1R- 427-204

REPORTS

DATE:

2006

EME Jot F-11 18-427-204

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APR - 4 2007 Environmental Bureau Oil Conservation Division

Final Report

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RICE OPERATING COMPANY JUNCTION BOX FINAL REPORT

1.1				F	BOX LOCA	TION					
	SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIF	RANGE	COUNTY	BOX DI	MENSIONS	S - FEET]
	EME	ict. F-11	F	11	215	36E	Lea	Length	Width	Depth	7
		JCL F-11	г	i I	210	305	Lea	no bi	oxjct. elimi	inated	
	LAND TYPE: B	LM ST/	ATE X	FEE LANDO	OWNER			OTHER			
	Depth to Groun	dwater	200	feet	NMOCD	SITE ASSE	SSMENT F	RANKING S		0	
	Date Started	6/17/20	005	Date Cor	npleted	4/13/2006	NMOC	D Witness		no	
	Soil Excavated	45	cubic yar	ds Exc	avation Le	ngth <u>10</u>	Width	10	Depth	12	feet
	Soil Disposed	0	cubic yar	ds Off	site Facility	n/	a	Location		n/a	
	NAL ANALY			Comm	a Data	1110/00		Convert Do		- - -	
1		HUAL REC	OLIS.	Sampi	e Date	4/13/20	106	Sample De	eptn	30 ft	

TPH, BTEX, and chloride laboratory test results completed by using an approved laboratory and testing procedures pursuant to NMOCD guidelines.

Sample	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	Total Hydrocarbon (C6-C35)	<u>Chlorides</u>
Location	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SOIL BORE @ 30 ft	<0.025	<0.025	<0.025	<0.025	<10.0	179

General Description of Remedial Action: This junction was eliminated with the pipeline upgrade/replacement program. After the box lumber was removed, the site was delineated using a backhoe to collect soil samples at regular intervals. Chloride field tests and OVMs were performed on each of the samples throughout the 10 x 10 x 12-ft-deep excavation. Although OVM concentrations were very low, chloride concentrations increased with depth. The excavated soil was blended on site (407 ppm Cl-) and then backfilled into the excavation and contoured to the surrounding terrain. To further investigate the depth of chloride penetration, a soil boring was initiated on 4/13/2006. The soil bore was advanced to a depth of 30 ft BGS when a trend of very low chloride concentrations could be confirmed, indicating non-saturated historical vadose conditions. The 30-ft sample was analyzed at a laboratory to confirm the field tests. BTEX and TPH were not present in detectable concentrations. The disturbed surface has begun to return to productive capacity.

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm	
10 x 1	0 x 12 excavati	on	
4-wall comp.	n/a	561	
bottom comp.	12	869	
backfill	n/a	407	

	20	395
Soil Bore	25	414
	30	179

enclosures: photos, lab results, soil bore data, chloride graph

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

		Ulanie	HOUR COMPANY_	RICE Operating Company
REPORT ASSEMBLED BY	Kristin Farris Pope	SIGNATURE	Knitin dan	is Pope
DATE	9/12/2006	TITLE	Project S	cientist

RICE Operating Company

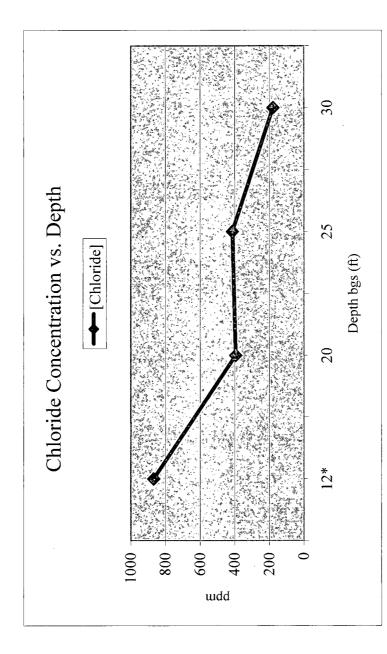
EME jct. F-11 unit 'F', Sec. 11, T21S, R36E

Vertical Delineation at Source

[CI]] ppm 869	395	414	179
Depth bgs (ft) 17*	20	25	30

Groundwater = 200 ft

10 x 10 x 12-ft deep excavation * bottom composite sample from



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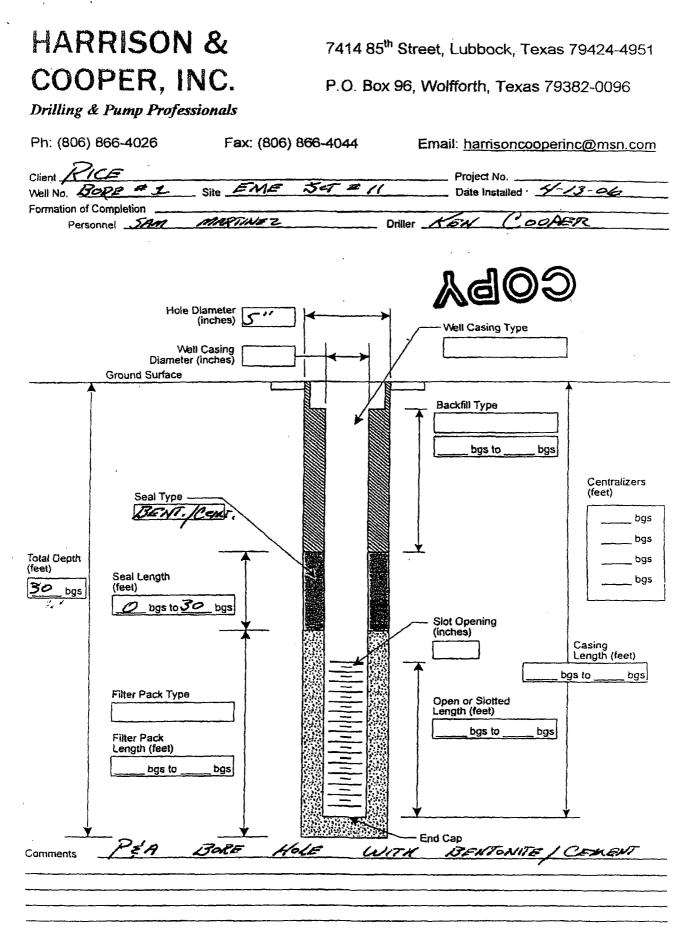
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		<u>م من المعامد من المارة موسع الما</u>				
				So	il Bore	
System:	EME	Locati	ion:Jct. F-11	1 G	W:200' Landowner:State Lease to [Dasco Cattle
0.00						
Soil Bore				GPS Coord	I. System UTM	
UL/ F	Sec. 11	T 21S R	36E	Nad 27 L	at. & Long. 32*29.800 103*14.160	
Depth	CI.	1	PID		Color	Time
20'	395		N/A		Mod. Orange pink fine sand	
25'	414		N/A		Very pale orange med sand w/ Caliche	
30'	179		N/A		Pale yellowish brown fine sand	
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Notes: 6' southwest of stake in ground from RRR crew. Sent 30' sample for lab confirmation. Did not run PID on these samples per KFP.

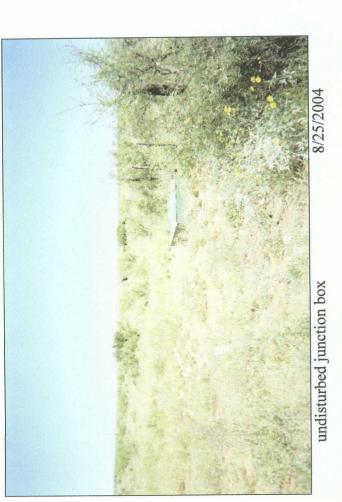
Signature Date

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Regulated by: Texas Dept. of Licensing & Regulation, Water Well Division, P.O. Box 12157, Austin, TX 78711, (800) 803-9202











11/1/2004

former junction site; re-plumbed straight through



Soil Bore @30 ++

Analytical Report

Prepared for:

Kristin Farris-Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240



Project: EME F-11 Project Number: None Given Location: None Given

Lab Order Number: 6D14011

Report Date: 04/21/06

	Rice Operating Co.	Project: EME F-11	Fax: (505) 397-1471
5	122 W. Taylor	Project Number: None Given	Reported:
1	Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	04/21/06 15:20

ANALYTICAL REPORT FOR SAMPLES

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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1@ 30' bgs	6D14011-01	Soil	04/13/06 14:41	04/14/06 10:15

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	Rice Operating Co.	Project: EME F-11	Fax: (505) 397-1471
	A22 W. Taylor	Project Number: None Given	Reported:
1	Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	04/21/06 15:20

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1@ 30' bgs (6D14011-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	ED62007	04/20/06	04/20/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	**	
Ethylbenzene	ND	0.0250	"	*	"	"	n	"	
Xylene (p/m)	ND	0.0250		"		"	"	"	
Xylene (o)	ND	0.0250	**	Ħ	"	н	"		
Surrogate: a,a,a-Trifluorotoluene		92.2 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.2 %	80-12	20	"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61418	04/14/06	04/19/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	н	"		"		**	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	**	
Total Hydrocarbon C6-C35	ND	10.0	n	*	"	"	"	"	
Surrogate: 1-Chlorooctane		106 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		95.6 %	70-13	30	"	"	**	"	

Environmental Lab of Texas

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Rice Operating Co.	Project:	EME F-11	Fax: (505) 397-147
122 W. Taylor	Project Number:		Reported:
Hobbs NM, 88240		Kristin Farris-Pope	04/21/06 15:20

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte B1@ 30' bgs (6D14011-01) Soil	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride % Moisture	179 4.6	10.0	mg/kg %	20 1	ED62005 ED61704	04/18/06 04/14/06	04/18/06 04/17/06	EPA 300.0 % calculation	···

Environmental Lab of Texas

	Rice Operating Co.	Project: EME F-11	Fax: (505) 397-1471
- 2	122 W. Taylor	Project Number: None Given	Reported:
	Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	04/21/06 15:20

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED61418 - Solvent Extraction (GC)										
Blank (ED61418-BLK1)				Prepared &	Analyzed:	04/14/06				
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	*							
Total Hydrocarbon C6-C35	ND	10.0	*							
Surrogate: 1-Chlorooctane	45.7		mg/kg	50.0		91.4	70-130		······	
Surrogate: 1-Chlorooctadecane	46.3		"	50.0		92.6	70-130			
LCS (ED61418-BS1)				Prepared &	k Analyzed:	04/14/06				
Carbon Ranges C6-C12	477	10.0	mg/kg wet	500		95.4	75-125			
Carbon Ranges C12-C28	491	10.0	17	500		98.2	75-125			
Total Hydrocarbon C6-C35	968	10.0	**	1000		96.8	75-125			
Surrogate: 1-Chlorooctane	51.8		mg/kg	50.0		104	70-130			
Surrogate: 1-Chlorooctadecane	45.2		"	50.0		90.4	70-130			
Calibration Check (ED61418-CCV1)				Prepared: (04/14/06 A	nalyzed: 04	/15/06			
Carbon Ranges C6-C12	266		mg/kg	250		106	80-120			
Carbon Ranges C12-C28	294		n	250		118	80-120			
Total Hydrocarbon C6-C35	560		"	500		112	80-120			
Surrogate: 1-Chlorooctane	45.6		"	50.0		91.2	70-130			
Surrogate: 1-Chlorooctadecane	38.7		"	50.0		77.4	70-130			
Matrix Spike (ED61418-MS1)	Source: 6D14012-01		Prepared &	2 Analyzed:	: 04/14/06					
Carbon Ranges C6-C12	509	10.0	mg/kg dry	536	ND	95.0	75-125			
Carbon Ranges C12-C28	510	10.0	н	536	ND	95.1	75-125			
Total Hydrocarbon C6-C35	1020	10.0	"	1070	ND	95.3	75-125			
Surrogate: 1-Chlorooctane	56.1		mg/kg	50.0		112	70-130			
Surrogate: 1-Chlorooctadecane	47.4		"	50.0		94.8	70-130			

Environmental Lab of Texas

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	Rice Operating Co.	Project: EME F-11	Fax: (505) 397-1471
1	122 W. Taylor	Project Number: None Given	Reported:
Ĩ	Hobbs NM, 88240	Project Manager: Kristin Farris-Po	pe 04/21/06 15:20

Organics by GC - Quality Control

Environmental Lab of Texas

					AA3				_	
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch ED61418 - Solvent Extraction (GC)										
Matrix Spike Dup (ED61418-MSD1)	Sour	ce: 6D14012	2-01	Prepared &	Analyzed:	04/14/06				
Carbon Ranges C6-C12	518	10.0	mg/kg dry	536	ND	96.6	75-125	1.75	20	
Carbon Ranges C12-C28	531	10.0	"	536	ND	99.1	75-125	4.03	20	
Total Hydrocarbon C6-C35	1050	10.0	"	1070	ND	98.1	75-125	2.90	20	
Surrogate: 1-Chlorooctane	57.0		mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	47.9		"	50.0		95.8	70-130			
Batch ED62007 - EPA 5030C (GC)										
Blank (ED62007-BLK1)				Prepared &	Analyzed:	04/20/06				
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	*							
Ethylbenzene	ND	0.0250	*							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	**							
Surrogate: a,a,a-Trifluorotoluene	39.7		ug/kg	40.0		99.2	80-120			
Surrogate: 4-Bromofluorobenzene	35.7		"	40.0		89.2	80-120			
LCS (ED62007-BS1)				Prepared: (04/20/06 A	nalyzed: 04	/21/06			
Benzene	1.24	0.0250	mg/kg wet	1.25		99.2	80-120			
Toluene	1.32	0.0250	"	1.25		106	80-120			
Ethylbenzene	1.34	0.0250		1.25		107	80-120			
Xylene (p/m)	2.99	0.0250	81	2.50		120	80-120			
Xylene (o)	1.49	0.0250	"	1.25		119	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.8	•	ug/kg	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	39.5		17	40.0		98.8	80-120			
Calibration Check (ED62007-CCV1)				Prepared: (04/20/06 A	nalyzed: 04	/21/06			
Benzene	58.4		ug/kg	50.0		117	80-120			
Foluene	55.3		"	50.0		111	80-120			
Ethylbenzene	58.5		"	50,0		117	80-120			
Xylene (p/m)	117		"	100		117	80-120			
Xylene (o)	58.9		**	50.0		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	42.7		"	40.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	45. I		"	40.0		113	80-120			

Environmental Lab of Texas

	Rice Operating Co.	Project:	EME F-11
	, 122 W. Taylor	Project Number:	None Given
Ĩ	Hobbs NM, 88240	Project Manager:	Kristin Farris-Pope

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED62007 - EPA 5030C (GC)										

Matrix Spike (ED62007-MS1)	Sour	ce: 6D14008	-17	Prepared &	Analyzed:	04/20/06				
Benzene	1.27	0.0250	mg/kg dry	1.36	ND	93.4	80-120			
Toluene	1.32	0.0250	"	1.36	ND	97.1	80-120			
Ethylbenzene	1.26	0.0250	**	1.36	ND	92.6	80-120			
Xylene (p/m)	2.95	0.0250	**	2.73	ND	108	80-120			
Xylene (o)	1.36	0.0250	**	1.36	ND	100	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.3		ug/kg	40.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	32.8		n	40.0		82.0	80-120			
Matrix Spike Dup (ED62007-MSD1)	Sour	ce: 6D14008	-17	Prepared & Analyzed: 04/20/06						
Benzene	1.35	0.0250	mg/kg dry	1.36	ND	99,3	80-120	6.12	20	
Toluene	1.46	0.0250	"	1.36	ND	107	80-120	9.70	20	
Ethylbenzene	1.48	0.0250	*	1.36	ND	109	80-120	16.3	20	
Xylene (p/m)	3.27	0.0250	"	2.73	ND	120	80-120	10.5	20	
Xylene (o)	1.58	0.0250	"	1.36	ND	116	80-120	14.8	20	
Surrogate: a,a,a-Trifluorotoluene	40.1		ug/kg	40.0		100	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Fax: (505) 397-1471 Reported:

04/21/06 15:20

Rice Operating Co.	Project: EME F-11								Fax: (505) 397-1471		
. 122 W. Taylor	Project Number: None Given								Repo	rted:	
Hobbs NM, 88240		Project Mai	nager: Kr	istin Farris-P	ope				04/21/06	5 15:20	
General	Chemistry Para	meters by Environm				ls - Qua	lity Con	trol			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch ED61704 - General Preparatio	n (Prep)										
Blank (ED61704-BLK1)				Prepared: ()4/14/06 Ai	nalyzed: 04	/17/06	,			
% Solids	100		%								
Duplicate (ED61704-DUP1)	Sour	Source: 6D13017-01			04/14/06 A	nalyzed: 04	/17/06				
% Solids	96.1		%		92.4			3.93	20		
Duplicate (ED61704-DUP2)	Sour	ce: 6D14008-	-03	Prepared: (04/14/06 A	nalyzed: 04	/17/06				
% Solids	95.6		%		95.7			0.105	20		
Batch ED62005 - Water Extraction											
Blank (ED62005-BLK1)				Prepared &	z Analyzed:	04/18/06					
Chloride	ND	0.500	mg/kg								
LCS (ED62005-BS1)				Prepared &	z Analyzed:	04/18/06					
Chloride	9.08		mg/L	10.0		90.8	80-120				
Calibration Check (ED62005-CCV1)				Prepared &	Analyzed:	04/18/06					
Chloride	8.90		mg/L	10.0		89.0	80-120				
Duplicate (ED62005-DUP1)	Sour	ce: 6D14016-	-01	Prepared &	Prepared & Analyzed: 04/18/06						
Chloride	1960	25.0	mg/kg		1930			1.54	20		

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	Notes and Definitions	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	04/21/06 15:20
122 W. Taylor	Project Number: None Given	Reported:
Rice Operating Co.	Project: EME F-11	Fax: (505) 397-1471

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

Raland K Just

4/21/2006

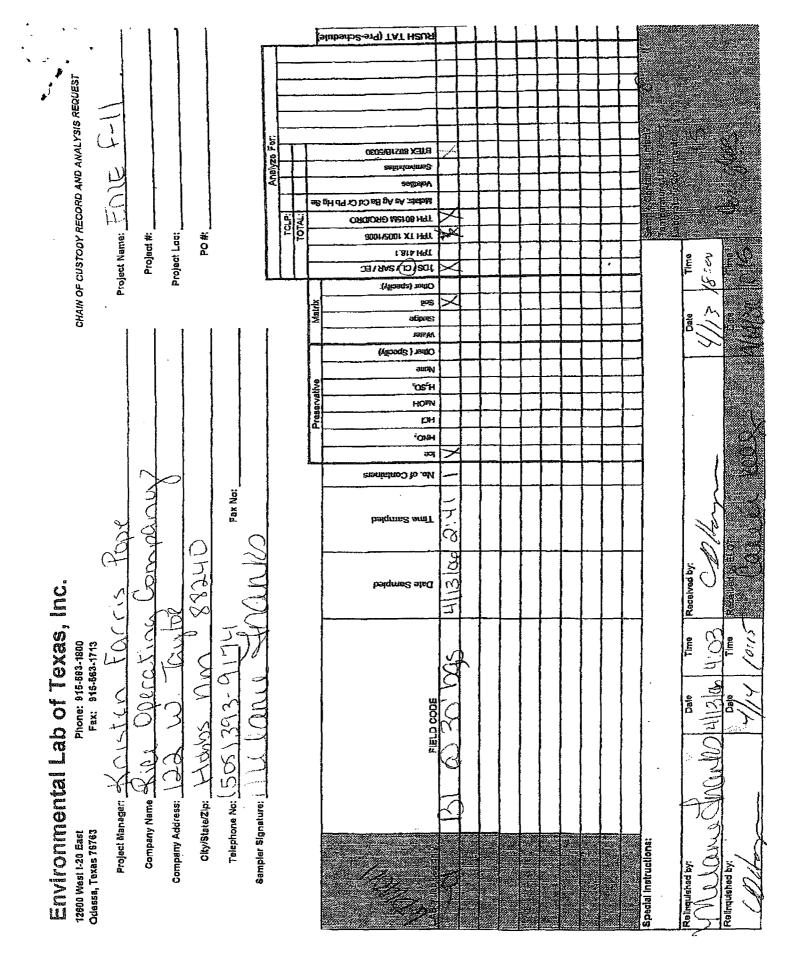
Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

Date:

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Environmental Lab of Texas



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e En	ivironmental Lab of Texas rective Action Report – Sample Log-In
🕐 🕐 Variance / Cor	rective Action Report – Sample Log-In
ent: <u>Me op</u> ,	
.te/Time:	
der #: 6014011	
tials:	
	Sample Receipt Checklist

mperature of container/cooler? 1.5 Yes No CI ipping container/cooler in good condition? **E**s No stody Seals intact on shipping container/cooler? (ABS No Not present stody Seals intact on sample bottles? No Not present tes iain of custody present? (PD) No mple Instructions complete on Chain of Custody? No **C** rain of Custody signed when relinquished and received? No (শ্বিষ্ঠ rain of custody agrees with sample label(s) Fes | No intainer labels legible and intact? No imple Matrix and properties same as on chain of custody? No Yes imples in proper container/bottle? Tes No imples properly preserved? Xes. No imple bottles intact? F No eservations documented on Chain of Custody? (Per No ontainers documented on Chain of Custody? (29 No ifficient sample amount for indicated test? Yes No I samples received within sufficient hold time? প্লি No OC samples have zero headspace? (Yes) No Nct Applicable

ther observations:

entact Person: egarding:	Variance Documentation: Date/Time:	Contacted by:
orrective Action Taken:	······································	
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