD1)				Prepared &	Analyzed:	16-Apr-12	2			
Benzene	2.14	0.050	mg/kg	2.00		107	65.2-126	2.80	26.9	
Foluene Foluene	2.21	0.050	mg/kg	2.00		111	73.2-126	2.84	27.9	
Ethylbenzene	2.21	0.050	mg/kg	2.00		110	74.4-131	2.99	28.5	
Total Xylenes	6.78	0.150	mg/kg	6.00		113	73. 5- 130	2.53	27.7	
Surrogate: 1-Bromofluorobenzene (PID)	0.0512		mg/kg	0.0500		102	64.4-134			
Matrix Spike (2041601-MS1)	Sour	ce: H200818-	07	Prepared &	Analyzed:	16-Apr-12				
Benzene	2.09	0.050	mg/kg	2.00	ND	105	38.5-146			
Toluene	2.14	0.050	mg/kg	2.00	ND	107	43.8-145			
Ethylbenzene	2.21	0.050	mg/kg	2.00	ND	111	38.7-154			
Total Xylenes	7.02	0.150	mg/kg	6.00	0.089	116	46,4-151			
Surrogate: 4-Bromofluorobenzene (PID)	0.0569		mg/kg	0.0500		114	64.4-]34			
Matrix Spike Dup (2041601-MSD1)	Sour	ce: H200818	-07	Prepared &	Analyzed:	16-Apr-12				
Benzene	2.08	0.050	mg/kg	2,00	ND	104	38.5-146	0.371	51.6	
Toluene	2.13	0.050	mg/kg	2.00	ND	107	43.8-145	0.461	56.1	
Ethylbenzene	2.20	0.050	mg/kg	2.00	ND	110	38.7-154	0.670	59.8	
Total Xylenes	6.94	0.150	mg/kg	6.00	0.089	114	46.4-151	1.21	61.7	

Cardinal Laboratories

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients's exclusive remedy 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 and any other cause whatsoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, 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 hersunder by Cardinal, regardless of whether such 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 All with vertical approval of Cardinal Laboratories.

Celeg D. Keine



^{*=}Accredited Analyte



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 452

Project Manager: MARCE_LA MARQUEZ

Fax To: (505) 632-1876

Reported:

17-Apr-12 10:49

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

1												í.
			Reporting		Spike	Source		%REC		RPD		l
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	l

Batch 2041601 - Volatiles

 Matrix Spike Dup (2041601-MSD1)
 Source: H200818-07
 Prepared & Analyzed: 16-Apr-12

 Surrogate: 4-Bronnofluorobenzene (PID)
 0.0588
 mg/kg
 0.0500
 118
 64.4-134

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Centinal's liability and clients exclusive remaidy for any cleim arising, whether bissed in contract or ta's, shall be limited to the amount paid by client for analyses. All claims, including any other cause whatsoever shall be deemed velved unless made in verting and received by Cerdinal width thirty (30) days after completion of the applicable service. In no event shall Cerdinal be liable for including, without limitedion, 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 sucl client is based upon any of the above stated reasons or otherwise. Results relate only to this samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

s. Page 15 of 17



Notes and Definitions

QM-07

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLESSE NOTE: Utability and Damages. Cardinal's liability and client's exclusive ramedy 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 and any other cause whatsoever shall be deemed waived 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 damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, afflights or successors shalling out of or related to the performance of the services hareunder by Cardinal, regardless of whether such claims 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 approved of Cardinal Laboratories.

Celey D. Kuna



CHAIN OF CUSTODY RECORD

FOR GAL USE ONLY GAL JOB#

Table 1. - Matrix Type

Samplers Signature:

Project Name JF. ro# 452

FAX Number: 505-632-1876

1 -629-639-1

Aztec Phone Number:

Address: 49 CR 3150

Contact: Mar celle

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil1 = Surface Water, 2 = Ground Water 6 = Waste, 7 = Other (Specify)2) Ship samples promptly following collection. 3) Designate Sample Reject Disposition. 1) Ensure proper container packaging.

			Comments											513 TE 15	50 10:40
quired														Osted Osted	21/11/4
Analyses Required		()	Seosystems (30)	10 S	\ \ \ \	7	7	7	7					Marguex	Leuson
FAX (970) 247-4227		Preservative(s)	PC H(Specify)	ОФР () ОФР (7		7					Repaired by:	Godi
(970) 247-4220 FAX (97		Miscellaneous	of Containers ple Filtered ? Y/N reserved (Ice Only)	գոՍ				1 4 1		•				The Elol	
	81303	Miscel	ected by: (Init.) rix Type Table 1	COII		0	0	20	 	~~			·	E	
Green Analytical Laboratories	75 Suttle Street, Durango, CO 81303	Collection	Date Time	04/10/12 7: DE	ी निःपर	8:30	8:50	4:05	1 10:05					of Oleman	Thispose []Store (30 Days)
Lab Name: Green Anal	Address: 75 Suttle S		Sample ID	47008ZS	2.p	3Pile 14	4 Pile 18	spile 576	6 Pile 619	7.	8.	.6	10.	Relinquished by:	Sample Reject: [] Return



INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 562

Project Manager: MARCELLA MARQUEZ

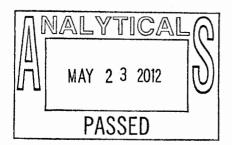
25-May-12 10:56

AZTEC NM, 87410

Fax To: (505) 632-1876

PILE #18 H201168-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories					
Volatile Organic Compounds by EPA Meth	od 8021								
Benzene*	ND	0.050	mg/kg	50	2052402	AP	24-May-12	8021B	
Toluene*	ND	0.050	mg/kg	50	2052402	AP	24-May-12	8021B	
Ethylbenzene*	ND	0.050	mg/kg	50	2052402	AP	24-May-12	8021B	
Total Xylenes*	ND	0.150	mg/kg	50	2052402	AP	24-May-12	8021B	
Surrogate: 4-Bromofluorobenzene (P1D)		111 %	89.4	-126	2052402	AP	24-May-12	8021B	



Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine



May 25, 2012

AZTEC, NM 87410

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 05/23/12 11:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager





INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 562

25-May-12 10:56

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

			,	
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE #9	H201168-01	Soil	22-May-12 08:40	23-May-12 11:15
PILE #13	H201168-02	Soil	22-May-12 08:55	23-May-12 11:15
PILE #14	H201168-03	Soil	22-May-12 09:20	23-May-12 11:15
PILE #18	H201168-04	Soil	22-May-12 09:40	23-May-12 11:15
PILE #765	H201168-05	Soil	22-May-12 10:00	23-May-12 11:15
PILE #776	H201168-06	Soil	22-May-12 10:50	23-May-12 11:15

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's Rability and client's exclusive ramady for any claim arising, whisther based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including, whose for negligence and any other cause whistonower shall be deemed welfund unless made in verting and neceword by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential demages including, without limitation, business interruptions, loss of use, or loss of profits including, whithout limitation, business interruptions, loss of use, or loss of profits including, whithout limitation, business interruptions, loss of use, or loss of profits including, whithout limitation, business interruptions, loss of use, or loss of profits including without any or the above stated reasons or otherwise. Results related to the services therein any of the above stated reasons or otherwise. Results related above. This report shall not be reproduced except in All with written approval of Cardinal Laboratories.

Celey D. Keina

%REC



Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 562

Reporting

Project Manager: MARCELLA MARQUEZ

Source

Fax To: (505) 632-1876

Spile

Reported: 25-May-12 10:56

RPD

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2052401 - General Prep - Organics				شده سجيدشيد.					~~~	
Blank (2052401-BLK1)				Prepared &	Analyzed:	24-May-1	2			
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	41.6		mg/kg	50. 7		83.2	65.2-140			
Surrogate: 1-Chlorooctadecane	46.2		mg/kg	50. 7		92.3	63.6-154			
LCS (2052401-BS1)				Prepared &	Analyzed:	24-May-1	2			
GRO C6-C10	176	10.0	mg/kg	200		88.1	66.4-124			
DRO >C10-C28	176	10.0	mg∕kg	200		88.2	61.6-132			
Total TPH C6-C28	352	10.0	mg/kg	40(88.1	69.7-122			
Surrogate: 1-Chlorooctane	43.6		mg/kg	50.17		87.1	65.2-140			
Surrogate: 1-Chlorooctadecane	48.5		mg/kg	50.1)		97.0	63.6-154			
LCS Dup (2052401-BSD1)				Prepared &	Analyzed:	24-May-1	2			
GRO C6-C10	173	10.0	mg/kg	200		86.7	66.4-124	1.55	23.4	
DRO >C10-C28	169	10.0	mg/kg	200		84.7	61.6-132	3.97	23.1	
Total TPH C6-C28	343	10.0	mg/kg	400		85.7	69.7-122	2.75	20.6	
Surrogate: 1-Chloroociane	43.6		mg/kg	50.1)		87.2	65.2-140			
Surrogate: 1-Chlorooctadecane	46.5		mg/kg	50.()		92.9	63.6-154			
Matrix Spike (2052401-MS1)	Sour	ce: H201168-	01	Prepared &	Analyzed:	24-May-1	2			
GRO C6-C10	196	10.0	mg/kg	200	ND	98.0	17.7-179			
DRO >C10-C28	188	10.0	mg∕kg	200	3.74	92.0	21.3-172			
Total TPH C6-C28	384	10.0	mg/kg	400	4.60	94.8	24.3-163			
Surrogate: 1-Chlorooctane	46.6		mg/kg	50.0		93.3	65.2-140			
Surrogate: 1-Chlorooctadecane	48.3		mg/kg	50.0		96.6	63.6-154			

Cardinal Laboratories *=Accredited Analyte

Colog D. Kune





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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 562

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 25-May-12 10:56

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2052401 - General Prep - Organics										
Matrix Spike Dup (2052401-MSD1)	Sour	ce: H201168-	01	Prepared &	Analyzed:	24-May-1	2			
GRO C6-C10	190	10.0	mg/kg	200	ND	95.0	17.7-179	3.03	80.9	
DRO >C10-C28	180	10.0	mg/kg	200	3.74	88.0	21.3-172	4.39	104	
Total TPH C6-C28	370	10.0	mg/kg	400	4.60	91.3	24.3-163	3.70	62.6	
Surrogate: 1-Chlorooctane	44.6		mg/kg	50.0		89.2	65.2-140			
Surrogate: 1-Chlorooctadecane	46.0		mg/kg	50.0		92.0	63.6-154			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Kuns



INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 562

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 25-May-12 10:56

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spil:e	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2052402 - Volatiles										
Blank (2052402-BLK1)				Prepared &	Analyzed:	24-May-12	2			
Benzene	ND	0,050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	. 0.150	mg/kg							
Surrogate: 4-Bromofluorobenzene (FID)	0.0579		mg/kg	0.0500		116	89.4-126			
LCS (2052402-BS1)				Prepared &	Analyzed:	24-May-12	2			
Benzene	1.98	0.050	mg/kg	2.0(1		99.0	80.7-116			
Toluene	2.06	0.050	mg/kg	2.00		103	89.7-121			
Ethylbenzene	2.07	0.050	mg/kg	2.00		104	91.4-124			
Total Xylenes	6.41	0.150	mg/kg	6.00		107	93.4-130			
Surrogate: 4-Bromofluorobenzene (F1D)	0.0550		mg/kg	0.0500		110	89.4-126			
LCS Dup (2052402-BSD1)				Prepared &	Analyzed:	24-May-12	2			
Benzene	1.68	0.050	mg/kg	2.00		84.1	80.7-116	16.3	16.4	
Toluene	1.77	0.050	mg/kg	2.00		88.6	89.7-121	15.2	16.6	
Ethylbenzene	1.77	0.050	mg/kg	2,00		88.7	91.4-124	15.5	16.1	
Total Xylenes	5.53	0.150	mg/kg	6.00		92.2	93,4-130	14.7	15.8	
Surrogate: 1-Bromofluorobenzene (P1D)	0.0570		mg/kg	0.0500		114	89.4-126			
Matrix Spike (2052402-MS1)	Sou	rce: H201148	-01	Prepared &	Analyzed:	24-May-1	2			
Benzene	2.06	0.050	mg/kg	2.00	ND	103	69.9-119			
Toluene	2,13	0.050	mg/kg	2,00	ND	106	67.5-131			
Ethylbenzene	2.11	0.050	mg/kg	2.00	ND	105	46.7-157			
Total Xylenes	6.50	0.150	mg/kg	6.00	ND	108	45.1-161			
Surrogate: 4-Bromofluorobenzene (P1D)	0.0550		mg/kg	0.0500		110	89.4-126			
Matrix Spike Dup (2052402-MSD1)	Sou	rce: H201148	-01	Prepared &	Analyzed:	24-May-1	2			
Benzene	1.93	0.050	mg/kg	2.00	ND	96.4	69.9-119	6.86	22	
Toluene	2.00	0.050	mg/kg	2.00	ND	99.9	67.5-131	6.15	17.9	
Ethylbenzene	1.99	0.050	mg/kg	2.00	ND	99.4	46.7-157	5.92	21.5	
Total Xylenes	6.11	0,150	mg/kg	6.00	ND	102	45.1-161	6.32	27	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine





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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 562

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

25-May-12 10:56

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2052402 - Volatiles

 Matrix Spike Dup (2052402-MSD1)
 Source: H201148-01
 Prepared & Analyzed: 24-May-12

 Surrogate: 4-Bromofluorobenzene (PID)
 0.0552
 mg/kg
 0.0500
 110
 89.4-126

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether besed in contract or text, aheli be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and racaved by Cardinal within thirty (30) days after completed service. In no event shall Cardinal be labele for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by claim, its subsidiaries, settlettes or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such

Celeg & Keens

Celey D. Keene, Lab Director/Quality Manager

Estage 12/01/4



ND

Notes and Definitions

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Kuna



CHAIN OF CUSTODY RECORD

1) Ensure proper container packaging.

Contact

1 = Surface Water, 2 = Ground Water Table 1. - Matrix Type

FOR GAL USE ONLY GAL JOB#

5=0:1

6 = Was2) Ship samples promptly following collection.

. •		
	1 11 2	
	1 11 1 2	
-63		٠ ١
=		
- 32		
	-	
· On	•	3
	1.0	
	¥.	
	69	1000
-		
= Rinsate,	1440	1000
		. 40
		-
	7.7	
. प	1.43	10
ুম 🗎	_ ਹੁ	11
	ᅙ	1
	<u>ə</u>	
	Ð.	
	Street	
	Othe	
	Othe	
	=Othe	
	= Othe	
	/=Othe	
	7=Othe	
	7 = Other (Specify	
	,7=Othe	
	e, 7 = Othe	
	te, 7 = Othe	
VSediment, 4	ste, 7 = Othe	Signature:

	'ਚ	Ţ	
3 = Soil/Sediment, 4 = Rins	6 = Waste, 7 = Other (Specil		1
ll.	S	1	<u> </u>
प्र	i i	The]
Ę.	更	- 5	ļ
₹.		H	
ā	7	E	
SO .	ਲੰ)ig	
3	SE/	2	
Ž,	3	a P	
11,		E	P
(1)	-	S	1
		A. Samplers Signature.	3
14.5		- 3	1
		1	ŧ∵
		0	Ι.
ō		0	1
2		5	
Š		1	1
δ			
	1		1
3		-	1
Reject			1
le Reject I	1	-	
aple Reject	d		
Sample Reject	d		
e Sample Reject	do	1 E.	
nate Sample Reject	50 10 10 10 10 10 10 10 10 10 10 10 10 10	Varnez F. / /	
signate Sample Reject I	56 P	ct Names, F. / /	1
Designate Sample Reject 1	# OP 64	Olect Names	
3) Designate Sample Reject Disposition	₽ 5 10 10 10	Project Names	

FAX Number 505-632-1976 Phone Number: 505 - 6 32 1 7 1/2

	כן מחווני פונברי המושיפה כן)	2										o		<u> </u>		
	Collection			Miscellaneous	ous		Pre	Preservative(s)	ve(s)		7	<u> </u>	90		-		
Sample ID D	Date	Tune	Collected by: (Init.) Martix Type	From Table 1 No. of Containers	MAY ? baratita algma2	Unpreserved (Ice Only)	EONH	HZ2O 1 HCF	HOVN	Other (Specify)	Sin 080	108 X 7118	JE 2901701AD				Comments
9	2/2 8:40		\vdash	ļ.,	1	2					•	1					
13	مُد	5.2.3	~~~									, _{, , , ,}					
1 # 4 Ju	4	1:20							•		_>	<u>,</u>					
1 BI # 1/0"	0	0 6: 6										7					
3P16# 7165		0:07									4/6						
"Pile# 776 V		P301	Ś	→ →		4					12						
1.									- -								
6				1				H				\vdash			$\exists \exists$		
0									Ž						-		
Relinquished My	1	The state of the same	9	C/52c	BIJE	7	Tras		Received by	1/4	1	077	atil			100 P	1991
Relinguished by:	9		<u> </u>	P(1)			Time: 3.2, Redeing	3	de l'Ad	17	L	44. T	2	4			12/2

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey
Division Director
Oll Conservation Division



April 17, 2012

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm - Permit # NM1-010-B

Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) request, dated April 12, 2012, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized to "build up" the area north of the office/shop building on of the existing facility property, located in NW/4 SE/4 of Section 2, Township 29 North, Range 12 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

Pile # 778

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations specified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse; and

Ms. Marquez JFJ Landfarm, LLC Permit NM1-010-B April 17, 2012 Page 2 of 2

3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface water, and protects human health and the environment.

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey Director

JB/baj

cc: OCD District III Office, Aztec

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey
Division Director
Oil Conservation Division



April 17, 2012

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm - Permit # NM1-010-B

Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) request, dated April 12, 2012, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized to "build up" the area north of the office/shop building on of the existing facility property, located in NW/4 SE/4 of Section 2, Township 29 North, Range 12 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

 Pile # 727
 Pile # 741

 Pile # 758
 Pile # 770

 Pile # 770
 Pile # 770

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations specified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse; and

Ms. Marquez JFJ Landfarm, LLC Permit NM1-010-B April 17, 2012 Page 2 of 2

3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface water, and protects human health and the environment.

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey

Director

JB/baj

cc: OCD District III Office, Aztec

Jones, Brad A., EMNRD

From:

Marcella Marquez [marcella@industrialecosystems.com]

Sent:

Thursday, April 12, 2012 4:42 PM

To:

Jones, Brad A., EMNRD

Subject:

Letter to request reuse of treated soils on facility

Attachments:

Letter to request reuse of treated soils on facility.doc; Pile 727.pdf; Pile 770.pdf; Pile 741.pdf;

Pile 758.pdf; Pile 778.pdf; map.pdf

Importance:

High

Brad:

Attached please find the QA/QI for the analytical reports for each pile along with the map of the area that the soils will be spread.

Please let me know if you have any questions.

Also, I will be out of the office tomorrow, so if you need anything I won't be able to get back with you until Monday.

Thanks, Marcella



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

April 17, 2012

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

This letter is being submitted to you as a request to reuse/recycle treated soils. We are requesting approval to reuse/recycle treated soils within our property boundaries. The treated soils would be utilized to "build up" the area north of the Office/Shop building.

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

- o Pile 770
- o Pile 727
- o Pile 741
- o Pile 758
- o Pile 778

Respectfully Submitted,
Marcuea Marquey

Marcella Marquez HSE Administrator

Enclosures-Analytical Reports



ANALYTICAL RESULTS FOR INDUSTRIAL ECOSYSTEMS ATTN: MARCELLA MARQUEZ 49 CR 3150 **AZTEC, NM 87410**

Receiving Date: 02/02/12 Reporting Date: 02/08/12 Project Owner: NOT GIVEN

Project Name: JFJ 10309 Project Location: NOT GIVEN Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

Sample Received By: JH

Analyzed By: MS

LAB NUMBER SAMPLE ID

DRO $(>C_{10}-C_{28})$ (mg/kg)

ANALYSIS DATE	02/03/12
H200256-01 PILE 727	16.2
	·
All devices to the contraction of the contraction o	i
Quality Control	244
True Value QC	200
% Recovery	122
Relative Percent Difference	24.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

2012

H200256TCL IEI

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy 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 and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, 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 services hereunder by Cardinal, regardless of whether such 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.



February 9, 2012

Marcella Marquez Industrial Ecosystems 49 CR 3150 Aztec, NM 87410

Re: JFJ 10309

Enclosed are the results of analyses for samples received by the laboratory on 02/02/12 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 www.tceq.texas.gov/field/qa/lab accredited certif.html

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

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)

Method EPA 524.2 Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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.

Thank you,

Celey D (R) eene

Laboratory Director/Quality Manager



CHAIN OF CUSTODY RECORD

	1		1
Page	ı	of	l

Client: LET	·
Contact: W	rcella
Address: 4	CR 3150
Heter	NM
Phone Number:	1505-632-1782
FAX Number: 5	05-632-1876

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

PO# 10309

Project Name:

NOTES:

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

Samplers Signature:

FOR GAL USE ONLY
GAL JOB #

Lab Name: Green Analytical Laboratories (970) 247-4220 FAX (970) 247-4227 Analyses Required 75 Suttle Street, Durango, CO 81303 Address: Miscellaneous Preservative(s) Collection Unpreserved (Ice Only) Sample Filtered ? Y/N Collected by: (Init.) No. of Containers Other (Specify) Sample ID Date Time Comments H2S04 NAOH HN03 HCL H200256-7:20 12 7.50 S 15 8:15 i.e. (D) Y 8:35 19:10 05 765 06 770 9:40 6. **l**z 07 7. 12 10:30 S 778 10:35 8. ղ չ 09 11:10 9. 11 11:40 (0 IO. 🔌 Relinquished by: * Sample Reject: [| Return [] Dispose [] Store (30 Days)



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 AZTEC NM, 87410

Fax To:

(505) 632-1876

Received:

02/01/2011

Reported:

02/04/2011

Project Name:

JFJ

Project Number:

9475

Project Location:

NOT GIVEN

Sampling Date:

01/28/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID:(PILE 727) (H100224-11)

Analyzed By: CMS

2.50 4455	11187	<u> </u>							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2011	ND	2.21	111	2.00	5.26	
Toluene*	<0.050	0.050	02/02/2011	ND .	2.27	113	2.00	7.18	
Ethylbenzene*	<0.050	0.050	02/02/2011	· ND	2.32	116	2.00	8.13	
Total Xylenes*	<0.150	0.150	02/02/2011	, ND	6.86	114	6.00	7.52	

Surrogate: 4-Bromofluorobenzene (PIL Chloride, SM4500Cl-8	99.8 mg/			d Byl HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	02/03/2011	ND	448	112	4 00	0.00	
TPH 8015M	mg,		the second second second	d Byt AB	·	<u></u>			·
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2011	ND	243	97.3	250	3.02	
ORO COM	-	10.0	02/03/2011	ND	235	94.2	250	4.84	

Surrogate: 1-Chlorooctane

96.8 %

70-130

Surrogate: 1-Chlorooctadecane

93.4 %

70-130

Cardinal Laboratories

*=Accredited Analyte



February 04, 2011

MARCELLA MARQUEZ

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 02/01/11 10:30.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Notes and Definitions

S-LOW

Low surrogate recovery confirmed as a matrix effect by a second analysis.

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damagne. Cardinal's liability and client's exclusive remedy 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 and any other cause whatcovers shall be deemed welved unless made in writing on an exceived by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damagnes, including, without limitation, bushess interruptions, icas of use, or loss of priorits 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 such claim is based upon any of the above stated reasons or otherwise. Results related above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine



CHAIN OF CUSTODY RECORD

Page of

Client:	ndustri	ol E	(05)	181	CMS
Contact:	Narcell	<u>ک</u> در		Annin Trainn	
Address:	-9 CA.	315	0		
Cult	rwd, De	87	410		
- 	ber 505 - l	ر (۲. <i>د</i>	.17	12	1 1

FAX Number: 5,05-632-1

NOTES:

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

PO# 9475

Table I. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

FOR GAL USE ONLY

GAL JOB #

Samplers Signature:

Address: 75 Suttle S	treet, Durar	igo, CU 81.		·	<u>. ::::::</u>		<u> </u>		<u> 1999)</u>	**:	· ·. · · · · · ·			· :	, :	1	, red		# #	Ţ.,				3 I I	
	Colle	ction		Miscell	апеои	s		Pre	serva	tive	(s)		V	, J.	-										
Sample ID H10224	Date	Time	Collected by: (Init:)	Matrix Type From Table I	No. of Containers	Sample Filtered ? Y/N	Unpreserved (Ice Only)	HN03	нсг	H2SO4	NAOH	Other (Specify)	DR.0 8315	とうとくごう		Child Cales							C	omine	nts
	1/24/11	7:10	C	7	1	N						, T	V	1/	t. A	1	* :								
21/24	1	7:20	,	17	ı	1							14	100	1.5										
3.1. /a.5		7:35											10	1	أكليا	V		- ::::			*				
41: 126		7:40											E.com	3	4	A			177						
5 4, 21		7:50			Ì		1						1	250	iš.	1									
6 17 /2 8		2.00											المان مانيان	W.	/	/							10.00		
74 /29		8:10			ľ								6	1		1									
84 130		8:23		1 3									7	1	معود	1							HM.		
911 131		8:46		17	į.								حينا		<u> </u>	1		1 11							
10. \ 7/3		8:55	1			11		1					100	•	A	1/250	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		100						:
Relinquished by:	<i>1</i> ,)	1,,,,,,,,	<u> </u>	Date	2/2	,	Time	* 2		Reggi	ved b	y	22	~ S	9	ا در او		تىنىك دىم د	ــــــــــــــــــــــــــــــــــــــ	السنطة الشيا	Date	128	<i>i</i> . 1	Tim	2 دع

* Sample Reject: [] Return [] Dispose [] Store (30 Days)

2.5°c 4

ale Henson

2/1/11 Page 22 of 2

	: :
	Ä
1 THE 1 ST	4
Analy	tical
Analy	rarias
Laborat	COLLEC

CHAIN OF CUSTODY RECORD

ak a najaga galegia og malahhira ola a jamakat og a timak ett timak elakantonio og more same kan og år Mille o Det som kommunikariset og med som kommunikariset og som kommunikariset og som kommunikariset og som kommunikar

			2.4
•	à	٠.	.)
Page		of	(C)\

Laboratories	CIMIN OF COSTODY RECORD	Page of or
Client: LEI	NOTES:	
Contact:	1) Ensure proper container packaging. Table 1. — Matrix Type	FOR GAL USE ONLY
Address:	2) Ship samples promptly following collection. 1 = Surface Water, 2 = Ground Water	GAL JOB#
	3) Designate Sample Reject Disposition. 3 = Soil/Sediment, 4 = Rinsate, 5 = Oil	
Phone Number:	PO# 9475 6 = Waste, 7 = Other (Specify)	
FAX Number:	Project Name: # Samplers Signature: 7	

	Lab Name: Green Anal	ytical Labor	ratories	(9	70) 24	7-4220) É	AX (970)	247-	4227					An	alys	es R	equir	ed				·			
*** :	Address: 75 Suttle S	treet, Durar	igo, CO 81.	303				· · · · · ·				:-: :::::			:		6					7 22 1					
		Collé	ction)	Miscell	aneous	S		Pre	serv	ative	s)		14.55	S	3	S					1 1 1 1 1					
	Sample ID	Date	Timė	ollected by: ((mit.)	Matrix Type From Table 1	s, of Containers	Sample Filtered 2 Y/N	Unpreserved (Ice Only)	EVOS	HÇC.	H2SO4	NAOH	Other (Specify)	280 X 080	120 V	STEX 5031	L. B.C.							Ċ	omme	ents	
: ::	H107941-			ိ •		ž		5	盒	Ĭ	H	ž	ō			3							121 42	· : ···	· · · :	12 (12 1) 	1: 1: :
	1116 727	1/28/11	9:15	CI	3		N		1.					Legar .	الميمي م	4	V				. : . ;			gali Tali	:	, :	
-	² 11 724	\	9:30	1		1									V	N.									· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	-1,11,111 -1,1
3	3.41 742		9:45						1 1 1				1		نمري	See .		11				: : : : : : : : : : : : : : : : : : :		: :::: :::::::::::	. :::. . : : '		
1	4. 750		9.55										1.1 21; 1.1.1.1	1	V	ASA"	کم		ladi de Ladiove		:::::::: v:::::::::			jig sii t V			
	5.11 751		10:17	1											1	1	<u>.</u>										
6	6" 756		16/37						.::::	-: 1				1	سعينا	أتخما	1										
1	7 . 750		10:48											1	25	نمرا	1										
8	8 1. 758		11:13	1 /					1					مميرا	60	Last	u f	1									
	9 11 760		11:34			ř	1	<u> </u>					1771	1		Ç,	,										
	7 .6.0		5 7 5 50 F					-			11 , 44	-::				**	::	- 7-,-	1.1. 1.1.1.1		127 233		 			, ; ; .	- 1 1 1
17	Relinquished by:	Man ?			Dylfa	8111	<u> </u>	Time	: 3	5	lencei	ved b	y. <i>15</i>	Usa	XY	000	ren		<u> </u>			Date	128	/11	Tim	ig: 5	36
	Reliminished by:	Marie			Pyle:	4/11		Time	: (L)	: 1	Recei	ed b	M		1	Δi	P	J				Dute	28/	7	Tim		4

^{*} Sample Reject: [] Return: [] Dispose: [] Store (30 Days)

2.5°c

Jodi Henson

Page 23 of 23



ANALYTICAL RESULTS FOR INDUSTRIAL ECOSYSTEMS ATTN: MARCELLA MARQUEZ 49 CR 3150 AZTEC, NM 87410

Receiving Date: 02/02/12
Reporting Date: 02/08/12
Project Owner: NOT GIVEN
Project Name: JE I 10309

Project Name: JFJ 10309
Project Location: NOT GIVEN

Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

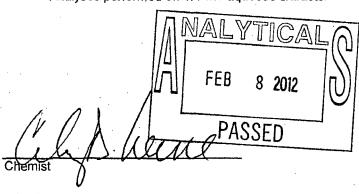
Sample Received By: JH Analyzed By: MS

LAB NUMBER SAMPLE ID

GRO DRO (C_6-C_{10}) $(>C_{10}-C_{28})$ (mg/kg) (mg/kg)

ANALYSIS DATE	02/03/12	02/03/12
H200256-06 / PILE 770)	<10.0	<10.0
	e en	<u>.</u>
		+
		-
Quality Control	203	244
True Value QC	200	200
% Recovery	102	122
Relative Percent Difference	20.1	24.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Std. Methods 4500-CFB *Analyses performed on 1:4 w:v aqueous extracts.



Date

H200256TCL IEI



February 9, 2012

Marcella Marquez Industrial Ecosystems 49 CR 3150 Aztec, NM 87410

Re: JFJ 10309

Enclosed are the results of analyses for samples received by the laboratory on 02/02/12 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)

Method EPA 524.2 Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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.

Thank you,

Celey D/Kleene

Laboratory Director/Quality Manager



CHAIN OF CUSTODY RECORD

	1		3
Page	l	of	1

Client: IEI	
Contact: W	rcella
Address: 4	CR 3150
Arter	NM
Phone Number:	1505-632-1782
FAX Number: 57	15-639-1876

NOTES:

- 1) Ensure proper container packaging.
- 2) Ship samples promptly following collection.
- 3) Designate Sample Reject Disposition.

PO# 10309

Project Name: JFJ

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

FOR GAL USE ONLY

GAL JOB #

Samplers Signature:

:	Lab Name:	Green Ana	lytical Labor	ratories	(9	970) 24	7-4220) F.	AX (9	970) 2	247-4	1227		\neg			Ār	alyse	s Requ	iired				
	Address:	75 Suttle S	Street, Duran	1go, CO 81	303							-		1.			\sim	Ø						
			Colle	ection		Miscel	laneous	s		Pres	serva	tive	(s)	٦,	3	Ž	六	9						
_					it.)		2	N/A	e Only)						200	3015	30%	3(
	Samp	ole ID	Date	Time	Collected by: (Init.)	Matrix Type From Table 1	No. of Containers	Sample Filtered ? Y/N	Unpreserved (Ice	33		04	HC	* 1	, KO	Ro	(EX	larid						Comments
	H2002	56-		-	S	Math	No.	Sam	Unp	HN03	HCL	H2SO4	NAOH	ğ (4	U	æ	5						
01	1. Pilo	727	2112	7:20	ET.	3	1	N							/									
OZ	2. (741	j`	1:50		Ì	i	1						,		V	V							
03	3. M	758		8:15											\checkmark									
(D) Y	4. į	761		8:32										i	/	V	\	Ś						
05		765		9:10										1										
06	6. ly	770		9:40												V					T			
07	7. 12	776		10:30	Π									1										
5	8. 1 (778		10:25											1	$\sqrt{}$	/	V					, .	
29	9. ا ر	1784		11:10			\prod	y							7	~	V	V						
(0	10.	79.2		11:40			1					V	1	$\sqrt{1}$	X	V	✓	/						
	Relinquished b	12111	27/	7		Date:	111	2	Time	2:4	Ó		yed M		\mathcal{N}	Na	20	LL	Λ			Prif:	12	严二十1
	Relinguished b	Excuer	m.	1	·	Dafa:	[1][772	00	7	(cej	d by	itie		7	la	k				2to	117	Timeras
	* Sample Reje	et [] Return	[] Dispose	[Store (3)	0 Days)										X	d	i.	M	ins	001	ما	J	10/1	ナカル

Reported:

19-Dec-11 13:43

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 10180

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876



Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst -	Analyzed	Method	Notes
		Cardina	l Laborat	ories		77			
Inorganic Compounds								•	
Chloride	48.0	16.0	mg/kg	4	1121904	НМ	17-Dec-11	4500-CI-B	
Organic Compounds									
	•	100	mg/kg	10	1121704	CK.	17-Dec-11	418.1	
COLO CU CITO	•	10.0	mg/kg	1	1121507	MS	15-Dec-11	8015M	
<u> </u>	TVD	10.0	mg/kg	1	1121507	MS	15-Dec-11	8015M	
Surrogate: 1-Chlorooctane		70.9 %	55.5	-154	1121507	MS	13-Dec-11	8015M	
Surrogate: 1-Chlorooctadecane		81.7 %	57.6	-158	1121507	MS	15-Dec-11	8015M	
Volatile Organic Compounds by EPA	Method 8021								
Benzene	ND	0.050	nig/kg	50	1121402	MS	14-Dec-11	8021B	-
Toluene	ND	0.050	mg/kg	50	1121402	MS .	14-Dec-11	8021B	
Ethylbenzene	ND	0.050	mg/kg	. 50	1121402	MS	14-Dec-11	8021B	
Total Xylenes	ND	0.150	mg/kg	50	1121402	MS	14-Dec-11	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		108 %	64.4	-134	1121402	MS	14-Dec-11	8021B	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Uability and Damages. Cardinal's Bability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the smooth paid of th



Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



December 19, 2011

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 12/14/11 10:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab-accred-certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 10180

19-Dec-11 13:43

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

			·	
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PILE 539	H102681-01	Soil	13-Dec-11 10:50	14-Dec-11 10:15
PILE 563	H102681-02	Soil	13-Dec-11 11:25	14-Dec-11 10:15
PILE 586	H102681-03	Soil	13-Dec-11 11:40	14-Dec-11 10:15
PILE 595	H102681-04	Soil	13-Dec-11 12:45	14-Dec-11 10:15
PILE 756	H102681-05	Soil	13-Dec-11 13:00	14-Dec-11 10:15
PILE 747	H102681-06	Soil	13-Dec-11 13:40	14-Dec-11 10:15
PILE 763	H102681-07	Soil	13-Dec-11 14:00	14-Dec-11 10:15
PILE 765	H102681-08	Soil	13-Dec-11 14:15	14-Dec-11 10:15
PILE 770	H102681-09	Soil	13-Dec-11 14:30	14-Dec-11 10:15
PILE 776	H102681-10	Soil	13-Dec-11 14:45	14-Dec-11 10:15
			•	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager





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

Reported: 19-Dec-11 13:43

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150 AZTEC NM, 87410 Project: JFJ

Project Number: 10180

n

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Inorganic Compounds - Quality Control

Cardinal Laboratories

	4	Reporting		Spike	Source		%REC		RPD	
Analyte .	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1121505 - General Prep - Wet Chem	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					<u> </u>				
Blank (1121505-BLK1)				Prepared &	k Analyzed:	15-Dec-11				
Chloride	ND	16.0	mg/kg							
LCS (1121505-BS1)				Prepared &	k Analyzed:	15-Dec-11				
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (1121505-BSD1)				Prepared &	& Analyzed:	15-Dec-11				
Chloride	416	16.0	mg/kg	400		104	80-120	3.77	20	
Duplicate (1121505-DUP1)	Sou	rce: H102677	-07	Prepared &	& Analyzed:	15-Dec-11			_	
Chloride	· 1630	16.0	mg/kg		1620			0,985	20	
Matrix Spike (1121505-MS1)	Sou	rce: H102677	-0 7	Prepared é	Analyzed:	15-Dec-11				
Chloride	2260	16.0	mg/kg	400	1620	160	80-120			
Batch 1121904 - General Prep - Wet Chem										
Blank (1121904-BLK1)				Prepared &	& Analyzed:	17-Dec-11				_
Chloride	ДN	16.0	mg/kg							
LCS (1121904-BS1)				Prepared &	& Analyzed:	17-Dec-11			•	
Chloride	464	16.0	mg/kg	400		116	80-120			
LCS Dup (1121904-BSD1)				Prepared &	Ł Analyzed:	17-Dec-11				
Chloride	432	16.0	mg/kg	400	· - · · · · · · · · · · · · · · · · · ·	108	80-120	7.14	20	
Duplicate (1121904-DUP1)	Sou	rce: H10 27 04	-06	Prepared &	& Analyzed:	17-Dec-11				
Chloride	48.0	16.0	mg/kg		48.0			0.00	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Uability and Damages. Cardinal's Bability and client's exclusive ramsely for any claim arising, whether based in contract of tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistocres shall be determed weived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable sanker. In no event shall Cardinal be lable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its authoritiests, arithmeter or soccessors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such

Celey D. Kuna

Celey D. Keene, Lab Director/Quality Manager





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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

Project: JFJ

Reported:

49 CR 3150

Project Number: 10180

19-Dec-11 13:43

AZTEC NM, 87410

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 1121904 - General Prep - Wet Chem

Matrix Spike (1121904-MS1)	Source:	H102704	-06	Prepared &	Analyzed:	17-Dec-11			
Chloride	464	16.0	mg/kg	400	48.0	104	80-120	_,	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usering and banages. Coronais reasoning and countries exclusive removal of war always of the cause whatsoever shall be deemed welved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential dan including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subdishiris; affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether clients to be reproduced 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 Leboratories.





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 10180

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

19-Dec-11 13:43

Organic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1121507 - General Prep - Organics	···									
Blank (1121507-BLK1)				Prepared &	Analyzed:	15-Dec-11				
GRO C6-C10	DN	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surragate: 1-Chlorooctane	48.5		mg/kg	50.0		97.1	55.5-154			
urrogate: 1-Chlorooctadecane	53.7		nig/kg	48.7	•	110	57.6-158			
CS (1121507-BS1)				Prepared &	: Analyzed:	15-Dec-11				
FRO C6-C10	206	10.0	mg/kg	200		103	63.5-131			
DRO >C10-C28	168	10.0	mg/kg	200		84.1	52.3-130			
Total TPH C6-C28	374	10.0	mg/kg	400		93,6	62-129			
urrogate: 1-Chlorooctane	55.2		mg/kg	50.0		111	<i>55.5-154</i>			•
urrogate: 1-Chlorooctadecane	. 58.8		mg/kg	48.7		121	57.6-158			
CS Dup (1121507-BSD1)				Prepared &	Analyzed:	15-Dec-11				
FRO C6-C10	208	10.0	mg/kg	200		104	63.5-131	1.05	13.9	
DRO >C10-C28	166	10.0	mg/kg	200		82.8	52.3-130	1.48	18.1	
otal TPH C6-C28	374	10.0	mg/kg	400		93.5	62-129	0.0791	16.2	
urrogate: 1-Chlorooctane	55.8		mg/kg	30.0		112	55.5-154			
urrogate: 1-Chlorooctadecane	57.3		mg/kg	48.7		118	57.6-158			
Batch 1121704 - Solvent Extraction										
Blank (1121704-BLK1)				Prepared &	Analyzed:	17-Dec-11				
PH 418.1	ND	100	mg/kg		ı					
LCS (1121704-BS1)				Prepared &	Analyzed:	17-Dec-11	<u>. </u>			
PH 418.1	1240	100	mg/kg	1090		113	80-120			

Cardinal Laboratories

*=Accredited Analyte

ount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed wolved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable including, without limited on, business interruptions, loss of use, or ioss of profits incurred by client, its subsidiaries, efficiency afficiency arising out of or related to the performance of the services hereunder claim is based upon any or the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in All with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

Meage 15 of 19



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 10180

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

19-Dec-11 13:43

Organic Compounds - Quality Control

Cardinal Laboratories

		Repo	orting		Spike	Source		%REC		RPD	i
Analyte	Result	.]	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1121704 Salvent Extraction											

Batch 1121704 - Solvent Extraction

LCS Dup (1121704-BSD1)				Prepared & Analy	zed: 17	-Dec-11			
TPH 418.1	1240	100	mg/kg	1090		114	80-120	0.565	20

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contrast or tart, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and 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 liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, efficients or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based on any of the above tabled reasons or otherwise. Retails relate only to the sameless formation above. This is necessarily and the performance of the services hereunder by Cardinal such control of Cardinal Laboratories.

Celey & Kuna



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

Reported: 19-Dec-11 13:43

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 10180

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1121402 - Volatiles				يشعف ويسود ويواوا ويعمل	·					
Blank (1121402-BLK1)				Prepared &	: Analyzed:	14-Dec-11				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0520		mg/kg	0.0488		107	64.4-134			
LCS (1121402-BS1)				Prepared &	Analyzed:	14-Dec-11				
Benzene	2.02	0.050	mg/kg	2.00		101	65.2-126			
Toluene	1.90	0.050	mg/kg	2.00		95.1	73.2-126			
Ethylbenzene	2.15	0.050	mg/kg	2.00		107	74.4-131			
Total Xylenes	6.14	0.150	mg/kg	6.00		102	73.5-130			
Surrogate: 4-Bromofluorobenzene (PID)	0.0512		mg/kg	0.0488		105	64.4-134			
LCS Dup (1121402-BSD1)		_		Prepared &	Analyzed:	14-Dec-11				
Benzene	1.99	0.050	mg/kg	2.00		99.6	65.2-126	1.23	26.9	
Toluene	1.89	0.050	mg/kg	2.00		94.5	73.2-126	0,630	27.9	
Ethylbenzene	2.13	0.050	mg/kg	2.00		107	74.4-131	0.633	28.5	
Total Xylenes	6.12	0.150	mg/kg	6,00		102	73.5-130	0.343	27.7	
Surrogate: 4-Bromofluorobenzene (PID)	0.0515		mg/kg	0.0488		106	64.4-134			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Kuns

Celey D. Keene, Lab Director/Quality Manager





Notes and Definitions

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or text, shall be limited to the amount paid by client for analyses. All claims, including those for nepilipence and any-other cause whatevers shall be deemed waked unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be Bable for indefental or consequential damages, including, without similation, business interruptions, loss of use, or loss of profits including, whicher sixth claims is beared upon any of this above stated reasons or otherwise. Results relate only to the samples listentified above. This report shall not be reproduced accept in All with written approved of Cardinal Laboratories.

Celey S. Kuna

Celey D. Keene, Lab Director/Quality Manager





lient IET	46			TON											Tab	L. Y	ĸź	14.5	· 10			a	r	
ontact! XX) Cut de	750			a. ' ' a. i ' ' '		per cor	11 15.			· ·	: : [+ ;** i	Table 1 Matrix Type 1 = Surface Water, 2 = Ground Water											GAL.
ddress: 49 CR 3		110		4 4 Mg 400 4		les proi			1. 171 7	·	٠	n.	<u>√</u> :	Soil	11.16			79.47 5	· · · · · · · · · · · · · · · · · · ·	200	11.1		Gr2	AL.
H2tec Nrv hone Number: 505	632-6	782	.	3) De PO#	signate	Sample	1	ct Di	sposi	tton.	٠.		1	Was					. ** :: '		O4a			خند
AX Number: SQST	- 	100	<u></u>		t Name			<u> </u>		 :		_	<u></u>	plers S					1/	D] 	ļ	
	elle	2 124					<u>المستدرا</u> مخمد	. "	~	نبند				,	oigua	Ruic.	عثد	<u>شينيم.</u> در	7	-	3	- A. C.	_/	
Lab Name: Green Anal			(9	70) 24	7-4220) FA	X (13 970)	247	-422	7		i o		A	nalys	es R	caui	ted	<u></u>		T		
<u> </u>	treet, Duran	 	· · · · · · · · · · · · · · · · · · ·	 		- + +	~ - ;			• • •			3		O	Γ		1	Γ	<u> </u>	T	1		
	Colle	ction		Miscel	lancou	s		Pre	serv	ativ	c(s)			5	2	14								
						-	B						喜	do	300.									
			(1)		*	Sample Filtered ? Y/N	e Only						,	80	۵.									
Sample ID	Date	Time	E		arite	Day	eq (Jose					(8)	3		3								Com	mei
			q per	\$ 100 m	Com	Ē	Ž					Spec	B	N.	è									
0.00101			Collected by (Init	Matrix Type From Table 1	No. of Confairters	1	Unpre	SS	TOT	H2504	NAO	Other (Specify	DROF6KO	BTeX	ट									
H102681	idal	10:50	Ȇ	3 = 3	7	N	2	王	A	至	Z	ō	7	Œ	\mathcal{Q}	1.00				-				: :
Hile 539	1912/1	17	4	12		N				_	-		/		W				-					
2 Pile 563		11:41	1	-	-	-		_		-	-	-	7		. Y.		-		-	-				<u></u>
3. Pile 586 4. Pile 595		15,12		+	-	1				-	-		1			-	-		-	-			<u> </u>	
S (N =)		1		++-	-								7		7		- 17.0		-		-	—		. : :
916 136 916 747		1:00	1					10.1 H			-		1			: : :	-							. :
P/6763		3 20									-													- 1
*Pi 6 765		9:15											7		7									
°P:1.770		2:30	1					1 1 1 1					1		1		33,75.2							
10 D(6 776	1	2.45	1	1		1							1	100	/								11. 11. 11. 11. 11. 11. 11. 11. 11. 11.	
Relinquished by:	Me	1/-	,	Date;	2-13-1	7	Tim	٠Q.	47	Rece	ived	NY.				المنظمة المنظمة		1.	- 	<u> </u>	P#5	~ (=	3117	ine
Relinquished by:		//		Øale:	13-	11	Tim	c., "	15	Hec	ycd	by:		17		1 4					Date	3/17		ynk,

Page 19 of 19



ANALYTICAL RESULTS FOR INDUSTRIAL ECOSYSTEMS ATTN: MARCELLA MARQUEZ 49 CR 3150 AZTEC, NM 87410

Receiving Date: 02/02/12 Reporting Date: 02/08/12 Project Owner: NOT GIVEN Project Name: JFJ 10309

Project Location: NOT GIVEN

Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

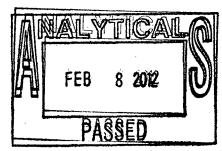
Sample Received By: JH Analyzed By: AP/MS

DRO **GRO** ETHYL TOTAL LAB NO. SAMPLE ID BENZENE* TOLUENE* BENZENE* XYLENES* CI** $(C_6 - C_{10})$ (>C10-C28) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) 02/02/12 ANALYSIS DATE: 02/03/12 02/03/12 02/06/12 02/06/12 02/06/12 02/06/12 H200256-02 **PILE 741** <10.0 19.9 <0.050 0.096 <0.050 0.456 512 Quality Control 2.46 7.63 464 1.95 203 244 2.34 6.00 400 True Value QC 2.00 2.00 2.00 200 200 % Recovery 102 122 97.5 117 123 127 116 Relative Percent Difference 24.4 9.2 9.5 9.9 9.6 10.9 20.1

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; Std. Methods 4500-CIB

TEXAS NELAP CERTIFICATE T104704398-11-3 FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Date



H200256BT2 IEI

^{**}Analyses performed on 1:4 w:v aqueous extracts.



February 9, 2012

Marcella Marquez Industrial Ecosystems 49 CR 3150 Aztec, NM 87410

Re: JFJ 10309

Enclosed are the results of analyses for samples received by the laboratory on 02/02/12 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.2

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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.

Thank you,

Celey D/Reene

Laboratory Director/Quality Manager



CHAIN OF CUSTODY RECORD

	1	3
Page I	of	1

Client: IET	,
Contact: W	arcella
Address: 40	CR 3150
Heter	NM
Phone Number:	1505-632-1717
FAX Number: 5	05-639-1876

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

10309 PO#

Project Name:

NOTES:

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 =Waste, 7 =Other (Specify)

FOR GAL USE ONLY GAL JOB #

Samplers Signature:

	Lab Name: Green Ar	alytical Laborato	ories	(9	70) 24	7-4220	FA	X (9	70) 2	247-4	4227		\Box			An	lyses	Requi	red				
	Address: 75 Suttle	Street, Durango	, CO 813	03										$\overline{\mathcal{A}}$	J	77	9						
		Collection	on	l	Miscell	aneous	;		Pres	serva	tive	(s)		7	7	計	00						
	Sample ID H 200256-	Date	Time	Collected by: (Init.)	Matrix Type From Table 1	No. of Containers	Sample Filtered ? Y/N	Unpreserved (Ice Only)	HNO3	нсг	H2SO4	NAOH	pecify)	RO	GRO 8015	IEX.	Chlaride 30						Com ments
01	DI 727	7112	1:20	T	3	1	N							1		1	\dashv	1					
1	2. 6 741		:50		Ì	i	1							V	V	1	1						
50	3. in 158		5:15	1					\exists	1			1				1	1					
40	4 1: 761		3:35			1					\neg		٦,	V	1	1	1						·
05	5. VI 765		01:10							1		_	1,		1								·
26	6. Ly 770		:40	1								1		7	1	7		<u> </u>		-		-	
07	7. 12 771		06:0	7								7		/									
	8. 1; 778		0:25											7	/	1	J	\top		-			
\sim	9. 11 7784		1:10										1	1	1	V	1						
10	10. 1 79.3		1:40			,					V	1		1	V	7	1						
	Relinquished by:	27/			Date:	11/1	2	Time	1.4			yed by	٠, ٧,٠	N	Na	$Q_{\mathbf{k}}$	(1)	<u> </u>		ب	g re	12	Time: 41
	Relinguished by	my			Dald	1/1	2_		00	7	Recei	od by	iti		7	la	7	1			27		Timeyou

* Sample Reject: [] Return [] Dispose [] Store (30 Days)

Apdi Menson 2/2/12 +7/2



ANALYTICAL RESULTS FOR INDUSTRIAL ECOSYSTEMS ATTN: MARCELLA MARQUEZ

49 CR 3150 AZTEC, NM 87410

Receiving Date: 02/02/12 Reporting Date: 02/08/12 Project Owner: NOT GIVEN

Project Name: JFJ 10309
Project Location: NOT GIVEN

Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

Sample Received By: JH Analyzed By: AP/MS

DRO $Cl^{\star} \quad (>C_{10}\text{-}C_{28})$ LAB NUMBER SAMPLE ID $(mg/kg) \quad (mg/kg)$

ANALYSIS DATE	02/02/12	02/03/12
H200256-03 PILE 758	496	11.4
The state of the s		
		ļ
Quality Control	464	244
True Value QC	400	200
% Recovery	116	122
Relative Percent Difference	10.9	24.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Std. Methods 4500-CIB *Analyses performed on 1:4 w:v aqueous extracts.

Chemist

Date

H200256TCL IEI



February 9, 2012

Marcella Marquez Industrial Ecosystems 49 CR 3150 Aztec, NM 87410

Re: JFJ 10309

Enclosed are the results of analyses for samples received by the laboratory on 02/02/12 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 www.tceq.texas.gov/field/qa/lab accred certif.html.

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

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

Accreditation applies to public drinking water matrices.

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.

Thank you,

Celey D/Reene

Laboratory Director/Quality Manager



CHAIN OF CUSTODY RECORD

	I		3
Page	l	of	Ł

Client: JET	
Contact: W	ircella
Address: 4	CR 3150
Aztei	NM
Phone Number:	1505-632-1782
FAX Number: 5	15-632-1876

NOTES:

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

PO# 10309

Project Name: JFJ

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

FOR GAL USE ONLY

GAL JOB #

Samplers Signature: Cliffed for

	Lab Name: Green	n Analyti	cal Labor	ratories	(9	70) 24	7-422	0 F	AX (9	70)	247-	4227	7				Ana	lyses	Requi	ired .			-	
	Address: 75 S	uttle Stre	et, Duran	go, CO 813	303									\Box .		ار	77	Q.						
			Colle	ction	1	Miscell	aneou	s		Pre	serva	ative	(s)	\Box	7	چ	굯	g						
	Sample ID		Date	Time	Collected by: (Init.)	Matrix Type From Table 1	No. of Containers	Sample Filtered ? Y/N	Unpreserved (Ice Only)	HNO3	HCL	H2SO4	NAOH	pecify)	KO S	GRO XOIE	N N	Chlaride 30						Comments
01	1010 72º		1112	7:20	7	3	1	N								7				T				
5	2 6 74	7	1	1:50		Ĩ	i	1						١,	1	1			1	1				
3	3. in *15			8:15								\neg		1				$\overline{\Lambda}$						
(D) Y	4. ii 76			8:35			7							1,	1	V	1			1				
05	5. vi 76			9:10										1,		1								
06	6. Ly 77		1	9:40				1						1	1	/								
07	7. 12 77			10:30										1	/				1					
S		8		10:35										٦,	1	Λ,	/	J						
29	9. 12 77	4		11:10				V			·				1	1	V	/		1.				
·	10. 1 79	3	1	11:40			1					V	1		X	V	1							
	Relinquished by: Relinquished by:	lip	2/-	7		Date:		12	Time	2:4	Οī		ived by	٠,٠	<u> </u>	7	la	w				974 279	12	Time: 41 Time(100
*	* Sample Reject: [] R	leturn []	Dispose	[Store (30) Days)									-	4	d	$\dot{\nu}$	Ne	ns	ois	<u></u>	J	10/1	ターもカル



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410**

Fax To:

(505) 632-1876

Received:

02/01/2011

Reported:

02/04/2011

Project Name: Project Number: JFJ

Project Location:

9475

NOT GIVEN

Sampling Date:

01/28/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID PILE 758 (H100224-18)

BTEX 8021B	mg		- Vice Vice Control	d By: CMS			<u> </u>	·	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifler
Benzene*	0.099	0.050	02/02/2011	ND	2.21	111	2.00	5.26	
Toluene*	0.512	0.050	02/02/2011	ND	2.27	113	2.00	7.18	
Ethylbenzene*	0.193	0.050	02/02/2011	ND	2.32	116	2.00	8.13	•
Total Xylenes*	2.16	0.150	02/02/2011	ND	6.86	114	6.00	7.52	

Surrogate: 4-Bromofluorobenzene (PIL

96.9 %

70-130

	mg.	/kg	Analyze	d By: HM		<u></u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
						1			
TPH 8015M	mg/kg			d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	8S	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	15.0	10.0	02/04/2011	ND	243	97.3	250	3.02	
		•	THE STATE OF					4	
			The state of the s			· · · · · · · · · · · · · · · · · · ·			

70-130 Surrogate: 1-Chlorooctane 89.6 % Surrogate: 1-Chlorooctadecane 93.7 %

Cardinal Laboratories

*=Accredited Analyte



February 04, 2011

MARCELLA MARQUEZ
INDUSTRIAL ECOSYSTEMS
49 CR 3150
AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 02/01/11 10:30.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005 Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2 Haloacetic Acids (HAA-5)

Method EPA 524.2 Total Trihalomethanes (TTHM)

Method EPA 524.4 Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Notes and Definitions

S-LOW

Low surrogate recovery confirmed as a matrix effect by a second analysis.

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability and clients exclusive remedy for any dalim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its usubdiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples skentified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine



CHAIN OF CUSTODY RECORD

Page of

Contact: W	larcel	2a		X		aria. Britist
Address: H		315	50		11.1	
azte	C.NV	Ž-	141	$^{\circ}$.

FAX Number: 505-632-1871

NOTES:

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

PO# 9475

Project Name JF 1

Table I. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

Samplers Signature:

FOR GAL USE ONLY

GAL JOB #

Analyses Required Lab Name: Green Analytical Laboratories (970) 247-4220 FAX (970) 247-4227 75 Suttle Street, Durango, CO 81303 Address: Miscellaneous Collection Preservative(s) Sample Filtered ? Y/N Collected by: (Init.) No. of Containers Sample ID Date Time Comments H2S04 NAOH 1/28/11 7:10 7:20 125 7:35 12% 7:40 50 3:00 8:10 129 8.23 130 3 8:46 10. 🔨 Relinquished by:

* Sample Reject. [] Return [] Dispose [] Store (30 Days)

8

25°c

40de Henson

./ | Page 22 of 23

•		- 30					
	-	-7/	劉 "	Y.		٠.	
	7	N		1			
. 2	<u>a</u>	11	髓化				
1						1	
4		4	- 1	<u>U</u>			
: '		— /	٩n	äly	/ti	Cō	al:
• • • • • • • • • • • • • • • • • • • •	: :		ab	ora	ito	rie	2.5

CHAIN OF CUSTODY RECORD

	C %
Page el	of 💸
1 450	_

CITATIVO I COULT REDUCTED	and the second second	rage of the
Client: ZCZ		
Contact: 1) Ensure proper container packaging: Table 1 - Mat	rix Type	
Address: 2) Ship samples promptly following collection. 1 = Surface Water, 2 =	Ground Water	GAL JOB#
3) Designate Sample Reject Disposition 3 = Soil/Sediment, 4 =	Rinsate, 5 = Oil	
Phone Number: PO# 9475 6 = Waste, 7 = Other (S	pecify)	
FAX Number: Project Name: J Samplers Signature:	1.00	
	. A3 /37	

Lab Name: Green Ana	Lab Name: Green Analytical Laboratories (970) 247-4220 FAX (970) 247-4227										Analyses Required														
Address: 75 Suttle													: ::::::::::::::::::::::::::::::::::::									. ::::::::::::::::::::::::::::::::::::			
	Collect	ion		Viscell	aneous	ş		Pres	ervati	ve(ŝ)			<u>.</u>	A.	3										
Sample ID	Date	Time	Collected by: (Init.)	Matrix Type From Table I	No. of Containers	Sample Fillered ? Y/N	Unpreserved (tee Only)	LINO3	HCL	NAOH	Other (Specify)	DRO SOISA	6RO 9015	675× 800	S 10 10 10							Co	mmen	its	
	1/28/11	9:15	CT	3	1	N						1	1 de de	1	1										
2,, 724		9:30	(4.	7	ن المن						1	L.C.	V						[] - 1		7 111			
742		9:45								1: 1 1: 1 1: 1		1	معامل	10	1	:.• i •;			ilijenij Ha	er siidi er siid		11 11 1	in an air		
1 4 750		9:55										Lacus .	V	.00	1	.*: : .:				:::::::::::::::::::::::::::::::::::::::		18.40		1.11	
5.11 751	6 P. Carrelland Vic. Service	0.17				1						1	<i>(</i>	1											
26m 756		16137										1	1	lasta"	100°										
77 n 750	en e decembration de la la	10:48										1	W	أمريا	1										
8 1. 758		1173	1									المحسيرة	(See	المنسط	d				1 1 1						
9 14 71 2		11:34			1	1						1	ý	V	V.										
10.															11	ii									
Relinquished by:	Man 1		1. 1. 1. 1.	Date	8 112		Time	3.5	. Re	eived	by:	1160	YY	P.	3000	*5				Date	128		Time	:36	_
Refinquished by	Their	<u>, </u>		Date:	V//1		Time:		Re	ceived	bý.	ii.		41	Ž	.)		:		Dulé		7	Time:		

^{*} Sample Reject: [] Return [] Dispose [] Store (30 Days)

2.50

Jode Henson

Page 23 of 23



Receiving Date: 02/02/12 Reporting Date: 02/08/12 Project Owner: NOT GIVEN Project Name: JFJ 10309

Project Location: NOT GIVEN

Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

Sample Received By: JH Analyzed By: AP/MS

GRO DRO **ETHYL** TOTAL LAB NO. SAMPLE ID (C_6-C_{10}) (>C₁₀-C₂₈) **BENZENE* TOLUENE* BENZENE*** XYLENES* CI** (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) ANALYSIS DATE 02/03/12 02/03/12 02/06/12 02/06/12 02/06/12 02/06/12 02/02/12 H200256-08 **PILE 778** <10.0 <10.0 <0.050 <0.050 <0.150 64 <0.050

		i			İ		
!	i						
Quality Control	203	244	1.95	2.34	2.46	7.63	464
True Value QC	200	200	2.00	2.00	2.00	6.00	400
% Recovery	102	122	97.5	117	123	127	116
Relative Percent Difference	20.1	24.4	9,2	9.5	9.9	9.6	10.9

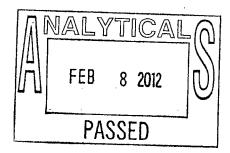
METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; Std. Methods 4500-CFB

**Analyses performed on 1:4 w:v aqueous extracts.

TEXAS NELAP CERTIFICATE T104704398-11-3 FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist Chemist

Date



H200256BT2 IEI



February 9, 2012

Marcella Marquez Industrial Ecosystems 49 CR 3150 Aztec, NM 87410

Re: JFJ 10309

Enclosed are the results of analyses for samples received by the laboratory on 02/02/12 12:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 www.tceq.texas.gov/field/qa/lab accredited through Texas NELAP under certificate number T104704398-11-3. 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 www.tceq.texas.gov/field/qa/lab accredited certification 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 www.tceq.texas.gov/field/qa/lab accredited certification.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.2

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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.

Thank you,

Celey D. (K) eene

Laboratory Director/Quality Manager



CHAIN OF CUSTODY RECORD

	1	1	
Page	ı	of	

Client: IEI
Contact: Warcella
Address: 40 CR 3150
Atter NM
Phone Number: 565-632-1782
FAX Number: 505-632-1876

NOTES:	

- 1) Ensure proper container packaging.
- 2) Ship samples promptly following collection.
- 3) Designate Sample Reject Disposition.

PO# 10309

Project Name: JFJ

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 =Waste, 7 =Other (Specify)

Samplers Signature:

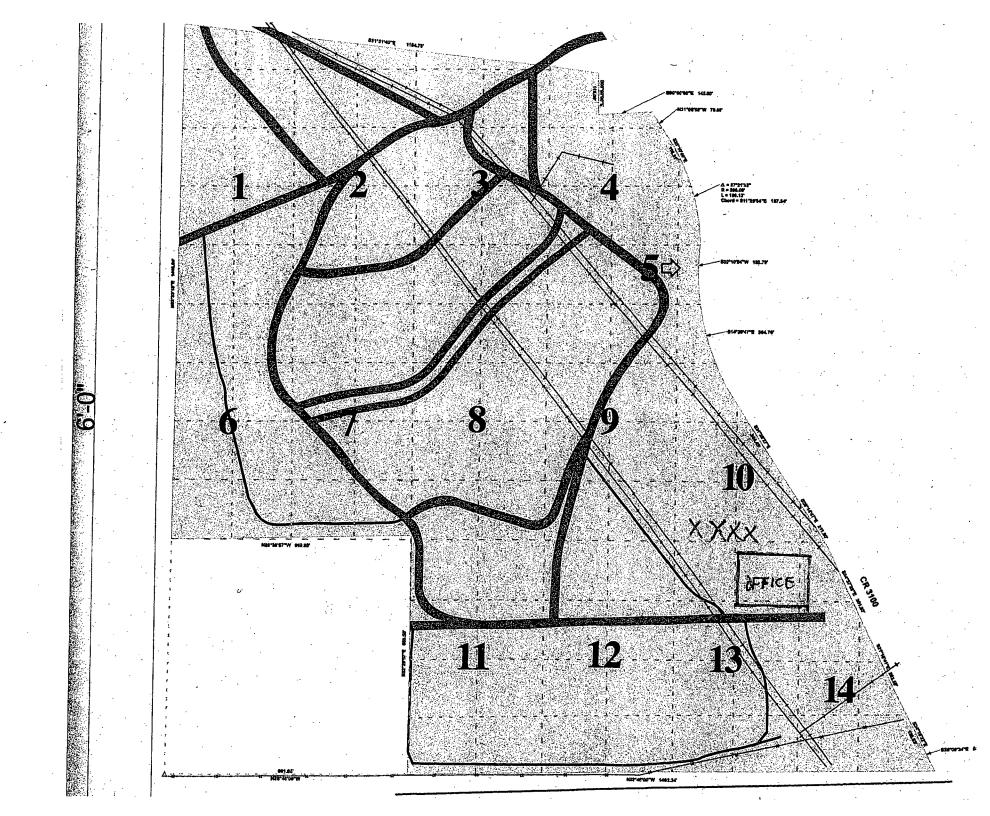
FOR GAL USE ONLY
GAL JOB #

·----

Lab Name: Green Analytical Laboratories FAX (970) 247-4227 Analyses Required (970) 247-4220 75 Suttle Street, Durango, CO 81303 Address: Collection Miscellaneous Preservative(s) Unpreserved (Ice Only) Sample Filtered ? Y/N Collected by: (Init.) No. of Containers NAOH Other (Specify) Sample ID Time Date Comments H2SO4 HN03 HCL :20 JZ S 8:15 8:35 BY 05 9:10 765 V. 06 6. ly 17:40 7. 12 10:30 S ا8. ج 10:35 11:10 (0 10. 🔌 Date: Relinquished by: ma 1.

* Sample Réject: [] Return [] Dispose [] Store (30 Days)

pai denson 2/2/12



Jones, Brad A., EMNRD

From:

Marcella Marquez [marcella@industrialecosystems.com]

Sent:

Tuesday, April 10, 2012 10:57 AM

To:

Jones, Brad A., EMNRD

Subject:

Letter to request reuse of treated soils on facility

Attachments:

Letter to request reuse of treated soils on facility.doc; 3228_0001.pdf

Importance:

High

Brad:

Please see attached letter & analytical reports.

Let me know if you have any questions or if any additional information is needed.

Thanks,

Marcella



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

April 11, 2012

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

This letter is being submitted to you as a request to reuse/recycle treated soils. We are requesting approval to reuse/recycle treated soils within our property boundaries. The treated soils would be utilized to "build up" the area north of the Office/Shop building.

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

- o Pile 770
- o Pile 727
- o Pile 741
- o Pile 758
- o Pile 778

Marceleamarquez

Respectfully Submitted,

Marcella Marquez

HSE Administrator

Enclosures-Analytical Reports



ANALYTICAL RESULTS FOR INDUSTRIAL ECOSYSTEMS ATTN: MARCELLA MARQUEZ

49 CR 3150 AZTEC, NM 87410

Receiving Date: 02/02/12 Reporting Date: 02/08/12

Project Owner: NOT GIVEN
Project Name: JFJ 10309

Project Location: NOT GIVEN

Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

Sample Received By: JH

Analyzed By: MS

DRO (>C₁₀-C₂₈) (mg/kg)

LAB NUMBER SAMPLE ID

ANALYSIS DATE	02/03/12
H200256-01 PILE 727	16.2
Quality Control	244
True Value QC	200
% Recovery	122
Relative Percent Difference	24.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

PASSED

02/09/12

Date

H200256TCL IEI



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 AZTEC NM, 87410

Fax To:

(505) 632-1876

Received:

02/01/2011

Reported:

02/04/2011

Project Name:

JFJ 9475

Project Number: Project Location:

NOT GIVEN

Sampling Date:

01/28/2011

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: PILE 727 (H100224-11)

BTEX 80218	mg/	kg	Analyze	d Byl CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifle
Benzene*	<0.050	0.050	02/02/2011	ND	2.21	111	2.00	5.26	
Toluene*	<0.050	0.050	02/02/2011	ND	2.27	113	2.00	7.18	
Ethylbenzene*	<0.050	0.050	02/02/2011	- ND	2.32	116	2.00	8.13	
Total Xylenes*	<0.150	0.150	02/02/2011	ND	6.86	114	6.00	7.52	
Surrogate: 4-Bromofluorobenzene (PIL	99.8	% 70-130		·					
Chloride, SM4500Cl-B	mg/	ķg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	608	16.0	02/03/2011	ND	448	112	4 00	0.00	
TPH 8015M	mg,	kg	Analyzed By: AB		· ·				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10	<10.0	10.0	02/03/2011	ND	243	97.3	250	3.02	
DRO > CAD USE	-	10.0	02/03/2011	ND	235	94.2	250	4.84	
Surrogate: 1-Chlorooctane	96.8	% 70-130) .						
Surrogate: 1-Chlorooctadecane	93.4	% 70-130) ·						

Cardinal Laboratories

*=Accredited Analyte

LEASE NOTTE: Uability and Damages. Cardinal's Bability and client's exclusive remady for any claim entaining, whisther based in contract or text, shall be limited to the amount paid by client for analyses. All claims, including those for neigligence and my other cluse whitesomer shall be decread waitend written made in writing and necedered by Cardinal whitin thirty (20) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, and the completion of the applicable services, incidental cardinal be liable for incidental or consequential damages, and the contraction, business interruptions, loss of use, or loss of profits becurred by client, its subsidiaries, affiliates or successors attaining out of or related to the performance of the services hereunder by Cardinal, regardless of whether such shall only approached except in All with written approved of Cardinal Laboratories.

Celey D. Keine



Receiving Date: 02/02/12 Reporting Date: 02/08/12 Project Owner: NOT GIVEN

Project Owner: NOT GIVEN
Project Name: JFJ 10309
Project Location: NOT GIVEN

Sampling Date: 02/01/12 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

Sample Received By: JH Analyzed By: AP/MS

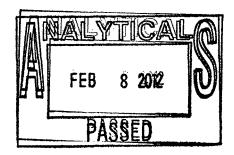
LAB NO.	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)	BENZENE* (mg/kg)	TOLUENE* (mg/kg)	ETHYL BENZENE* (mg/kg)	TOTAL XYLENES* (mg/kg)	Cl** (mg/kg)
ANALYSIS DA	ATE:	02/03/12	02/03/12	02/06/12	02/06/12	02/06/12	02/06/12	02/02/12
H200256-02	PILE 741	<10.0	19.9	<0.050	0.096	<0.050	0.456	512
		<u> </u>	1					
		<u> </u>	<u>:</u>			ļ		
			T	 			ļ 	
Quality Contro	ol	203	244	1.95	2.34	2.46	7.63	464
True Value Qo	C	200	200	2.00	2.00	2.00	6.00	400
% Recovery		102	122	97.5	117	123	127	116
Relative Perce	ent Difference	20.1	24.4	9.2	9.5	9.9	9.6	10.9

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; Std. Methods 4500-CFB

TEXAS NELAP CERTIFICATE T104704398-11-3 FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Cal Men

Date



H200256BT2 IEI

^{**}Analyses performed on 1:4 w:v aqueous extracts.



Receiving Date: 02/02/12 Reporting Date: 02/08/12 Project Owner: NOT GIVEN

Project Name: JFJ 10309
Project Location: NOT GIVEN

Sampling Date: 02/01/12

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

Sample Received By: JH Analyzed By: AP/MS

DRO $\label{eq:controller} \text{CI*} \quad (>C_{10}\text{-}C_{28})$ LAB NUMBER SAMPLE ID $(\text{mg/kg}) \quad (\text{mg/kg})$

ANALYSIS DATE	02/02/12	02/03/12
H200256-03 PILE 758	496	11.4
		ļ
		
Quality Control	464	244
True Value QC	400	200
% Recovery	116	122
Relative Percent Difference	10.9	24.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Std. Methods 4500-CITB *Analyses performed on 1:4 w:v aqueous extracts.

Chemist

Date

H200256TCL IEI



Receiving Date: 02/02/12 Reporting Date: 02/08/12

Project Owner: NOT GIVEN

Project Name: JFJ 10309
Project Location: NOT GIVEN

Sampling Date: 02/01/12

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

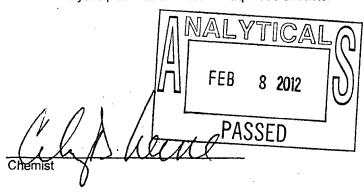
Sample Received By: JH

Analyzed By: MS

	GRO	DRO
	(C_6-C_{10})	(>C ₁₀ -C ₂₈)
LAB NUMBER SAMPLE ID	(mg/kg)	(mg/kg)

ANALYSIS DATE	02/03/12	02/03/12
H200256-06 PILE 770	<10.0	<10.0
		<u> </u>
	<u> </u>	<u> </u>
Quality Control	203	244
True Value QC	200	200
% Recovery	102	122
Relative Percent Difference	20.1	24.4

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Std. Methods 4500-CFB *Analyses performed on 1:4 w:v aqueous extracts.



Date

H200256TCL IEI

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy 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 and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, 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 services hereunder by Cardinal, regardless of whether such 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.



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

Reported:

19-Dec-11 13:43

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 10180

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

PILE 770

H102681-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories					
Inorganic Compounds									
Chloride	48.0	16.0	mg/kg	4	1121904	НМ	17-Dec-11	4500-CI-B	
Organic Compounds									
		100	mg/kg	10	1121704	CK	17-Dec-11	418.1	
CALS CO CIV		10.0	mg/kg	1	1121507	MS	15-Dec-11	8015M	
Show are con	ND	10.0	mg/kg	1	1121507	MS	15-Dec-11	8015M	
Surrogate: 1-Chlorooctane		70.9 %	55.5	-154	1121507	MS	15-Dec-11	8015M	
Surrogate: 1-Chlorooctadecane		81.7 %	57.6	-158	1121507	MS	15-Dec-11	8015M	
Volatile Organic Compounds by EPA Met	hod 8021				4				
Benzene	ND	0.050	mg/kg	50	1121402	MS	14-Dec-11	8021B	1,
Toluene	ND	0.050	mg/kg	50	1121402	MS .	'M-Dec-11	8021B	
Ethylbenzene	ND	0.050	mg/kg	50	1121402	MS	14-Dec-11	8021B	
Total Xylenes	ND	0.150	mg/kg	50	1121402	MS	14-Dec-11	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		108 %	64.4	-134	1121402	MS	14-Dec-11	8021B	

Cardinal Laboratories

*=Accredited Analyte

RLEASE NOTE: Uability and Damages. Cardinal's liability and client's exclusive remedy for any claim artising, whether based in contract or tort, shall be limited to the amount park by client for analyses. All doints, including, who they cause whatsoever shall be deemed welved unless made in vertical and received by Cardinal welfor they (30) days after completion of the applicable service. In the event shall Cardinal be labore for coverable or investmental states of the including, whose initiation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or aucressors are saving out of or related to the performance of the services between the exercises or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in Mil with vention approval of Cardinal Laboratories.



Celey D. Keine



ANALYTICAL RESULTS FOR INDUSTRIAL ECOSYSTEMS ATTN: MARCELLA MARQUEZ

49 CR 3150 AZTEC, NM 87410

Receiving Date: 02/02/12 Reporting Date: 02/08/12

Project Owner: NOT GIVEN Project Name: JFJ 10309

Project Location: NOT GIVEN

Relative Percent Difference

Sampling Date: 02/01/12

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 4°C

10.9

Sample Received By: JH Analyzed By: AP/MS

LAB NO.	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)	BENZENE* (mg/kg)	TOLUENE* (mg/kg)	ETHYL BENZENE* (mg/kg)	TOTAL XYLENES* (mg/kg)	ĊI** (mg/kg)
ANALYSIS DA	TE:	02/03/12	02/03/12	02/06/12	02/06/12	02/06/12	02/06/12	02/02/12
H200256-08	PILE 778	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	64
		<u> </u>						
		:	ļ				 	
`				-				
			1					
			ļ					
Quality Contro	ol .	203	244	1.95	2.34	2.46	7.63	464
True Value Q0)	200	200	2.00	2.00	2.00	6.00	400
% Recovery		102	122	97.5	117	123	127	116

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; Std. Methods 4500-CFB

**Analyses performed on 1:4 w:v aqueous extracts.

TEXAS NELAP CERTIFICATE T/104704398-11-3 FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

Date

FEB 8 2012

PASSED

H200256BT2 IEI





Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 AZTEC NM, 87410

Fax To: (505) 632-1876

Received:

02/01/2011

Reported: Project Name: 02/04/2011 JFJ 9475

Project Number: Project Location:

NOT GIVEN

Sampling Date:

Compling Date:

01/28/2011 Soil

Sampling Type:

2011

Sampling Condition: Sample Received By: Cool & Intact

Qualifier

Jodi Henson

Sample ID: PILE 758 (H100224-18)

BTEX 8021B	mg		Analyze	d By: CMS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD
Benzene*	0.099	0.050	02/02/2011	ND	2.21	111	2.00	5.26
Taluene*	0.512	0.050	02/02/2011	ND	2.27	113	2.00	7.18

02/02/2011 2.32 116 2.00 8.13 ND Ethylbenzene* 0.193 0.050 7.52 6.00 Total Xylenes* 2.16 0.150 02/02/2011 ND 6.86 114

Surrogate: 4-Bromofluorobenzene (PIL

96.9 %

70-130

mg/	kg	Analyze	d Byl HM					
Result [*]	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
					1			
mg/kg			Analyzed By: AB					
Result	Reporting Limit	Analyzeti	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
15.0	10.0	02/04/2011	ND	243	97.3	250	3.02	•
				والثق				
	Result mg/ Result	Result Reporting Limit mg/kg Result Reporting Limit	Result Reporting Limit Analyzed mg/kg Analyze Result Reporting Limit Analyzed 15.0 10.0 02/04/2011	mg/kg Analyzed By: AB Result Reporting Limit Analyzed Method Blank 15.0 10.0 02/04/2011 ND	Result Reporting Limit Analyzed Method Blank BS mg/kg Analyzed By: AB Result Reporting Limit Analyzed Method Blank BS 15.0 10.0 02/04/2011 ND 243	Result Reporting Limit Analyzed Method Blank BS % Recovery mg/kg Analyzed By: AB Result Reporting Limit Analyzed Method Blank BS % Recovery 15.0 10.0 02/04/2011 ND 243 97.3	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC mg/kg Analyzed By: AB Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC 15.0 10.0 02/04/2011 ND 243 97.3 250	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD mg/kg Analyzed By: AB Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD 15.0 10.0 02/04/2011 ND 243 97.3 250 3.02

Surrogate: 1-Chlorooctane

89.6 %

70-130

Surrogate: 1-Chlorooctadecane

93.7 %

70-130

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Uability and Damages. Cardinal's lability and clean's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by clean to analysiss. All claims, including and received by Cardinal websit their (30) days after completion of the societable service. In no event shall be determed waited unless made in vesting and received by Cardinal websit that completion of the societable service. In no event shall cardinal to the control or consequential damages including, whomas limitation, business intermediate, for so, or loss of profits including without finited to the societable services are sections and or related to the performance of the services heat-united by Cardinal, reported as well and the reproduced protect in full with written appropriate.

Celey D. Keine

Susana Martinez

Governor

John H. Bemis Cabinet Secretary-Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



November 17, 2011

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm - Permit # NM1-010-B

Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) request, dated November 10, 2011, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized to "build up" the west portion of the existing facility property, located in NW/4 SE/4 of Section 2, Township 29 North, Range 12 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

<i>Pile # 715</i>	Pile # 728
Pile # 719	Pile # 734
Pile # 724	Pile # 736

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations specified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse; and

Ms. Marquez JFJ Landfarm, LLC Permit NM1-010-B November 17, 2011 Page 2 of 2

3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface water, and protects human health and the environment.

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey Director

JB/baj

cc: OCD District III Office, Aztec

Jones, Brad A., EMNRD

From:

Marcella Marquez [marcella@industrialecosystems.com]

Sent:

Thursday, November 10, 2011 3:06 PM

To:

Jones, Brad A., EMNRD

Cc:

'Terry Lattin'

Subject:

Request to Reuse Treated Soils

Attachments:

Letter to request reuse of treated soils on facility.doc; Pile 736.pdf; Pile 715.pdf; Pile 719.pdf;

Pile 724.pdf; Pile 728.pdf; Pile 734.pdf

Brad:

Please see attached letter and corresponding analytical reports.

Thanks, Marcella Marquez, HSE Administrator Industrial Ecosystems, Inc. Phone: (505) 632-1782

Fax: (505) 632-1876 or (505) 334-1003



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

November 16, 2011

Brad Jones, Environmental Engineer NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

This letter is being submitted to you as a request to reuse/recycle treated soils. We are requesting approval to reuse/recycle treated soils within our property boundaries. The treated soils would be utilized to "build up" the West portion of the property.

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

- o Pile 715
- o Pile 719
- o Pile 724
- o Pile 728
- o Pile 734
- o Pile 736

Marcellamarquez

Respectfully Submitted,

Marcella Marquez

HSE Administrator

Enclosures-Analytical Reports



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410** Fax To: (505) 632-1876

Received:

08/20/2010

Reported:

08/27/2010

Project Name:

JFJ

Project Number: Project Location: 9003

NOT GIVEN

Sampling Date:

08/19/2010

Sampling Type:

Soil

200

0.746

Sampling Condition:

** (See Notes)

Sample Received By:

Jod! Henson

Sample 10: 719 (H020680-04)

BTEX 8021B	mg,	/kg	Analyze	d By: CK				**************************************	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value OC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2010	NO	0.810	81.0	1.00	5.27	
Toluene*	< 0.050	0.050	08/24/2010	ND	0.860	86.0	1.00	3.68	
Ethylbenzene*	⊴0.050 0.050		08/24/2010	010 NO 0.90		90.6	1.00	2.96	
Total Xylenes*	< 0.150	0.150	08/24/2010	ND	2.65	88.2	3,00	3.89	
Surrogang: 4-Bromofiumobeasene (PH	98,8	%6 \$9-126	,						
Chloride, SM4500CI-B	n)g.	/kg	Analyzed By: HM						QM-07
Analyte	Result	Reporting Limit	Analyzed	Method Blank	B5.	% Recovery	True Value QC	RPO	Qualifier
Chloride	160	16.0	08/23/2010	ИD	432	108	400	0.00	
TPH 8015M	mg/kg		Analyze	d By: Aß					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	65	% Recovery	True Value QC	RPD	Qualifiei
GRO C6-C10	< 10.0	10.0	08/24/2010	ND	162	81.2	200	0.699	

ND

163

81.3

Surrogate: 1-Chloroottime

DRO >C10-C28

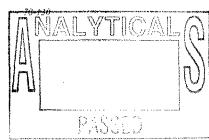
92.0%

80.4

Surragme: 1-Chloruoctadecime

70-130 36.1 %

10.0



08/24/2010

Cardinal Laboratories

*⇒Accredited Analyte

PLEASE NEED. Lighting and distributes. Considering building and designed containing entropy of the containing and the containin

Celey D. Keene, Lab Director/Quality Manager



August 27, 2010

MARCELLA MARQUEZ

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/20/10 11:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water-matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager

Celey D. Kune

PHONE (\$75) 393-7376 *-101 F. HARLAND * HOBBS, NH 88240

Notes and Definitions

Sept: The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

NO ... Analyte NOT DETECTED at or above the reporting limit.

RPD Relative Percent Difference

OM-07

Samples not received at proper temperature of 6°C or below.

disufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples by received at or below 6°C.

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLACE (SOUTE 1997 CHANNES ANTHRO AND EXPLORED EX

Celuy Kuno

Celey D. Keene, Lab Director/Quality Manager

Page 12 of 13

CHAIN OF CUSTODY RECORD Page 1 of 1 NOTES: Table 1. - Matrix Type 1) Ensure proper container packaging. 1 = Surface Water, 2 = Ground Water 2) Ship samples promptly following collection. Address: L 3 = Soil/Sediment, 4 = Rinsate, 5 = Oil3) Designate Sample Reject Disposition. 800B 6 = Waste, 7 = Other (Specify)PO# Phone Number: FAX Number 505 1032 189 Sawar, a Project Name: 1 Samplers Signature: riblecosys (970) 247-4220 Analyses Required FAX (970) 247-4227 Green Analytical Laboratories Lab Name: 75 Suttle Street, Durango, CO 81303 Address: Preservative(s) Collection Miscellaneous Unpreserved (Ice Only) Sample Filtered? Y/N No. of Containers Other (Specify) Sample ID Date Time FI2SO4 6/17/10 7:40 06:8 8:17 8:39 7:05 5. 11 17. CC 9:50 10:03 Ç, 736 Q 11:00 11 11:29 10. 42 Relinquished by:

Date: 8-19-10 13:20

19-10

TEIO

* Sample Reject: [] Return [] Dispose [] Store (30 Days)

Page 13 of 13

Time: 20

FOR GALUSE ONLY

GALJOB#

Comments



Analytical Results For:

INDUSTRIAL ECOSYSTEMS
MARCELLA MARQUEZ
49 CR 3150
AZTEC NM, 87410
Fax To: (505) 632-1876

Received:

08/20/2010

Reported: Project Name: 08/27/2010

Project Number:

JFJ 9003

Project: Location:

NOT GIVEN

Sampling Date:

08/19/2010

Sampling Type:

Soil

Sampling Condition: Sample Received By:

** (See Notes)

Jodi Henson

Sample 10: 736 (H020680-08)

BTEX 8021B	rng,	/kg	Analyzed By: CK						5-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2010	NO	0.810	81.0	1,00	5.27	
Toluene*	0.261	0.050	08/24/2010	ИD	0.860	86.0	1.00	3.68	
Ethylbenzene*	0.060	0.050	08/24/2010	ND	0.906	90.6	1.00	2.96	
Total Xylenes*	0.522	0.150	08/24/2010	ND	2.65	88.2	3.00	3.89	

Surrogate: 4-Bromofluorobenzene (FIL

130 %

80-120

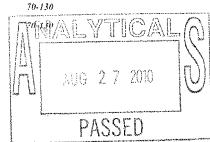
Chloride, SM4500CI-B	nıg	/kg	Analyze	d By: HM					QM-07	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	ß	% Recovery	True Value QC	æø	Qualifier	
Chloride	240	16.0	08/23/2010	МÐ	432	108	400	0.00		
TPH 8015M mg/kg			Analyzed By: AB						S-04	
Analyte	Result	Reporting Limit	Analyzeci	Method Blank	BS	% Recovery	True Value QC	KPD	Qualitier	
GRO C6-C10	<10.0	10.0	08/25/2010	ND	162	81.2	200	0.699		
DRO >C10-C28	32.6	10.0	08/25/2010	OM	163	81.3	200	0.746		

Surrogate: 1-Chloroociane

88 4 %

Surrogate: 1-Chlorooctadecane

52 7 % [7]



Cardinal Laboratories

**Accredited Analyte

REAL WITH, Cabble for Damages. Continues based on a contract for any date manage amount access in contract to the security to a state by their in accession. As date on antique and the security
Celey & Keine

Celey D. Keene, Lab Director/Quality Manager

PHONE (575) 383-2326 * 101 E. MARIAND * HORRS, NM 88240



August 27, 2010

MARCELLA MARQUEZ

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/20/10 T1:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Tolüene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water-matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Celey Keene



Notes and Definitions

S-04	 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QNI-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
RPD	 Analyte NOT DETECTED at ar above the reporting limit. Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below. Tastifficient time to reach temperature.
	Chloride by SM4500CFB does not require samples be received at or below 6°C Sümples reported on an as received basis (wet) unless attronyise noted on report

t=Accredited Analyte

BLANCE CONTROL CONTROL AND CONTROLS CONTROL AND CONTROL AND CONTROL OF THE CONTRO

Celey & Kune

Analytical:
Laboratories

Fa.

10

Ana	alytical: oratories		(CHA	IN	OF	CI	JS	TC	D	Y	RI	ECO	OR	D						P	age l	of_	•
Client: I. C. T.	•			NOTE	is:																	Ų		
Contact: W CVCR	lla		_	1) Ens	ure pro	per cor	naine	r pac	kagin	ging. Table 1 Matrix Type					ic .] [FOR GA	LUSE ONLY					
The state of the s	3150	\$150 2) Ship samples promptly followin				wing	colle	ection	1.	1 =	Surf	ົລແຮ ີ	Water,	2 = 0	iroun	id Wa	ter		GAL	JOB#				
Meter NA	1874	n()	_	3) Des	ignate :	Sample	Reje	ct Di	sposi	tion.			3 =	Soil	/Sedi	iment,	4 = Ri	nsate	. 5 =	Oil				
	1000										6.=	Was	to,7	= Othe	Other (Specify)									
	pillanes \					1	Sa	***	1	<u>-</u>	Saini	ders :	Signo	iture:	Ma	r /s			RA	- Andrew	- A	لـــــ		
Marcella		In Sti	- i a	(ec	054	24:	en	/2 /		\$~~\	į.						-gli					<u> </u>	air resident	
Lab Name: Green Ana				70) 24			XX (S		-				***************************************	***************************************	Aı	nalyses	Requ	ired	*************			-		7
Address: 75 Suttle	Street, Duran	go, CO 81:	503													0	1	Ţ.		T				
	Colle	ction		Miscell	aneous			Pre	serv	ațive	(5)			Speciel	9	0		1				•		
							2.					1	13	1.5	7	2	-							
			3		şe.	Sample Filtered ? Y/N	Unpreserved (Ice Only)					<u> </u>	143	Uj	Ö	13								
Sample ID	Date	Time	Collected by: (Init.)	uimen uimed (lec						(3)			\(\tau_{\text{c}}\)	00	000	10						Commo	ante	
Jampie 15	Detto	Inne	d b	lype able	Sont	Ä	, Lvet					pec		(")	\geq	0						Commy	ants	
			lectr	Matrix Type From Table 1	No. of Containers	nple	presc	HN03	-4	H2SO4	NAOH	Other (Specify)	8 6	Q.	12									
H20680-			·	M:a Frc	Š		η	=	HCI.	H2	ž	ŏ	(-)	0	\otimes	\bigcirc								
1. Pile 716 -	8/17/10	7:40	RC	3	ţ	13							V.					_						_
2. Pile 1722.	1	00:3											10											
Dile 73t		8:17											V	V	$\sqrt{}$	4								
4.11 719.		8:39											1	سمعميا	1	مميا								
5.11 715.		9:05				4							V	بتمي	1									
6. 11721 679		9:27	il.										1	V	✓	1								
7. 11 729.		9:50	14										1	V	تمسيا									
8. 4 736.		10:03				ļ.							V	J.	تمممها	~								
9. 11 . 738.		11:00											v.	سمر	ومهمنا	V					·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
10. 1. 735	-4	11:29	1	V	J	V							W.	1	V	V								
Relinquished by:	Est A			Date: S	(- q.	-10	Time	a (5	Perc	you t)y:	. (I.Q	- 8	V	age	-e	\display \(\frac{1}{2} \)		Date:	- (4- (O L.	\$: 2Ö	
Relinguished by:	-10 m	8		Date:	j G-1	0	Time	10		Rece	ed t	oy: a A	tic	1	A 16	id der) - 0			啰	1911	Time	3//	_
* Sample Reject: Return	[] Dispose	Store (3	() Days)	-						Ale	7 TO 1 1 1 1 1 1 1	-	110	ji c	000	to			2	128	9/10	11	ile,	
	•									7	لمئزرة شد	ه ب	ئىلىنىڭارلىك ئىلىنىڭارلىك	<i>,</i>	ر .				••	,	· , ·		Page 1	3 of 13



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 AZTEC NM, 87410

Fax To:

(\$05) 632-1876

Received:

08/20/2010

Reported:

08/27/2010

Project Name:

JFJ

Project Number:

9003

Project Location:

NOT GIVEN

Sampling Date:

08/19/2010

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

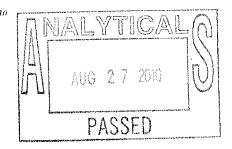
Sample ID:/715 (H020680-05)

BTEX 8021B	mg,	′kg	Analyzo	d By: CK	,	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	Ø\$	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2010	ND	0.810	81.0	100	\$.27	
Toluene*	<0.050	0.050	08/24/2010	ND	0.860	86.0	1.00	3,68	
Ethylbenzene*	<0.050	0.050	08/24/2010	ND	0.906	90.6	1.00	2.96	
Total Xylenes*	< 0.150	0.150	08/24/2010	ND	2,65	88.2	3,00	3.89	
									,
Surrogare: 4-Bramafluurobenzene	(P)E 100 :	86 - 126	3						

Chloride, SM4500CI-B	nıg	/kg	Analyzc	d By: HM					QM-07	
Analytis	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Trug Value QC	RPD	Qualifier	
Chloride	64. D 16.0		08/23/2010	ND	432	108	400	0.00		
TPH 8015M	/kg	Analyzed By: AB			·····			S-04		
Analyté	Reșult	Reporting Limit	Analyzed	Method Blank	es	% Recovery	True Value QC	RPO	Qualifier	
GRO-C6-C10	≪10.0	10.0	08/24/2010	МО	162	81.2	200	0.699		
DRQ >C10-C28	19.3	10.0	08/24/2010	МО	163	81.3	200	0.746		
•										

Surrogate: 1-Chlorocetane 82.8 % 70-130

Surrogate: 1-Chloraoctadecane 44.6 % 70-130



Cardinal Laboratories

*=Accredited Analyte

SEAS NOTE contributed the supple of the supp

Celeg & Keine

Celey D. Keene, Lab Director/Quality Manager

PHONE (575) 393-3326 * 101 E. MAŘÍAND * HOBBS, NM 88740



August 27, 2010

MARCELLA MARQUEZ

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/20/10 11:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Tribalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager





Notes and Definitions

\$ 04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
Q14-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ИD	- Analyte NOT DETECTED it or above the reporting limit
RPD	Relative Percent Difference
16 K	Simples not received at proper temperature of 6°C or below.
4##	dissificient lane to reach temperature.
* ; ,	Chloride by SM4500ChB does not require samples be received at an below 6°C
	Samples reported on an as received basis (well) unless otherwise noted on report-

Cardinal Laboratories

PASSE HOUSE LOOKED was theregoe. Comment entance and comment entances tension, tension, output in the comment of comments and control and

Celey & Kune

CHAIN OF CUSTODY RECORD Page 1 of 1 NOTES: Table 1. - Matrix Type 1) Ensure proper container packaging. FOR GALUSE ONLY 1 = Surface Water, 2 = Ground Water Address: L 2) Ship samples promptly following collection. GALIOB # 3 = Soil/Sediment, 4 = Rinsate, 5 = Oil3) Designate Sample Reject Disposition. 6 = Waste, 7 = Other (Specify) PO# Phone Number: FAX Number: 505, 1032.1 Samplers Signature: Project Name: N idlecosyst (970) 247-4220 FAX (970) 247-4227 Analyses Required Lab Name: Green Analytical Laboratories 75 Suttle Street, Durango, CO 81303 Address: Collection Miscellaneous Preservative(s) Unpreserved (Ice Only) Sample Filtered ? Y/N No. of Containers Other (Specify) Sample ID Date Time Comments Blitho 17.40 00:8 8:39 7:05 9:27 9:50 7. . . 0 10.03 11:00 18 Relinquished by: The a O 雪: 20 Relinquished by: THO 19-10

f-T Store (30 Days) * Sample Reject: [] Return [[Dispose

Page 13 of 13



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410** Fax To: (505) 632-1876

Received:

08/20/2010

Reported:

08/27/2010

Project Name:

JF)

Project Number: Project Location:

NOT GIVEN

9003

Sampling Date:

08/19/2010

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample IQ: 724 (HD20680-10)

BTEX 80210	mg,	/kg	Analyze	d By: CK			***************************************		
Analyte	Result	Reporting Limit	Analyzed	Hethod Blank	ttS	% Recovery	True Value QC	RPD	Qualifier
Benzeng*	₹0.050	0.050	08/24/2010	ОИ	9.810	81.0	1.00	5.27	
Toluene**	<0.050	0.050	08/24/2010	NC	0.860	0.88	1.00	3,68	
Ethylberizene*	<0.050	0.050	08/24/2010	NO	0.906	90.6	1.00	2.96	
Total Xylenes*	< 0.150	0.150	08/24/2010	ND	2.65	88.2	3.00	3.89	

Surrogate: 4-Bromojluorabenzene (PII.

\$0.120

Chloride, SM45DOCI-B	mg	/kg	Analyze	d By: HM					QM-07
Analyte	Resim	Reporting Limit	Analyzed	Method Blank	ßS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/23/2010	ND	432	108	400	0.00	
TPH 8015M	nıg	/kg	Analyzo	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Black	85	% Recovery	True Value QC	RPD	Qualitier
GRO C6-C10	<10.0	10.0	08/25/2010	ND	162	81.2	200	0.699	
DRO >C10-C28	28.5	10.0	08/25/2010	ND	163	81.3	200	0,746	

Surrogate: 1-Chlorooctane

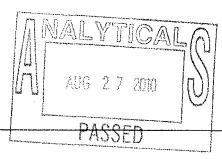
Cardinal Laboratones

809%

70-130 70-130

Surrogate: 1-Chloroactadecane

42.6 %



^≈Accredited Analyte

PERIOD BOTTO TO THE AND CONTROLS CONTROLS AND CONTROLS INTO CONTROL PROPERTY OF THE CONTROL AND CONTROL OF THE


August 27, 2010

MARCELLA MARQUEZ INDUSTRIAI. ECOSYSTEMS 49 CR 3150 AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/20/10 11:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-816 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

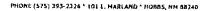
This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Celey Drune





Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

CM-D7 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

MD 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 zeach temperature.

Chloride by SM4500CHB does not require samples be recoved at or below 0°C.

Samples reported on an as received basis (wet) unless otherwise noted on report.

Cardinal Laboratories

†≈Accredited Analyte

THEM NOTE LOSSING AND DIVISION CONTINUES CONTINUES AND ADDRESS AND HOUSE AND ADDRESS AND HOUSE FOR HOUSE AND ADDRESS AND ADDRE

Celey Keine

Analytical

CHAIN OF CUSTODY RECORD

	6		
Page	Ĩ	of	- €

CHEM:	
Contact: V	arcella
Address: 49	CK 3150
Matec	NM 87410
Phone Number:	505-632.1762

NOTES:

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

PO# 4003

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate. 5 = Oil

6 = Waste, 7 = Other (Specify)

FOR GALUSE ONLY

GALJOB#

FAX Number: 505.632.1891 Project Name: N Samplers Signature: Marcella @ Mdustrialecosyst Lab Name: Green Analytical Laboratories (970) 247-422d Analyses Required 75 Suttle Street, Durango, CO 81303 Address: Collection Miscellaneous Preservative(s) Unpreserved (Ice Only) Sample Filtered ? Y/N Sample ID Date Time Comments NAOH H2SO4 olivilo 17:40 00:8 8:17 8:39 9:05 7. 10:03 11:00 11 Relinquished by: Time: a O Relinquished by: TP910

* Sample Reject: | | Return | | | Dispose | - | Store (30 Days)

400 Menson

128/10 11.15. Page 13 of 13



Analytical Results For:

INDUSTRIAL ECOSYSTEMS
MARCELLA MARQUEZ
49 CR 3150
AZTEC NM, 87410
Fax To: (505) 632-1876

Received:

08/20/2010

Reported:

08/27/2010

Project Name: Project Number: JFJ 9003

Project Number: Project Location: NOT GIVEN

Sampling Date:

08/19/2010

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Qualifier

Sample Received By: Jodi Henson

Sample ID: 728 (H020680-07)

BTEX 80218	mg,		Analyzi	ed By: CK
Analyte	Result	Reporting Limit	Analyzed	Method

Method Blank BS % Recovery True Value QC RPO Benzene" < 0.050 0.050 08/24/2010 0,810 ND 81.0 1,00 5.27 Toluene* 0.251 0.050 08/24/2010 ND 0.86086.0 1.00 3.68 Ethylbenzene* 0.068 0.050 08/24/2010 ОИ 0.906 90.6 1.00 2.96 Total Xylenes* 0.571 0.150 08/24/2010 ND 2.65 88.2 3,00 3.89

Surrogette: 4-Bromaffuorobenzene (PH

101 %

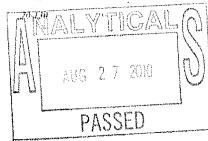
80-120

Chloride, SM4500CI-B	nıg	/kg	Analyze	d By: HM			·		QM-07
Analyte	Regult	Reporting Limit	Analyzed	Method Blank	88	% Receivery	True Value QC	RPD	Qualitier
Chloride	256	16.0	08/23/2010	ио	432	108	400	0.00	
TPH 8015M	nıg	/kg	Analyzo	d By: AB			1441-pan-mailteanai		S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	"& Recovery	Trae Value QC	BPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2010	NO	162	81.2	- 200	0.699	
DRO >C10-C28	49.4	10.0	08/25/2010	ND	163	81.3	200	0.746	

Surrogote: 1-Chlorosciane Surrogote: 1-Chlorosciadecana 93 1 28

33.9 %

70-130



Cardinal Laboratories

*=Accredited Analyte

REACE WILL LANSING WILL ELEMENT WILL ELEMENT WILL ELEMENT WITH CONTROL OF THE MAN AND THE WILL ELEMENT WITH A SHAPE WE SEE THE WITH A SHAPE WE SHAPE WE SHAPE WITH A SHAPE WE SHAPE WE SHAPE WE SHAPE WE SHAPE WITH A SHAPE WE SH

Celego France



August 27, 2010

MARCELLA MARQUEZ

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC, NM:87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/20/10 11:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846-8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number 3104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager

Celey & Kune



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was acceptable in acceptable i.CS recovery.
ND.	Analyte NOT DETECTED at or above the reporting limit.
RPD	Relative Percent Difference
kik .	Samiples not received at proper temperature of 6°C or below.
usis,	Insufficient time to reach temperature.
	Chloride by SN4500CFB does not require samples be received at or below 6°C

Cardinal Laboratories ***Accredited Analyte

PLEASE (\$70%). LANGER WIS CHANGES. Continued to being and from a change in the continue of the continue of the continue and t

Celey & Kune

Celey D. Keene, Lab Director/Quality Manager

	719
-	Analytical Laboratories
tor.	Capoi arones

CHAIN OF CUSTODY RECORD

		á.			,
•	Page	Ť	ωf	1	į:

Client: -L. E. T.
Contact: Worcella
Address: 49 CA 3150
Nztec NM 87410
Phone Number: 565-632.1782-
FAX Number: 505.632.1816

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

PO# 4003

Project Name: N

NOTES:

Table 1. – Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

Samplers Signature:

FOR GALUSE ONLY
GALJOB #

Marcoun @ Maustrialecosystems (970) 247-4220 FAX (970) 247-4227 Lab Name: Green Analytical Laboratories Analyses Required 75 Suttle Street, Durango, CO 81303 Address: Miscellaneous Collection Preservative(s) Unpreserved (Ice Only) Sample Filtered ? Y/N No. of Containers Sample ID Date Time Comments H2SO4 0 17 10 7:40 06:8 8:17 V 8:39 9:05 5. 11 9:27 6. 11 721 675 7. il 9:50 10:03 736 11 11 11:00 Date: 8-14-10 Relinquished by: TE a O T3:20 TE10 19-10

VYSOT FOR 10

* Sample Reject: | J. Return | | Dispose | Store (30 Days)

gode Denson

8/20/10

Page 13 of 13



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410**

Fax To:

(505) 632-1876

Received:

08/20/2010

Reported:

08/27/2010

Project Name:

JF)

Project Number:

9003

Project Location:

NOT GIVEN

Sampling Date:

08/19/2010

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By: Jodí Henson

Sample ID: 734 (H020680-03)

BTEX 8021B	กาฐ	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	DE-	% Recovery	Trust Value QC	RPO	Qualifier
Benzene*	<0.050	0.050	08/24/2010	NO	0.810	81.0	1.00	5.27	
Toluener	<0.050	0.050	08/24/2010	ON	0.860	86.0	1,00	3.68	
Ethylbenzene*	<0.050	0.050	08/24/2010	ND	0.906	90.6	1.00	2.96	
Total Xylenes*	≈0.150	0.150	08/24/2010	NO	2.65	88.2	3.00	3.89	

Sucrogate: 4-Bromofluorobenzene (PIL

Analyte

Analyte

Chioride, SM4500CI-B

Chloride

TPH 8015M

GRO C6-C10

DRO >C10-C28

100.96 mg/kg

Result

- 80.0

Result

<10.0

47.6

80-120

QM-07 QC RPD Qualifie
QC RPD Qualifier
0.00
\$-04
QC RPO Qualifie
0.699
0.746

Surcogate: 1-Chlorooctane

97.23%

mg/kg

70-130

Surrogate: 1-Chlaroactadecane

35.2 %

70-130

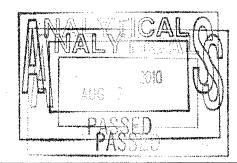
Reporting Limit

16.0

Reporting Limit

10.0

10.0



Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

PHONE (975) 393-2325 * 101 E. MARLAND * HOBBS, NH B8740



August 27, 2010

MARCELLA MARQUEZ

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/20/10, 11:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846.8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number 1104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water-matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-S)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager

Celey D. Keine

PHONE (\$7\$) 393-2326 * 101 E. HARLAND * HOBBS, NH 88240

Notes and Definitions

Set The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable i.CS recovery.

ND Airalyte NOT DETECTED at or above the reporting limit.

RPB Relative Percent Difference.

Samples not received at proper temperature of 6°C or below.

Insufficient time to reach temperature.

Clikoride by SM4500Cl-B does not require samples be received at or below.6°C

Samples reported on an as received basis (with unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

HEASE SOTE: - Middle and Channess. Chemical technic and stands intermed on any matrix count is represent in the scanes in the anterior picture of class of c

Celey & Kune

Celey D. Keene, Lab Director/Quality Manager

Client: T. E. Laboratories

Client: T. E. Laboratories

Contact: Marcella

Address: 49 CL 3150

Matter Nm 87410

Phone Number: 505-632.1762

FAX Number: 505.632.1876

War Cella Q Widnestri

Lab Name: Green Analytical Laboratories

Address: 75 Suttle Street, Durango, CO 81303

Collection

CHAIN	OF	Ti	TETO	DV	REC	ORD
CALLEALLY.		ب و	ノンフスペン	シュ	$\mathbf{I} \mathbf{V} \mathbf{L} \mathbf{V}$	CHALL

Page	of	E
4 050	<u></u>	

No.	```	TC

- i) Ensure proper container packaging.
- 2) Ship samples promptly following collection.
- 3) Designate Sample Reject Disposition.

PO# 4003

Table 1. - Matrix Type-

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate. 5 = Oil

6 = Waste, 7 = Other (Specify)

FOR GALUSE ONLY
GALJOB #

Number: 505,1032.18710 Project Name: JF.) Savyling Samplers Signature: Kerling Kelling Navcolla @ Marcolla @ M

Lab Name: Green Ana	lytical Labor	ratories	(9	7/0) 24	7-422() <u>1</u> ~/	$AX_{i}(S)$	70) 2	4/-4	227		_i_			natyse	s Requ	ired	 	į		
Address: 75 Suttle	Street, Durar	igo, CO 813	803												0				ł		
	Colle	ction	i	Miscell	aneous	}		Pres	ervat	tive(s).		4,00	0	O						
Sample ID H20680 -	Date	Time	Collected by: (fnjt:)	Matrix Type From Table 1	No. of Centainers	Sample Filtered 2 Y/N	Unpreserved (Ice Only)	HN03	HCI,	H2SO4	Other (Specify)	10 8 0 1 C	17/19/2 04/0 10/0/2 04/0/0	2	Chlorideso					Commei	nts
1. Pile 716.	61710	7.40	RC		į	17						V	1								
2 Pile 122.	1	00:8	1		<u> </u>	ſ						ŀ	/								
Dile 13to		8:17										l,	V	V	1						
4.41 719.		8:39											مر ار	1/	مميره						
5.11 TIS.		9:05	i i								-	V	يمي أم	1	ungra .						
6. 11721 6797		9:27	1									,	1	1	1						
7. 11 728	Ē	9:50	ì									1	1 5	~	1						
8. V 736.	,	10:03										V	. 1	1	اسمسا						
9 11 738.		11:00										~	مرا	بمحمقا	·V						
10. 11 734	1	11:39	1	V	مل ا	1						lio/	1 4	V	V						
Relinquished by	EN KI		, par	Date: 5	1-19	-10	Time	a()	R	ercive	d by: پیشرین	درن	لم سري	V	tures	- TI	$\sqrt{}$		19-11	5 Time	: 20
Relifiquished by:	Dra	0		Dafe:	19-1	(2)	Time	10	R	eceve	d by:	ti	<u>. </u>	1/2	1111	7		 Daie:/	1914	Time	

* Sample Réject: | | Return | | Dispose | | Store (30 Days)

flat Denson

8/20/10

Page 13 of 13

-2:

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

John H. BemisCabinet Secretary-Designate

Brett F. Woods, Ph.D.Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



October 6, 2011

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils
JFJ Landfarm, LLC - Industrial Ecosystems Inc.
JFJ Landfarm - Permit # NM1-010-B
Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,
San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) request, dated October 5, 2011, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized at the proposed Crowe Blanco Landfarm, located in Section 16, Township 29 North, Range 9 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

Pile # 737

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations specified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse; and

Ms. Marquez JFJ Landfarm, LLC Permit NM1-010-B October 6, 2011 Page 2 of 2

3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface, and protects human health and the environment.

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey Director

JB/baj

cc: OCD District III Office, Aztec

Jones, Brad A., EMNRD

From:

Marcella Marquez [marcella@industrialecosystems.com]

Sent:

Wednesday, October 05, 2011 11:23 AM

To:

Jones, Brad A., EMNRD

Cc:

'Terry Lattin'

Subject:

Pile 737

Attachments:

2450_0001.pdf; Letter to remove treated soils to Blanco facility.doc

Brad:

Please see attached request to remove treated soils from the JFJ Landfarm to the Blanco property along with the corresponding analytical reports.

Please let me know if you have any questions or if additional information is needed.

Thanks, Marcella Marquez, HSE Administrator Industrial Ecosystems, Inc. Phone: (505) 632-1782

Fax: (505) 632-1876 or (505) 334-1003



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

October 6, 2011

Brad Jones NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

As per our meeting on 08/18/11, this letter is being submitted to you as a request to remove treated soils from the JFJ Landfarm to be reused/recycled at our property in Blanco (Sec-16, T-29N, R-09W).

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

o Pile 737

Respectfully Submitted,
Marcelea Marquey

Marcella Marquez HSE Administrator

{Attachments}



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410**

Fax To:

(505) 632-1876

Received:

08/17/2011

Reported:

08/19/2011

Project Name:

JFJ

Project Number: Project Location:

NONE GIVEN **NOT GIVEN**

Sampling Date: Sampling Type: 08/16/2011

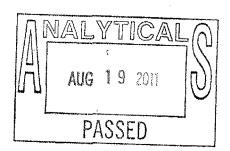
Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: PILE 737 (H101727-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/17/2011	ND	432	108	400	3.77	
TPH 418.1	mg	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BŞ	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	08/18/2011	ND	1060	97.2	1090	1.90	



Cardinal Laboratories *=Accredited Analyte

Hope S. Moreno



August 19, 2011

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/17/11 9:45.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Lope S. Moreno

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,

Hope Moreno

Inorganic Technical Director



Notes and Definitions

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 SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on repor

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's Bability and clients's exclusive remody for any claim arising, whether based in contract or tort, shall be firmful to the amount paid by client for analyses. All claims, including those for nepligence and any other cause whatbourer shall be deemed welved unless made it weiting and received by Cardinal within tility (30) days after completion of the applicable service. In no event shall Cardinal be bable for incidental or consequential damages, including, without amittands, business Interruptions, loss of use, or loss of profits incuried by client, he subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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.

Rope S. Moreno



CHAIN OF CUSTODY RECORD

							٠.	. :				
	:	:	:	:			*					
٠		- 1	١,,	ين	_	- ; ;	1		~£	٠.		
		1	a	ಕ	띡.	::	2:	_::	Oi.		· F	

ClientE				
Contact: γ	arce	lla		
Address: 49	CR	315	0	
artec	Wn) %	7411	\mathcal{D}
Phone Number:	505	(43°)	1-17	82
FAX Number:	5 05 -	632	-187	16

NOTES:

1) Ensure proper container packaging.

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

PO# 92

Project Name:) F

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

Samplers Signature:

FOR GAL USE ONLY
GAL JOB #

Lab Name: Green Analytical Laboratories (970) 247-4220 FAX (970) 247-4227 Analyses Required Address: 75 Suttle Street, Durango, CO 81303 Collection Preservative(s) Miscellaneous Sample Filtered ? Y/N Collected by: (Init.) No. of Containers Sample ID Time Date Comments H2S04 10:47 11:21 11:55 :12 1:40 Relinquished by: * Sample Reject: [] Return Rispose [] Store (39 pays) on 8/17/11



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 9994

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

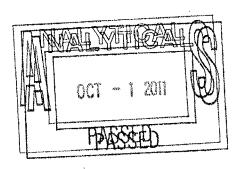
Reported:

01-Oct-11 15:55

PILE 737

H102090-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	l Laborat	ories					
Organic Compounds									
Benzene	ND	0.050	mg/kg	50	1092901	CMS	30-Sep-11	8260B	
Tolucne	CIM	0.050	mg/kg	50	1092901	CMS	30-Sep-11	8260B	
Ethylbenzene	П	0.050	nig/kg	50	1092901	CMS	30-Sep-11	8260B	
Total Xylenes	ΟΪΛ	0.150	mg/kg	50	1092901	CMS	30-Sep-11	8260B	
Surrogate: Dibromofluoromethane		80.6%	61.3-		1092901	CMS	30-Sep-11	8260H	
Surrogate: Toluene-d8		103 %	71.3-	129	1092901	CMS	30-Sep-11	8260H	
Surrogate: 4-Bromofluorobenzene		114%	65.7-	141	1092901	CMS	30-Sep-11	8260H	



Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clearly's exclusive remedy for any claim largery, whether based in cortibact or tort, shall be limited to the amount paid by cherk for crushysess. All claims, including those for neighporter and any other course whatsonews shall be deemed waved unless made in writing and recoved by Cardinal within thing (30) days after complicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business inhamplions, loss of unit or performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the allowe stated reasons or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in full with waters approval of Cardinal Laboratories.

aleg D. Kens



October 01, 2011

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 09/29/11 10:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

aleg to Keene

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. Keene

Lab Director/Quality Manager





Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 9994

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported:

01-Oct-11 15:55

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike	Source	9/ D E/C	%REC	D DES	RPD Limit	Notes
Maryte	RESUIT	Fimit	Units	1.evel	Result	%REC	Limits	RPD	Limit	NOICS
Batch 1092901 - Volatiles			1/11-11-11-11-11-11-11-11-11-11-11-11-11		······································					
Blank (1092901-BLK1)				Prepared &	Analyzed:	29-Sep-11				
Benzene	D	0.050	mg/kg	***************************************	***************************************		I de contra contra e a comerci p		PM - 7 51 71 71 81 81 81 81 81 81 47 47 7	
Toluene	ND	0.050	mg/kg							
Ethylhenzene	ND	0.050	mg/kg							
Total Xylenes	ИD	0.150	mg/kg							
Surrogate: Dibromofluoromethane	0.571		mg/kg	0.500		114	61.3-142	*************		
Surrogate: Toluene-d8	0.493		mg/kg	0.500		98.7	71.3-129			
Surrogate: 4-Bromofluorobenzene	0.381		mg/kg	0.500		76.1	65.7-141			
LCS (1092901-BS1)				Prepared &	Analyzed:	29-Sep-11				
Benzene	2.27	0.050	tng/kg	2.00		1] 4	76.8-122			
Tolucie	2.36	0,050	mg/kg	2.00		118	73,1-129			
Ethylbenzene	2.48	0.050	mg/kg	2.00		124	72.8-128			
m+p - Xylene	5.42	0,100	mg/kg				69.4-129			
o-Xylene	2.27	0.050	ıng∕kg	2.00		114	70.3-126			
Total Xylenes	7.69	0.150	mg/kg	6,00		128	72-127			
Surrogate: Dibromofluoromethane	0.456		mg/kg	0.500		91.2	61.3-142			
Surrogate: Tolvene-d8	0.486		mg/kg	0.500		97.2	71.3-129			
Surrogate: 4-Bromofluorobenzene	0.456		mg/kg	0.500		91.1	65.7-141			
LCS Dup (1092901-BSD1)				Prepared &	: Analyzed:	29-Sep-11				
Benzene	2,36	0,050	mg/kg	2.00		118	76.8-122	3.86	18.7	
Toluene	2.39	0.050	mg/kg	2.00		120	73.1-129	1.47	19.4	
Ethylbenzene	2.55	0.050	mg/kg	2.00		127	72.8-128	2.67	21.8	
m+p - Xylene	5,60	0,100	mg/kg				69.4-129	3,14	25.3	
Total Xylenes	7.93	0.150	mg/kg	6.00		132	72-127	3.08	23.2	
o-Xylene	2.34	0.050	mg/kg	2.00	t to profess, Nach a part occupance the following	117	70,3-126	2.92	23.6	
Surrogate: Dibromofluoromethane	U.463		mg/kg	0.500		92.6	61.3-142			
Surrogate: Taluene-d8	. 0.481		mg/kg	0.500		96.2	71.3-129			
Surrogate: 4-Bromofluorobenzene	0.443		mg/kg	0.500		88.7	65.7-141			

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Listabley and Damages. Cardinal's bability and clients' exclusive remisely for any claim ensuring, whether based in contract or tort, shall be intried to the amount paid by client for analyses. All claims, including those for nephigents and any other cause whatsoever shall be deemed varied unless made in webing and received by Cardinal within thirty (30) days after completion of the applicables service. In no event shall Cardinal be saide for modernal or consequential damages, including, without similarly, and because of the services of use of profits incurred by client, its subsidiaries, artificities or successors as strength on the services of the services hereunder by Cardinal, regardless of whether such clients in based upon the services are strength on the services of the services hereunder by Cardinal profits incurred by Cardinal shows that the services of the services hereunder by Cardinal shows that the services of the services hereunder by Cardinal shows that the services of the services hereunder by Cardinal shows that the services of the services hereunder by Cardinal shows that the services of the services o

Celley & Keene

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS

49 CR 3150

AZTEC NM, 87410

Project: JFJ

Project Number: 9994

Project Manager: MARCELLA MARQUEZ

Fax To: (505) 632-1876

Reported: 01-Oct-11 15:55

Organic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1092903 - General Prep - Organics										
Blank (1092903-BLKI)				Prepared &	¿ Analyzed:	: 29-Sep-11				
TPH 418.1	ND	10.0	mg/kg					***************************************		
LCS (1092903-BS1)				Prepared &	k Analyzed:	: 29-Sep-11				
TPH 418.1	1060	10.0	mg/kg	1090	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	97.2	80-120			
LCS Dup (1092903-BSD1)				Prepared &	E Analyzed:	: 29-Sep-11				
TPH 418.1	1100	10.0	mg/kg	1090	***************************************	101	80-120	3.70	20	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Usbrilly and Damages. Cardinal's labelity and client's exclusive remedy for any claim arising, whether based in contract or turn, shall be limited to the amount paid by client for analyses. All clients, including those for neologicities and any other cause whitsoever shall be deemed waived unless made in writing and received by Cardinal brilly (30) days after conclusion of the applicable service. In no event shall Cardinal be liable for indicental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its auhaldaines, attiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regarders of wheelers such claims 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 Laboratonics.

aleg D. Kune

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Camages. Cardinal's liability and clients' exclusive remedy 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 nepligence and any other course whitevers shall be deemed welved unless made in verticing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall cardinal be deemed welved unless made in verticing and received by Cardinal within thirty (30) days after completely service, and of the applicable service. In no event shall cardinal be calculated, within a service and of the service has cardinal cardinal cardinal cardinal services have unless and the services hereunder by Cardinal reparties of whether such 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 Auf with written approval of Cardinal Laboratories.

Celey D. Kinne



	RECORD

	٠	٠		٠	٠		٠		٠	T .			٠		٠	- 0	
																	4
										. :							
- 7																	

Ü	Cl	ıcı	t.	 ٠	*	ŕ	L	ŕ	ï	ċ	4		:		į	. ;	:	.,	:	١.	:	:	:	Ì	:	:	:	ξ.	:	:	
•	7	-																													

Contact: TY Calcula Address: 49

Phone Number:

FAX Number: 505632-1876

NOTES: 1) Ensure proper container packaging,

2) Ship samples promptly following collection.

3) Designate Sample Reject Disposition.

Project Namo:

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsare, 5 = Oil

6 = Waste, 7 = Other (Specify)

FOR GALUSE ONLY

GALJOB#

Samplers Signature:

Lab Name: Green Ana	ilytical Labor	alories	(C	70) 24	7-4220) F7	XX (970) 2	47-42	27				Ana	lyses	Re	guire	:d				
Address: 75 Suttle	Street, Duran	go, CO 81.	303			gad.							ഹ									
	Collec	ction		Miscell	ancous			Pres	ervati	ve(s)		~ ∞	7.	:							多音语自	
Sample ID HIOAOCIO	Date	Time	Collected by: (Init.)	Matrix Typx From Table 1	No. of Containers	Sample Filtered ? Y7N	Unpreserved (Rec Only)	IIINO3	HOSEM	NAOE	Other (Specify)	HOL	BTEX ROALB								Comments	
PIW/	9/28/11	7:20	CT	3	1	N						1									Oleose prot resul	
2 11		7:40				1		::				1									Dead	
³ / ₄		7:55										V									put.	
4. (8:10										1									'a gul	13
5. (0)		8:30					11.					10	1	11 11		İ					/ 👐	a0
6. V		8:50	+									w/							1.		न्द्री १	Jux p
(A)		9:15										w				-					~ \ \ 0	
8.1		9:40										V									() ()	
244		10:25										1									fron Cha	
10 W 737	V	11:00		TV-	W								V							1	\mathcal{O}^{ω} c \mathcal{M}	٠ المعود
Relinquished by:	12/			Date	/28	/11	Tip	:0:	5 R	E C	by:	٠,	70	170	-h	,	d.	S	29	1/2	8/11 Time/11.	25
Rounquished by:	Exha	63		Date.	<u> </u>	-11	Tim	50	, Re	celed	by:	57		10	1 1	r :	·		125		Time 75	7,

Sample Reject: [] Return [] Dispose [] Store (50 Days)

Page 16 of 16

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

John H. Bemis Cabinet Secretary-Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



August 25, 2011

Ms. Marcella Marquez
JFJ Landfarm, L.L.C.
Industrial Ecosystems Inc.
Soil Reclamation Center
P.O. Box 2043
Farmington, New Mexico 87499

RE: Request for Approval of On-Site Disposition of Remediated Soils

JFJ Landfarm, LLC - Industrial Ecosystems Inc.

JFJ Landfarm - Permit # NM1-010-B

Location: NW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,

San Juan County, New Mexico

Dear Ms. Marquez:

The Oil Conservation Division (OCD) has reviewed JFJ Landfarm, LLC's (JFJ) request, dated August 25, 2011, for on-site disposition of remediated soils from the OCD permitted landfarm (Surface Waste Management Facility Permit # NM-1-0010B) to be utilized at the proposed Crowe Blanco Landfarm, located in Section 16, Township 29 North, Range 9 West NMPM, San Juan County, New Mexico. OCD has reviewed the analytical results to reuse the remediated soils from the following biopile(s):

Pile # 743 Pile # 762

Based upon the information provided, the above-referenced biopiles are hereby approved for reuse with the following understandings and conditions:

- 1. JFJ has demonstrated that the proposed soils for reuse satisfy the TPH, BTEX, and Benzene concentrations specified in Condition 17 of the Landfarm and Composting Operations section of your February 3, 2004 surface waste management facility permit (NM1-010-B);
- 2. JFJ shall obtain legal authority from the surface owner prior to placement of the remediated soils for reuse; and

Ms. Marquez JFJ Landfarm, LLC Permit NM1-010-B August 25, 2011 Page 2 of 2

3. JFJ shall ensure that remediated soils are reused in a manner that prevents the contamination of ground water and surface, and protects human health and the environment.

Please be advised that approval of this request does not relieve JFJ of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve JFJ of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Mr. Brad A. Jones of my staff at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Jami Bailey Director

JB/baj

cc: OCD District III Office, Aztec

Jones, Brad A., EMNRD

From:

Marcella Marquez [marcella@industrialecosystems.com]

Sent:

Thursday, August 25, 2011 1:15 PM

To: Cc: Jones, Brad A., EMNRD Bailey, Jami, EMNRD

Subject:

Letter to remove treated soils to Blanco facility

Attachments:

Letter to remove treated soils to Blanco facility.doc; Pile 743 Analyticals.pdf; Pile 762

Analyticals.pdf *

Brad:

Please see attached request to remove treated soils from the JFJ Landfarm to the Blanco property along with the corresponding analytical reports.

Please let me know if you have any questions or if additional information is needed.

Thanks,

Marcella

Industrial Ecosystems, Inc.



Industrial Ecosystems Inc. Soil Reclamation Center

P.O. Box 2043 Farmington, NM 87499 Phone: (505) 632-1782 Fax: (505) 632-1876 #49 CR 3150 Aztec, NM 87410

August 25, 2011

Brad Jones NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re:

JFJ Landfarm Permit # NM01-0010B

Disposition of Treated Soils

Dear Brad:

As per our meeting on 08/18/11, this letter is being submitted to you as a request to remove treated soils from the JFJ Landfarm to be reused/recycled at our property in Blanco (Sec-16, T-29N, R-09W).

Attached you will find the analytical reports showing the treated soils have reached acceptable permit levels for the following biopiles:

o Pile 743

o Pile 762

Respectfully Submitted,

marceea marquey

Marcella Marquez

HSE Administrator

{Attachments}



Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410**

Fax To:

(505) 632-1876

Received: Reported: 08/17/2011

08/19/2011

Project Name: Project Number: Project Location:

NONE GIVEN

NOT GIVEN

Sampling Date: Sampling Type: 08/16/2011

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: PILE 762 (H101727-05)

BTEX 80218	mg/	kg	Analyze	d By: CMS		· · · · · · · · · · · · · · · · · · ·			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2011	ND	1.99	99.3	2.00	6.77	
Toluene*	<0.050	0.050	08/18/2011	ND	1.90	95.0	2.00	7.27	
Ethylbenzene*	<0.050	0.050	08/18/2011	ND ·	1.94	97.2	2.00	7.93	
Total Xylenes*	<0.150	0.150	08/18/2011	ND	5.77	96.2	6.00	8.20	
Surrogate: 4-Bromofluorobenzene (PIL	102 9	% 70-130)			records the second seco	A 1 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					•
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2011	ND	432	108	400	3.77	
TPH 418.1	mg/	kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	08/18/2011	ND	1060	97.2	1090	1.90	

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Liability and Damages. Cardinal's lability and client's exclusive remedy for any claim anising, whother based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for nephgenous and witting and received by Cardinul within thirty (30) days after compression of the applicable service. In no event shall Development be based to incidental or consequential in

Alope S. Moreno

Hope Moreno, Inorganic Technical Director

Page 4 of 6



August 19, 2011

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/17/11 9:45.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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

Hope Moreno

Inorganic Technical Director



Notes and Definitions

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE MOTE: Liability and Damages. Cardinal's liability and client's enclusive remedy for any claim arising, whether based in contract or tost, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whataconeer shall be destined washed unless made in vertical and necessary including, without himitation, business hieremptons, loss of use, or loss of profits incurred by client, its subclaimins, affiliates or successors arising out of or related to the performance of the services heremone that the profits incurred by client, its subclaimins, affiliates or successors arising out of or related to the performance of the services heremone that the profits incurred program of the profits incurred to the services heremone that the profits including the performance of the services heremone that the profits including the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the services here the performance of the services heremone that the performance of the services heremone that the performance of the services heremone that the performance of the services here the performance of the services here the performance of the services here the performance of the services here.

Lope S. Moreno

Hope Moreno, Inorganic Technical Director

Page 5 of 6



Ar Lat	nalytical poratories		C	ΉΑ	IN	OF	Cl	JS	TC)D	Y	RE	CC)R	D	:: 14 .; :: 3						Page	1 0	f /	
Client: LEI				топ	:S:																				
Contact: Marce Address: 49 CR	3156) 41()		2) Shi	p samp	oper cor iles proi Sample	nptly	follo	wing	colle	ection	.	1	Surfa	Table ice W Sedin	ater,	2 = (Groun	d Wa	. ·		i	GAL UNI		
Phone Number: 505	632-	1782	<u>.</u>	PO#		95	29	7			-		6 =	Wast	e, 7 =	Othe	г (Sp	cify)	. <u></u>	<u></u>			:		
FAX Number: 505 -	632-	1876		Projec	t Nam	. J	F.	f_{\perp}	. :		: '		Samp	lers S	ignatu	ire:	///	12	e fo	2	/_	/-			
							٠. :	<u>. ji i</u>		: 	·:.	. i	: ::					/<	سسب			.: :			- .
Lab Name: Green Anal	lytical Labor	atories	(9	70) 24	7-4220). F	XX (9	770)	247-	422	7			. :: .	Апа	lyses	Requ	ired			: .i.				7
Address: 75 Suttle S	Street, Duran		سيسينين						·					2	0										1.
	Colle	ction	1	Miscell	aneou	s .		Pre	serv	ative	(s)	- : .		D	Q			<u>.</u>							
Sample ID	Date	Time	y: (Init.)	17	tainers	Sample Filtered 2 Y/N	Unpreserved (Ice Only)					eify)	814 1	X 80,	10es							Com	iments	\$	
H101727			Collected by: (Init.)	Matrix Type From Table I	No. of Containers	Sample-Filt	Unpreservo	HNO3	нсг	H2S04	NAOIT	Other (Specify	1 0 1	8 10	0 0 0 0										
1 +16 595	8/16	10:47	C	3	1	N				ļ	:		*		16			<u> </u>		-		<u> </u>	<u> </u>	<u> </u>	
- 12 Pile 723		11:21						: :		<u> </u>			V	150	1000	\perp	_				111	<u></u>	<u></u>		
3 Pile 737		11 55			1	1	·		. :	-	· ·		10		-				ļ		<u> </u>	<u> </u>	·.		1
1 1P/1 1E 743		1:12		<u> </u>		1				Ē			محمو		\int	- :.	_	-			: ''	· · · · · · ·		· 	1
5 Pite Pile 76		1:40	V	V	V	$ \mathcal{N} $				ļ.,,			1	1	100%		-		1			<u> </u>	<u>.</u> .		_
O:	<u> </u>					ļ	_								 -	<u>.</u>	-		:.	1		: :	:	·	4
7.	<u> </u>				ļ ·		<u> </u>			<u> </u>	ļ								1	1		· · ·	<u>:. </u>		<u> </u>
8	<u> </u>			1	-		-	. :		ļ							-		<u></u>	:: ::	<u>: ; .</u>		<u>: </u>	·. ·	1
10.				: <u>:</u>							-	: : : : · :				· · · · ·			-	11.11	; ;;; ;;:::::::::::::::::::::::::::::				-
Relinquished by:	$\frac{1}{2}$			Date:	1101	1 10	Time	23.		Rece	/v4/	- y: 1	11/2	λG	3.5			<u> </u>	1 - 1	Date	. 71	f 17	Cime	سروه	_
Recting dryfied by	216	/-	<u> </u>	Dige	16	<i>i)</i> Li	Time	1:4	5		ixed		10		To) 201	5			Date	10	111	Time:	145 146	1
* Sample Reject: [] Return	N histosc L #Z6	JStory (3)	Jays) Nen	Sor	ે :45	/17/1			بسرخ خسرخ پز	17	7 ?	شي ديد	Emu	12	3	16/1 50	11	a) Vi-u	iti	Ci	au		age 6	- of 6



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

Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410** Fax To: (505) 632-1876

Received:

08/17/2011

Sampling Date:

08/16/2011

Reported: Project Name: 08/19/2011

Sampling Type:

Soil

Project Number:

JFJ

Sampling Condition:

Cool & Intact

Project Location:

NONE GIVEN NOT GIVEN

Sample Received By:

Jodi Henson

Sample ID: PILE 743 (H101727-04)

TPH 418.1	mg	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
TPH 418.1	<100	100	08/18/2011	ND	1060	97.2	1090	1.90	

Cardinal Laboratories

*=Accredited Analyte

Lope S. Morano

Hope Moreno, Inorganic Technical Director



August 19, 2011

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150

AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 08/17/11 9:45.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Benzene, Toluene, Ethyl Benzene, and Total Xylenes Method SW-846 8260 Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005 Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Lope S. Moreno

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

Hope Moreno

Inorganic Technical Director



Notes and Definitions

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 SM4500Cl-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinatis kalphifty and client's exclusive ramenty for any client arising, whether based in contract or text, shall be intriced to the amount paid by client for analyses. All clients, including those for negligence and any other cause whetherover shall be deemed valued unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be failed for incidental or consequential demanges including, whether is a state of the performance of the services for the performance of the services hereafter only to the performance of the services for the performance of the services hereafter only to the performance of the services hereafter only to the performance of the services have performed on the services of the services have performed on the services of the services of the services have performed on the services of the services of the services have performed on the services of the services of the services have performed on the services of the services

Hope S. Moreno

Hope Moreno, Inorganic Technical Director



CHAIN OF CUSTODY RECORD

			ģ
Page	đ	of	1

Client: LEI	<u> </u>
Contact: Marce	Qla
Address: 49 CR	3150
artec Vr	087410
Phone Number: 505	632-1782
FAX Number: 505 -	632-1876

NŌ	TES:

- 1) Ensure proper container packaging.
- 2) Ship samples promptly following collection.
- 3) Designate Sample Reject Disposition.

PO#

Project Name:

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water

3 = Soil/Sediment, 4 = Rinsate, 5 = Oil

6 = Waste, 7 = Other (Specify)

Samplers Signature:

FOR GAL USE ONLY GAL JOB#

Lab Name: Green Anal	lytical Laboratorie	es (9	970) 247-	4220 FA	X (970)	247-4227	Analyses Required	
Address: 75 Suttle S	Street, Durango, C	O 81303						
	Collection		Miscellar	neous	Pre	servative(s)		
2 Pile 723 3 Pile 737 4 Pile 743	8/16 10:	55 12	3	No. of Containers Sample Filtered ? Y/N	Unpreserved (Ice Only) IINO3	HCL. H2SO4 NAOH Other (Specify)		
5. Pile 76	1.	W	W	XX			VVV	
7.								***************************************
8.								
9.								
10.							977	
Relinquished by:	det/	2	Date:	le[1]	Time:			45
Riefingnished by	010		D(8t) (0	Time!	Received by	Madrodo Dates 16 11 Time: 14	16

* Sample Reject: [] Return N Rispose [] Store (34) Page 6 of 6





Analytical Results For:

INDUSTRIAL ECOSYSTEMS MARCELLA MARQUEZ 49 CR 3150 **AZTEC NM, 87410** (505) 632-1876

Fax To:

Sampling Date:

06/21/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Project Number: Project Location:

Project Name:

Received:

Reported:

JFJ 9780

NOT GIVEN

06/22/2011

06/28/2011

Sample Received By:

Jodi Henson

Sample ID: PILE 743 (H101287-02)

BTEX \$260B	mg/	kg	Analyze	d By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.061	0.050	06/23/2011	ND	2.10	105	2.00	21.9	
Tolugne*	0.310	0.050	06/23/2011	ND	2.01	101	2.00	20.1	
Ethylbenzene*	0.107	0.050	06/23/2011	ND	1,94	97.2	2.00	23.2	
Total Xylenes*	0.874	0.150	06/23/2011	ND	5.84	97.4	6.00	24.8	•
Surrogate: Dibromofluoromethane	74.7	% 80-120							
'urrogate: Toluene-d8	98.3	% 80-120							
Surrogate: 4-Bromofluorobenzene	111 9	% 80-120					•		
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM		·			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	06/22/2011	ND	464	116	400	7.14	

Cardinal Laboratories

*=Accredited Analyte

RECEIVED



June 28, 2011

MARCELLA MARQUEZ INDUSTRIAL ECOSYSTEMS 49 CR 3150 AZTEC, NM 87410

RE: JFJ

Enclosed are the results of analyses for samples received by the laboratory on 06/22/11 10:30.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 B260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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. Keene

Lab Director/Quality Manager



Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Ustality and Damages. Cardinal's leasility and clients exclusive remedy for any claim along, whether based in contract or text, shall be intered to the amount paid by client for shallyess. All dates, included to writing and received by Cardinal whether based (30) days after congelection of the applicable service. In no event shall Cardinal be listed for incidental or consequential damages, including, whether such includes the process and the applicable service. In no event shall Cardinal be listed for incidental or consequential damages in the service services between the services herearded by client, its substitutes, affiliates or successors arising exit of or related to the performance of the services herearded by Cardinal, requirides or whether such ideas to be serviced and reserve or other shall res

Clay D. Kinne



	oratories		7	ITA	117	$\mathcal{O}\Gamma$	UL			נ ע	N			<u> </u>								Page_	1 0	f_/	
Chent: I.E.I.				NOTE	S:																				
Contact: Marcella				1) Ens	ure pro	per cor	ıtaine	r pack	aging.					Tabl	e 1	Ma	trix	Туре				ÉÖR	ÇAL USI	CONLY	1
Address: 49 CR 31	771, 771 11 11 1			2) Shij	n sampl	es pror	nptly	follov	រាពុទ្ធ c	ollec	іюп.	1 =	Surf	ace \	Vater	2	= Gr	ound	Wa	ter		G	AL JC)B#	
Actec. NME				3) Des	ignate :	Sample	Reje	ct Dis	positio	öπ.	1 1.7	3 =	Soil/	Sedi	ment,	4 =	Rin	sate,	5.=	Oil					
Phone Number 632)	7 1 1 1 1 1 1 1 1 1	PO#	4	80	r r	. 5 5				6 =	Wasi	c, 7	=Oil	ier (Spec	ify)	<u>.::::::::::::::::::::::::::::::::::::</u>	· · · ·	1	1	مجرشته سسند		Ì
FAX Number: 632				Projec	t Name	JF	ر	Sa	mρ	lin	15	Sam	olers S	igna	ture:	2	17	80)/	In the	do	1/2	100	for.	٠.
			= , 1, -1; : -4, -1				:			Ĺ)			122.1						(/		IJ	T.	117 17	÷ .
Lab Name: Green Analy	tical Labora	atories	<u>(</u>)	70) 24	7-4220	F/	۱X (^ç	970) 2	247-4	227	: ;		H. [1.7	Ar	alyse	s Re	quir	ed		• :.					7
Address: 75 Suttle St	reet, Duran	go, CO 813	03						: .						ю								·. ·		
	Collec	tion		Miscell	ancous			Pres	servat	ive(s	s)		-	8	Ŏ,								1. T		
						z	ŝ					13	Š	160%	ന്										
			(fait)		∞.	Filtered ? Y/N	e Only					8015	8015	2	٩										
Sample ID	Date	Time	1 1 2 2 1		aine	ered	d (1c				ecify)	~	20		Ť							Con	nments		
			ed by	Type	Cont	藿	erve				Spec	0	0	T W	, O										
			Nect	rtrix Turc	Jo	ample	pres	HN03	HCL	H2SO4	NAOH Other (Spe	DRO	0 KO	١		1-2									
H101287			ర	Fig	N	Sa	5_	主	표	<u> </u>	ž ö	"	9	8	S					1. 1. 1.					
	042111	9:25	CT	3	1	Ŋ			.i.,			V			V									i sari.	
2Pile # 743	N. Carlotte	9:50a										V	1	-	w/					: '				: :: :::::::::::::::::::::::::::::::::	
3 Pile # 747		10:212										/	1	/	مم							' <u> </u>			
1Pile# 763		11:05.										V	8	1	See-										
5Pile#765	\	11:45a	1	J	7	V						v	V	9	4	1									1

Relinquished by

71°50 1979:51

Page 8 of 8

6/20111 10:30

250