

# **AE Order Number Banner**

#### **Report Description**

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pPAC0616546875

Closure? 180918 1809

1RP - 918

JOHN H HENDRIX CORP



April 28, 2006

#### VIA CERTIFIED MAIL (CD)

Mr. Paul R. Sheeley Environmental Engineer State of New Mexico Oil Conservation Division 1625 North French Drive Hobbs, New Mexico 88240

Re: Soil Remediation Report, John H. Hendrix Corporation, Cardinal #1 Well Location, Unit Letter G (SW/4, NE/4), Section 27, Township 19 South, Range 38 East, Lea County, New Mexico

Dear Mr. Sheeley:

This letter is submitted to the State of New Mexico Oil Conservation Division ("OCD") on behalf of John H. Hendrix Corporation ("JHHC") by Larson and Associates, Inc. ("LA"), its consultant, and presents the results of remedial actions performed at the Cardinal #1 well location ("Site') located in unit letter G ("SW/4, NE/4"), Section 2711, Township 19 South, Range 38 East, Lea County, New Mexico. The Site is located at latitude North 32° 37' 58.7" and longitude West 103° 08' 01.17". Contact information for JHHC is as follows:

Mr. Marvin Burrows
Production Manager
John H. Hendrix Corporation
1310 18<sup>th</sup> Street
Eunice, New Mexico 88231
(505) 394-2649
mburrows@valornet.com

#### **Chronology**

The OCD inspected the Site during well plugging and required JHHC to remediate hydrocarbon-contaminated soil in the area of the separators and heater treater. In December 2005, LA personnel collected soil samples from the area of the separators and heater treater, wellhead, circulating and transfer pump and tank battery. The samples analysis were reported to the OCD on January 18, 2005, in a report titled, "Soil Sample Results and Remediation Work Plan, John H. Hendrix Corporation, Cardinal #1 Well (Plugged, Unit Letter G (SW/4, NE/4), Section 27, Township 19 South, Range 38 East, Lea County, New Mexico". The OCD approved the remediation work plan on February 23, 2006. This report presents the laboratory analysis of soil samples collected from

incident - n PACOGOS 437043 application - pPACOG 16546815 Mr. Paul R. Sheeley April 28, 2006 Page 2

excavations on April 11 and April 18, 2006. Figure 1 presents a location and topographic map. Appendix A presents the OCD approval letter and Form C-141.

#### **Remedial Action**

The following recommended remediation action levels ("RRAL") were calculated for the Site based on criteria published by OCD ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993"):

Ranking Criteria	Result	Ranking Score
Depth-to-Groundwater	<50 Feet	20
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1000 Horizontal Feet	0
		Total Score: 20

The following RRAL are assigned to the leak based on the total ranking score (20):

▶ Benzene 10 mg/kg
 ▶ Total BTEX 50 mg/kg
 ▶ TPH 100 mg/kg
 ▶ Chloride: 1000 mg/Kg

In April 2006, E. D. Walton Construction Company, Inc. ("EDW") excavated soil from the area around the wellhead and the separators and heater treater. Soil was also excavated from the area of the circulating and transfer pump once the pump was The maximum depth of soil removal was approximately nine (9) feet (wellhead), five (5) feet (separator/heater treater) and 2 feet (circulating/transfer pump). Soil samples were collected from the sides and bottom of the excavations using a stainless steel bucket auger, placed in 4-ounce glass containers, labeled, chilled in an ice chest and hand-delivered under chain of custody control to Environmental Lab of Texas, Inc. ("ELTI"). The laboratory analyzed the samples for total petroleum hydrocarbons ("TPH") using method SW-846 8015 for gasoline range organics ("GRO") and diesel range organics ("DRO"), and chloride by method SW-846-300. Duplicate samples were collected in 8-ounce glass jars for headspace analysis and were analyzed using a RAE Instruments, Model 2000 photoionization detector ("PID"). No PID readings exceeded 100 parts per million ("ppm"). The bucket auger was thoroughly washed between samples using a solution of laboratory detergent and potable water, and rinsed with distilled water. Table 1 presents a summary of the laboratory analysis. Appendix B presents the laboratory report. Appendix C presents photographs.

Referring to Table 1, all samples reported TPH below 100 milligrams per kilogram ("mg/Kg"), except, HT-SW (151.6 mg/Kg), HT-NW (249.1 mg/Kg), HT-MID (317.3 mg/Kg), WH-W2 (183.4 mg/Kg), WH-W4 (275.1 mg/Kg) and T-Pump (269.7 mg/Kg). Chloride was below 1,000 mg/Kg in all samples.

Mr. Paul R. Sheeley April 28, 2006 Page 3

JHHC is the owner of the property and requests permission to haul the contaminated soil to its centralized surface waste management facility and fill the excavations with clean soil. Your approval of excavation closure is requested. Please contact Mr. Marvin Burrows with JHHC at (505) 394-2649 or by email at <a href="mailto:mburrows@valornet.com">mburrows@valornet.com</a> or you may contact me at (432) 687-0901 or email <a href="mailto:mark@laenvironmental.com">mark@laenvironmental.com</a> if you have questions. Sincerely,

Larson and Associates, Inc.

Mark J. Larson, P.G., C.P.G., C.G.W.P.

Sr. Project Manager/President

Encl

cc: Marvin Burrows/JHHC Ronnie Westbrook/JHHC Wayne Price/OCD – Santa Fe **Tables** 

Table 1

Summary of Laboratory Analysis of Soil Samples Following Remediation

John H. Hendrix Corporation, Cardinal #1

Unit Letter G (SW/4, NE/4), Section 27, Township 19 South, Range 38 East

Lea County, New Mexico

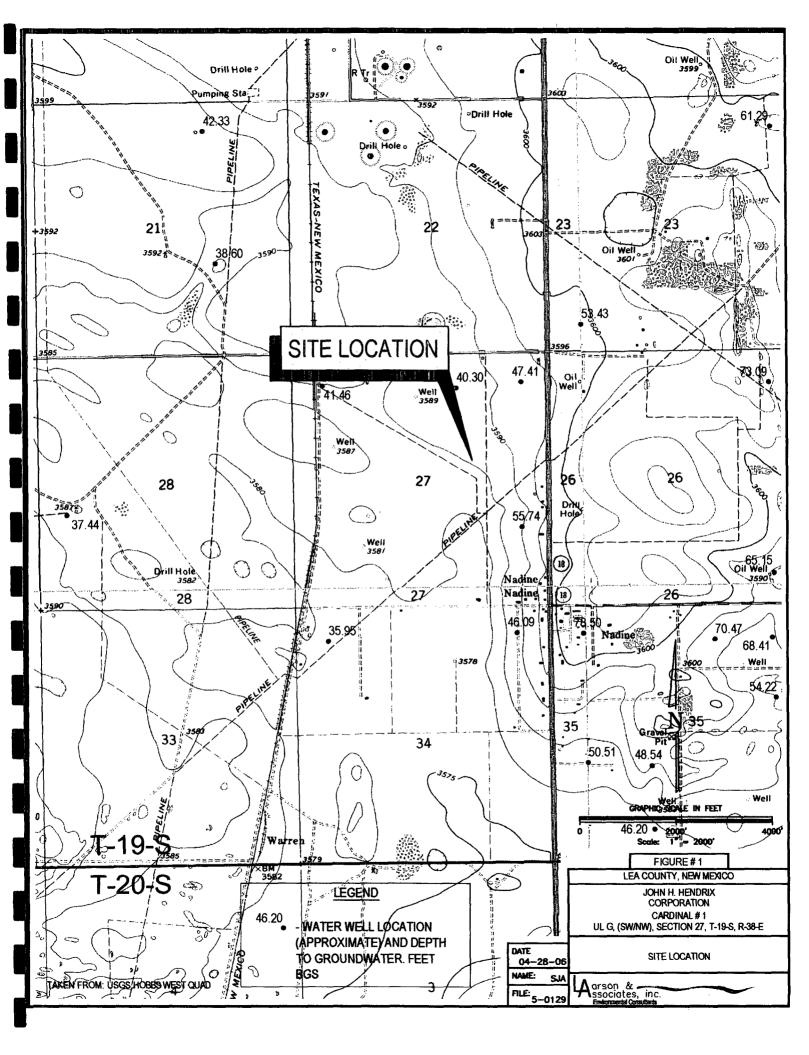
Date	Sample	Area	Sample Location	cation Depth	PID	GRO	DRO	DRO	TPH	Chloride
	Number		1	(Feet)	(mdd)	C6-C12	C12-C28	C28-C35	C6-C35	(mg/kg)
						(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
RRAL:									100	
4/11/2006	HT-NE	Heater Treater	Northeast - Side	2	0.1	<10.0	<10.0	<10.0	<30.0	46.8
4/11/2006	HT-NW	Heater Treater	Northwest - Side	7	0.1	<10.0	216	33.1	249.1	157
4/18/2006	HT-SE	Heater Treater	South East	2	0.1	<10.0	13.7	<10.0	13.7	288
4/11/2006	HT-SW	Heater Treater	Southwest - Side	2	0.1	<10.0	130	21.6	151.6	300
4/18/2006	HT-MID	Heater Treater	Center - Bottom	S	0.1	<10.0	255	62.3	317.3	6.06
4/11/2006	WH-S2	Wellhead	South - Side	2	0.1	<10.0	<10.0	<10.0	<30.0	114
4/11/2006	WH-S4	Wellhead	South - Side	4	3.3	<10.0	42.1	<10.0	42.1	143
4/11/2006	WH-E2	Wellhead	East - Side	2	0.1	<10.0	<10.0	<10.0	<30.0	47.4
4/11/2006	WH-E4	Wellhead	East - Side	4	0.1	<10.0	<10.0	<10.0	<30.0	118
4/11/2006	WH-W2	Wellhead	West - Side	7	0.1	<10.0	163	20.4	183.4	212
4/11/2006	WH-W4	Wellhead	West - Side	4	0.1	<10.0	248	27.1	275.1	440
4/11/2006	WH-N2	Wellhead	North - Side	7	0.1	<10.0	<10.0	<10.0	<30.0	34.5
4/11/2006	WH-N4	Wellhead	North - Side	4	0.1	<10.0	<10.0	<10.0	<30.0	106
4/11/2006	4/11/2006 WH-Bottom	Wellhead	Center - Bottom	6	0.1	<10.0	<10.0	<10.0	<30.0	285
4/18/2006	T-Pump	Transfer Pump	Center - Bottom	7	0.1	<10.0	185	84.7	269.7	138
Motos: Ano	Ixisis norform	Notes: Analysis narformed by Environmental Lal	ental Lab of Texas.	h of Texas. Inc., Odessa, Texas	1. Texas					

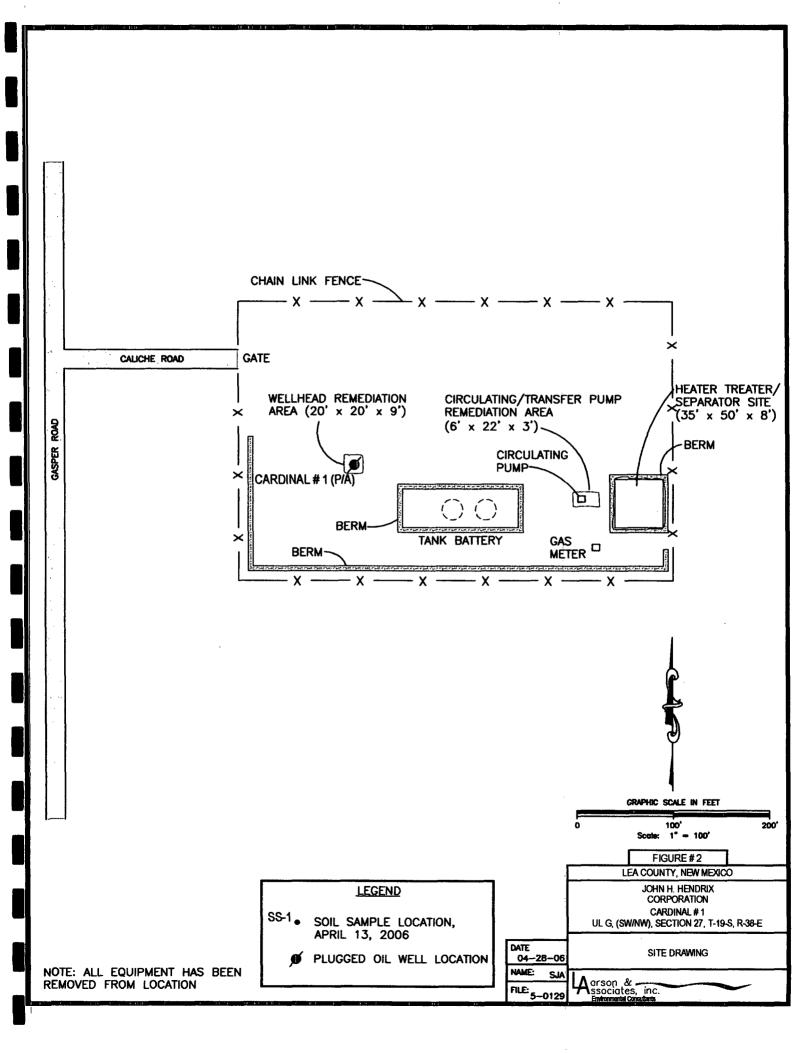
Notes: Analysis performed by Environmental Lab of Texas, Inc., Odessa, Texas

1. BGS: Below ground surface

ppm: Parts per million
 Mg/Kg: Milligrams per kilogram

Figures





#### Appendix A

OCD Correspondence Form C-141 District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III
1000 Rio Brazos Road, Aztec, NM 87410 1220 S. St. Francis Dr., Santa Fe, NM 87505

Date: April 28, 2006

\* Attach Additional Sheets If Necessary

Phone: (432) 67-0901

#### State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe NM 87505

Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back side of form

<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>						C, 14141 073						
			Rele	ase Notific	catio	n and Co	rrective A	ction	l	•		
						<b>OPERA</b>	FOR		☐ Initia	l Report	Ø	Final Report
Name of Co	mpany: Jo	ohn H. Hend	rix Corpo	oration			arvin Burrows					
Address: 13			, NM 882	31			No.: (505) 394-					
Facility Nan	ne: Cardin	al #1				Facility Typ	e: Well/Tank P	Battery (	(Closed)			
Surface Ow	ner: John	H. Hendrix	Corporati	on Mineral C	Owner				Lease N	О.		
				LOCA	ATIO	N OF REI	LEASE					
Unit Letter G	Section 27	Township 19 S	Range 38 E	Feet from the	Nort	h/South Line	Feet from the	East/V	Vest Line	County:	Lea	
			]			_	:: 103° 08' 01.1	7"				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Con to the	C-:II-			NAI	URI	E OF REL			37.1 B	199	0111	
Type of Rele		luction Equip	ment				Release: Unkno			ecovered" Hour of Di		7.
Source of Re	icase, 110c	action Equip	IIICITE			Unknown	iour or occurrence	<b>~</b> .	Unknown		SCOVERY	, •
Was Immedia	ate Notice (	Given?	Yes [	] No ☑ Not R	Require	d If YES, To	Whom?					
By Whom?						Date and I						
Was a Water	course Rea		Yes Y	☑ No		If YES, Ve	olume Impacting	the Wate	ercourse.			
occurred, inc	eluding the	separators, he	ater treater  Action Tal	r and circulating parties part	pump.	Soil was remeded 35'x50	ring well plugging diated per an OCI  area around the ated and will be h	D approv	ved work pl	eaters, 6'	k 22' ar	ound
				with clean soil.	nead.	Soil was excav	ated and will be h	iauled to	me JHHC	centralized	SUTTAC	e waste
regulations a public health should their or the environ	all operators or the env operations nment. In	s are required ironment. The have failed to	to report a e acceptan adequatel OCD acce	nd/or file certain ce of a C-141 rep y investigate and	release ort by remedi	notifications a the NMOCD nate contaminate	knowledge and used perform corresponding to the control of the con	ective act Report" ( reat to g	tions for rel does not rel round wate	eases whic ieve the op r, surface v	ch may oberator of water, h	endanger of liability uman health
Signature:	Andrew Williams	And the company of the contract of the contrac	THE AND ADDRESS OF THE PARTY OF			Approved by	OIL CON		ATION	DIVISI	ON	
Printed Nam	e: Mark J.	Larson – Lar	son and As	ssociates, Inc.		7,7,0,00		 			·	
Title: Agent	/Consultan	t		·····	<del></del>	Approval Da	ite:		Expiration	Date:		· · · · · · · · · · · · · · · · · · ·
E-mail Addı	ess: mark@	)laenvironme	ental.com			Conditions of	of Approval:			Attache	ed 🗌	



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON** 

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

February 23, 2006

Marvin Burrows/JHHC John H. Hendrix Corp., (JHHC) 110 N. Marienfeld St., Ste. 400 Midland, TX 79701

Re:

Cardinal #1 - Corrective Action Approval

Site Location: UL-G, Sec 27-T19S-R38E

Dated: January 18, 2006

Dear Mr. Burrows,

New Mexico Oil Conservation Division (OCD) received the corrective action plan prepared by Larson & Associates for JHHC and referenced above. The plan is **hereby approved** according to the information provided.

Please be advised that OCD approval of this plan does not relieve JHHC of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve JHHC of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please write or call: (505) 393-6161, ext. 113, or e-mail: <a href="mailto:psheeley@state.nm.us">psheeeley@state.nm.us</a>

Sincerely,

Paul Sheeley-Environmental Engineer

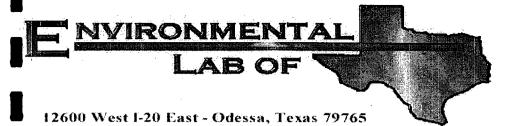
Cc:

Wayne Price - Environmental Bureau Chief

Chris Williams - District I Supervisor Larry Johnson - Environmental Engineer Mark Larson - Larson & Associates

#### Appendix B

**Laboratory Reports** 



# Analytical Report

# **Prepared for:**

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128

Location: None Given

Lab Order Number: 6D19001

Report Date: 04/25/06

P.O. Box 50685 Midland TX, 79710 Project: John Hendrix/ Cardinal #1

Project Number: 5-0128
Project Manager: Mark Larson

Fax: (432) 687-0456

**Reported:** 04/25/06 08:54

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HT-NE	6D19001-01	Soil	04/11/06 13:00	04/18/06 16:55
HT-SW	6D19001-02	Soil	04/11/06 13:20	04/18/06 16:55
HT-NW	6D19001-03	Soil	04/11/06 13:30	04/18/06 16:55
WH-S4	6D19001-04	Soil	04/11/06 11:30	04/18/06 16:55
WH-E4	6D19001-05	Soil	04/11/06 11:39	04/18/06 16:55
WH-W2	6D19001-06	Soil	04/11/06 11:58	04/18/06 16:55
WH-S2	6D19001-07	Soil	04/11/06 11:25	04/18/06 16:55
WH-E2	6D19001-08	Soil	04/11/06 11:35	04/18/06 16:55
WH-W4	6D19001-09	Soil	04/11/06 11:56	04/18/06 16:55
WH-N2	6D19001-10	Soil	04/11/06 11:43	04/18/06 16:55
WH-N4	6D19001-11	Soil	04/11/06 11:47	04/18/06 16:55
WH-Bottom	6D19001-12	Soil	04/11/06 11:51	04/18/06 16:55
HT-SE	6D19001-13	Soil	04/18/06 13:05	04/18/06 16:55
HT-MID	6D19001-14	Soil	04/18/06 13:15	04/18/06 16:55
T-Pump	6D19001-15	Soil	04/18/06 13:21	04/18/06 16:55

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128 Project Manager: Mark Larson Fax: (432) 687-0456 Reported: 04/25/06 08:54

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
HT-NE (6D19001-01) Soil									
Carbon Ranges C6-C12	ND.	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	ND .	10.0	II.	11	**	u ,	u	II	
Carbon Ranges C28-C35	ND	10.0	"	11	Ħ	n	н	H .	
Total Hydrocarbon C6-C35	ND	10.0	11	It	**	11	n		
Surrogate: 1-Chlorooctane		70.1 %	70-1	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.9 %	70-1	130	"	"	ıı	"	
HT-SW (6D19001-02) Soil								·	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	130	10.0	н	**	u	II.	it	11	
Carbon Ranges C28-C35	21.6	10.0	н	11	11	11	11	ч	
Total Hydrocarbon C6-C35	152	10.0	11	**	"	n	ti.	n	
Surrogate: 1-Chlorooctane		116 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		120 %	70-	130	"	"	a .	· · · · · · · · · · · · · · · · · · ·	
HT-NW (6D19001-03) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	216	10.0	n	: "	"	n,	ıı	tt	
Carbon Ranges C28-C35	33.1	10.0	11		"	H	ď	II.	
Total Hydrocarbon C6-C35	249	10.0		"	11	u	· a	, u	
Surrogate: 1-Chlorooctane		115 %	70-	130	"	"	,,	rr .	
Surrogate: 1-Chlorooctadecane		119 %	70-	130	"	"	"	"	
WH-S4 (6D19001-04) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	42.1	10.0	Ħ		**	u .	11	u .	
Carbon Ranges C28-C35	ND	10.0	#		**	11	н	"	
Total Hydrocarbon C6-C35	42.1	10.0	Ħ	11	11		11	#	
Surrogate: 1-Chlorooctane		113 %	70-	130	и	"	"	. #	
Surrogate: 1-Chlorooctadecane		117 %	70 <u>-</u>	130	"	"	.,,	"	•

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128
Project Manager: Mark Larson

Fax: (432) 687-0456

Reported: 04/25/06 08:54

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WH-E4 (6D19001-05) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	п		11	н	11	н	
Carbon Ranges C28-C35	ND	10.0	11	u	н	"	tf .	If	
Total Hydrocarbon C6-C35	ND	10.0		u	n	"	u	u .	
Surrogate: 1-Chlorooctane		116 %	70-	30	"	n	n	n .	
Surrogate: 1-Chlorooctadecane		126 %	70-	30		"	"	"	
WH-W2 (6D19001-06) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	,
Carbon Ranges C12-C28	163	10.0	10	n		н	11		
Carbon Ranges C28-C35	20.4	10.0		Ħ	er .	и .	**	H	
Total Hydrocarbon C6-C35	183	10.0	19	*		н	11		
Surrogate: 1-Chlorooctane		105 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		110 %	70-	130	"	ü	"	"	
WH-S2 (6D19001-07) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	11	11	ŧı	ti .	H	u	
Carbon Ranges C28-C35	ND	10.0	11	**	Ħ	IF	11	#	
Total Hydrocarbon C6-C35	ND	10.0	ti	ıı	Ħ	u .	II.	Ħ	
Surrogate: 1-Chlorooctane		115 %	70-	130	"	"	n	"	
Surrogate: 1-Chlorooctadecane		120 %	70-	130	"	"	"	"	
WH-E2 (6D19001-08) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	Ħ	u	н	11	91	n	
Carbon Ranges C28-C35	ND	10.0	н .		н	11	11		
Total Hydrocarbon C6-C35	ND	10.0	"	н	"	11	11		
Surrogate: 1-Chlorooctane		74.6 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		77.3 %	70-	130	"	"	"	"	<i>2</i>

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128
Project Manager: Mark Larson

Fax: (432) 687-0456

Reported:
04/25/06 08:54

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
WH-W4 (6D19001-09) Soil				2					
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	248	10.0	If	и	п	II .	u	0	
Carbon Ranges C28-C35	27.1	10.0	н	11	"	n	и	11	
Total Hydrocarbon C6-C35	275	10.0	u	**	11	"	"	11	
Surrogate: 1-Chlorooctane		83.5 %	70	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		83.3 %	· 70	130	"	#	"	. "	
WH-N2 (6D19001-10) Soil									• .
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	H	. 11	н	*	
Carbon Ranges C28-C35	ND	10.0	11		п	**	11	u	
Total Hydrocarbon C6-C35	ND	10.0	u	Ħ	n	n '	n	**	
Surrogate: 1-Chlorooctane		104 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		108 %	70-	130	"	"	. "	"	
WH-N4 (6D19001-11) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	i	ED61910	04/19/06	04/21/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	11	**	H	"	It	
Carbon Ranges C28-C35	ND	10.0	"	11	Ħ	"	ıı	"	•
Total Hydrocarbon C6-C35	ND	10.0	11	100	#	и	n	n	
Surrogate: 1-Chlorooctane		122 %	70-	130	"	. "	"	"	
Surrogate: 1-Chlorooctadecane		127 %	70-	130	"	"	"	n	
WH-Bottom (6D19001-12) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED62010	04/20/06	04/20/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	u '	tt	**	n	n	ti	
Carbon Ranges C28-C35	ND	10.0	"	н 1	и	11	11	и .	
Total Hydrocarbon C6-C35	ND	10.0	ı u		"	**	"	u	
Surrogate: 1-Chlorooctane		87.0 %	70-	-130	"	"	"	"	
Surrogate: 1-Chlorooctadecane	•	92.8 %	70-	-130		"	"	"	

P.O. Box 50685 Midland TX, 79710 Project: John Hendrix/ Cardinal #1

Project Number: 5-0128
Project Manager: Mark Larson

Fax: (432) 687-0456

**Reported:** 04/25/06 08:54

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
HT-SE (6D19001-13) Soil					·			<del></del>	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED62010	04/20/06	04/20/06	EPA 8015M	
Carbon Ranges C12-C28	13.7	10.0		"	*1	н	"	н	
Carbon Ranges C28-C35	ND	10.0	II.	**	**		11	Ħ	
Total Hydrocarbon C6-C35	13.7	10.0	и	н	н	н .	a	11	
Surrogate: 1-Chlorooctane		91.6 %	70-1	30	"	,"	"	"	
Surrogate: 1-Chlorooctadecane		94.4 %	70-1	30	"	"	"	"	
HT-MID (6D19001-14) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED62010	04/20/06	04/20/06	EPA 8015M	-
Carbon Ranges C12-C28	255	10.0	11	. и	ii.	и.,	*1	n'	
Carbon Ranges C28-C35	62.3	10.0	H	**	n	n	n		•
Total Hydrocarbon C6-C35	317	10.0			. "	n	lf	11	
Surrogate: 1-Chlorooctane		94.4 %	70-1	130	"	"	"	<i>"</i> .	
Surrogate: 1-Chlorooctadecane		95.0 %	70-i	130	n	"	"	"	
T-Pump (6D19001-15) Soil	,								
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	ED62010	04/20/06	04/20/06	EPA 8015M	
Carbon Ranges C12-C28	185	10.0	If	,	n	tt	**	41	
Carbon Ranges C28-C35	84.7	10.0	и		**	H	u	н	
Total Hydrocarbon C6-C35	270	10.0	н	H	11	n	п	п	
Surrogate: 1-Chlorooctane		89.6 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		94.0 %	70	130	***	**	n	"	

Larson & Associates, Inc. P.O. Box 50685

Project: John Hendrix/ Cardinal #1

Fax: (432) 687-0456

Reported:

P.O. Box 50685 Midland TX, 79710 Project Number: 5-0128
Project Manager: Mark Larson

**Reported:** 04/25/06 08:54

#### General Chemistry Parameters by EPA / Standard Methods Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
HT-NE (6D19001-01) Soil					•				<del></del> .
Chloride	46.8	5.00	mg/kg	10	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	8.4	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
HT-SW (6D19001-02) Soil									
Chloride	300	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	9.4	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
HT-NW (6D19001-03) Soil									
Chloride	157	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	7.8	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
WH-S4 (6D19001-04) Soil									
Chloride	143	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	9.5	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
WH-E4 (6D19001-05) Soil								·	
Chloride	118	5.00	mg/kg	10	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	10.3	0.1	%	. 1	ED62013	04/19/06	04/20/06	% calculation	
WH-W2 (6D19001-06) Soil			·						
Chloride	212	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	7.9	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
WH-S2 (6D19001-07) Soil									
Chloride	114	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	8.9	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
WH-E2 (6D19001-08) Soil									
Chloride	47.4	5.00	mg/kg	10	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	7.4	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128 Project Manager: Mark Larson Fax: (432) 687-0456 Reported: 04/25/06 08:54

## General Chemistry Parameters by EPA / Standard Methods **Environmental Lab of Texas**

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WH-W4 (6D19001-09) Soil						:			
Chloride	440	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	4.4	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
WH-N2 (6D19001-10) Soil	<u>.</u>							· .	
Chloride	34.5	5.00	mg/kg	10	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	3.7	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
WH-N4 (6D19001-11) Soil			·						·
Chloride	106	5.00	mg/kg	10	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	8.3	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
WH-Bottom (6D19001-12) Soil						·			
Chloride	285	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	8.2	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
HT-SE (6D19001-13) Soil	· · · · · · · · · · · · · · · · · · ·								
Chloride	288	10.0	mg/kg	20	ED62006	04/19/06	04/19/06	EPA 300.0	
% Moisture	3.9	0.1	%	l	ED62013	04/19/06	04/20/06	% calculation	
HT-MID (6D19001-14) Soil									
Chloride	90.9	5.00	mg/kg	10	ED62006	04/20/06	04/20/06	EPA 300.0	
% Moisture	8.5	0.1	%	1	ED62013	04/19/06	04/20/06	% calculation	
T-Pump (6D19001-15) Soil									·
Chloride	138	10.0	mg/kg	20	ED62006	04/20/06	04/20/06	EPA 300.0	
% Moisture	6.3	0.1	%	1	ED62013	. 04/19/06	04/20/06	% calculation	

Project: John Hendrix/ Cardinal #1

Fax: (432) 687-0456

P.O. Box 50685 Midland TX, 79710 Project Number: 5-0128 Project Manager: Mark Larson

Reported: 04/25/06 08:54

## 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 ED61910 - Solvent Extraction (C	GC)									
Blank (ED61910-BLK1)				Prepared:	04/19/06	Analyzed	: 04/20/06		<u> </u>	
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	ij							
Carbon Ranges C28-C35	ND	10.0								
Total Hydrocarbon C6-C35	ND	10.0	ч							
Surrogate: 1-Chlorooctane	52.7		mg/kg	50.0		105	70-130		· · · · · · · · · · · · · · · · · · ·	
Surrogate: 1-Chlorooctadecane	54.5		"	50.0		109	70-130			
LCS (ED61910-BS1)				Prepared:	04/19/06	Analyzed	d: 04/20/06			
Carbon Ranges C6-C12	545	10.0	mg/kg wet	500		109	75-125		<del></del>	
Carbon Ranges C12-C28	575	10.0	U	500		115	75-125			
Total Hydrocarbon C6-C35	1120	10.0	Ħ	1000		112	75-125			
Surrogate: 1-Chlorooctane	56.9		mg/kg	50.0	· · · · · · · · · · · · · · · · · · ·	114	70-130		· · · · · · · · · · · · · · · · · · ·	
Surrogate: 1-Chlorooctadecane	51.8		"	50.0		104	70-130			
Calibration Check (ED61910-CCV1)	•			Prepared:	04/19/06	Analyzed	d: 04/21/06			
Carbon Ranges C6-C12	288		mg/kg	250		115	80-120			
Carbon Ranges C12-C28	248		H	250		99.2	80-120			
Total Hydrocarbon C6-C35	536		11	500		107	80-120			
Surrogate: 1-Chlorooctane	59.7	·	п	50.0	<del></del>	119	70-130	····		
Surrogate: 1-Chlorooctadecane	58.2		"	50.0		116	70-130	•		
Matrix Spike (ED61910-MS1)	So	urce: 6D190	01-11	Prepared:	04/19/06	Analyzed	d: 04/21/06			
Carbon Ranges C6-C12	495	10.0	mg/kg dry	545	ND	90.8	75-125			
Carbon Ranges C12-C28	509	10.0	11	545	ND	93.4	75-125			
Carbon Ranges C28-C35	ND	10.0	11	0.00	ND		75-125			
Total Hydrocarbon C6-C35	1000	10.0	"	1090	ND	91.7	75-125			
Surrogate: 1-Chlorooctane	54.6		mg/kg	60.0		91.0	70-130			
Surrogate: 1-Chlorooctadecane	48.3		"	60.0		80.5	70-130			

P.O. Box 50685

Midland TX, 79710

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128 Project Manager: Mark Larson Fax: (432) 687-0456

Reported: 04/25/06 08:54

#### 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
Allalyte	Result	Lillit	Onits	Level	Kesuit	70REC	Limits	RPD_	Limit	Notes
Batch ED61910 - Solvent Extraction (	GC)				······································					
Matrix Spike Dup (ED61910-MSD1)	So	urce: 6D190	01-11	Prepared:	04/19/06	Analyzed	: 04/21/06			
Carbon Ranges C6-C12	497	10.0	mg/kg dry	545	ND	91.2	75-125	0.403	20	
Carbon Ranges C12-C28	517	10.0	Ħ	545	ND	94.9	75-125	1.56	20	
Carbon Ranges C28-C35	ND	10.0	11	0.00	ND		75-125		20	
Total Hydrocarbon C6-C35	1010	10.0	Ħ	1090	ND	92.7	75-125	0.995	20	
Surrogate: 1-Chlorooctane	54.8		mg/kg	60.0		91.3	70-130			
Surrogate: 1-Chlorooctadecane	48.5		"	60.0		80.8	70-130			
Batch ED62010 - Solvent Extraction (	GC)									
Blank (ED62010-BLK1)				Prepared	& Analyz	ed: 04/20/0	)6			
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	Ħ							
Carbon Ranges C28-C35	ND	10.0	n							
Total Hydrocarbon C6-C35	ND	10.0	Ħ							
Surrogate: 1-Chlorooctane	39.7		mg/kg	50.0		79.4	70-130			
Surrogate: 1-Chlorooctadecane	42.4		"	50.0		84.8	70-130			
LCS (ED62010-BS1)				Prepared	& Analyz	ed: 04/20/0	06			
Carbon Ranges C6-C12	474	10.0	mg/kg wet	500		94.8	75-125			
Carbon Ranges C12-C28	460	10.0	ii.	500		92.0	75-125			
Total Hydrocarbon C6-C35	934	10.0	п	1000		93.4	75-125			
Surrogate: 1-Chlorooctane	47.7		mg/kg	50.0		95.4	70-130			
Surrogate: 1-Chlorooctadecane	41.9	÷	"	50.0		83.8	70-130			
Calibration Check (ED62010-CCV1)				Prepared	& Analyz	ed: 04/20/	06			
Carbon Ranges C6-C12	205		mg/kg	250		82.0	80-120			
Carbon Ranges C12-C28	244		н	250		97.6	80-120			
Total Hydrocarbon C6-C35	449		"	500		89.8	80-120			
Surrogate: 1-Chlorooctane	49.9		"	50.0		99.8	70-130			
Surrogate: 1-Chlorooctadecane	51.6		"	50.0		103	70-130			

P.O. Box 50685 Midland TX, 79710 Project: John Hendrix/ Cardinal #1

Project Number: 5-0128

Project Manager: Mark Larson

Fax: (432) 687-0456

Reported: 04/25/06 08:54

## Organics by GC - Quality Control **Environmental Lab of Texas**

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

Batch ED62010 - Solvent Extraction (GC	Batch	ED62010 -	Solvent	Extraction (	(GC)
--	-------	-----------	---------	--------------	------

Matrix Spike (ED62010-MS1)	Sour	ce: 6D19001-12	2 Pre	epared &	& Analyze	d: 04/20/	06			
Carbon Ranges C6-C12	514	10.0 mg/k	g dry	545	ND	94.3	75-125			
Carbon Ranges C12-C28	502	10.0	•	545	ND	92.1	75-125			
Carbon Ranges C28-C35	ND	10.0	ı	0.00	ND		75-125	•		
Total Hydrocarbon C6-C35	1020	10.0	•	1090	ND	93.6	75-125			
Surrogate: 1-Chlorooctane	54.1	mg	/kg	50.0		108	70-130			
Surrogate: 1-Chlorooctadecane	48.6		"	50.0		97.2	70-130			
Matrix Spike Dup (ED62010-MSD1)	Sour	ce: 6D19001-12	2 Pr	epared a	& Analyze	ed: 04/20/	06			
Carbon Ranges C6-C12	5.05	10.0 mg/k	g dry	545	ND	92.7	75-125	1.77	20	
Carbon Ranges C12-C28	505	10.0	11	545	ND	92.7	75-125	0.596	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbon C6-C35	1010	10.0	*1	1090	ND	92.7	75-125	0.985	20	
Surrogate: 1-Chlorooctane	52.8	mg	g/kg	50.0		106	70-130			
Surrogate: 1-Chlorooctadecane	47.7		"	50.0		95.4	70-130			

P.O. Box 50685

Midland TX, 79710

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128
Project Manager: Mark Larson

Fax: (432) 687-0456

Reported: 04/25/06 08:54

## General Chemistry Parameters by EPA / Standard Methods - Quality Control Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED62006 - Water Extraction										• • • • • • • • • • • • • • • • • • • •
Blank (ED62006-BLK1)				Prepared	& Analyze	ed: 04/19/	06			
Chloride	ND	0.500	mg/kg							
Blank (ED62006-BLK2)				Prepared	& Analyze	ed: 04/20/	06			
Chloride	ND	0.500	mg/kg							
LCS (ED62006-BS1)			•	Prepared	& Analyz	ed: 04/19/	06			,
Chloride	8.78		mg/L	10.0		87.8	80-120			
LCS (ED62006-BS2)				Prepared	& Analyz	ed: 04/20/	06			
Chloride	9.16		mg/L	10.0		91.6	80-120		,	
Calibration Check (ED62006-CCV1)				Prepared	& Analyz	ed: 04/19/	06			
Chloride	8.56		mg/L	10.0		85.6	80-120			
Calibration Check (ED62006-CCV2)	•			Prepared	& Analyz	ed: 04/20/	06			
Chloride	9.38		mg/L	10.0		93.8	80-120			
Duplicate (ED62006-DUP1)	So	urce: 6D1800	04-01	Prepared	& Analyz	ed: 04/19/	′06			
Chloride	12900	200	mg/kg		12600		-	2.35	20	
Duplicate (ED62006-DUP2)	So	urce: 6D190	01-14	Prepared	& Analyz	/06				
Chloride	91.8	5.00	mg/kg	*	90.9			0.985	20	
Batch ED62013 - General Preparatio	n (Prep)									
Blank (ED62013-BLK1)	(~ )			Prepared	. 04/19/06	Analyze	d: 04/20/0	<u> </u>		
% Solids	100		%	Trepared	. 04/17/00	Milaryzo	G. 07/20/0	<i></i>		

P.O. Box 50685

Midland TX, 79710

Project: John Hendrix/ Cardinal #1

Project Number: 5-0128

Project Manager: Mark Larson

Fax: (432) 687-0456

Reported: 04/25/06 08:54

General Chemistry Parameters by EPA / Standard Methods - Quality Control **Environmental Lab of Texas** 

		Reporting		Spike	Source	· · · · · · · · · · · · · · · · · · ·	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch ED62013 - General Prepar	ation (Prep)									
Duplicate (ED62013-DUP1)	Sou	rce: 6D1900	1-01	Prepared:	04/19/06	Analyzed	: 04/20/06			
% Solids	90.0		%		91.6			1.76	20	
Duplicate (ED62013-DUP2)	Sou	rce: 6D1900	4-06	Prepared:	04/19/06	Analyzed	l: 04/20/06			
% Solids	89.9		%		89.5			0.446	20	
Duplicate (ED62013-DUP3)	Sou	Prepared:	04/19/06	Analyzed	1: 04/20/06					
% Solids	89.8		%		88.6			1,35	20	
Duplicate (ED62013-DUP4)	Sou	rce: 6D1900	9-01	Prepared:	04/19/06	Analyzed	1: 04/20/06	)		
% Solids	95.2		%	· - <del>-</del>	94.6			0.632	20	

P.O. Box 50685 Midland TX, 79710 Project: John Hendrix/ Cardinal #1

Project Number: 5-0128 Project Manager: Mark Larson Fax: (432) 687-0456

Reported: 04/25/06 08:54

#### **Notes and Definitions**

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:

Ralande Julio

Date: 4-25-06

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.

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If you have received this material in error, please notify us immediately at 432-563-1800.

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PROJECT NO.	-] <	α	ı	+		SABNIAT	s Slj		SSOCIATES, Environmental Const	IDC. Fax:	432-687-0456
PAGE	2 2	,   _	3	7 #8 RB B	מנמשומו	Ł CON	api		507 N. Mar	202 • 1	d, TX 79701
₹1pC	1	- SIDM	10 <sub>S</sub>	431-110 A2	SAMPLE IDENTIFICATION	AUMBER O	CY102 1-64		LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, CAPAR COMPOSITE)	ered, Ryed, F)
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	1130			MI	7						20
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72 A.	1158			MH	1						3
	1125			WH	14-52						
	1135			H M	H- E 2						× (
1 30	1156			IZ.	H-W4						1051
	1143			MM	H-N2						0.7
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-1.	11511			W	H- BOTTOM						2),
4/18	1305			#	T-SE		-				13
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SAMPLE	SAMPLED BY (Signatore)	afte (		_ \ \(\tilde{\epsilon}\)	DATE 1339 REPRIOUTS	D BY: 6	ED BY: (Signature)	DATE 4/18/100	RECEIVED BY: (Signature)		DATE:
	PELIND ISHED RY: (Signofflire)		125 E	X   X   C - 10   0   0		Signat	ure)	DATE	SAMPLE SHIPPED BY: (Circle)		
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COMMENTS:	NTS:					:		TURNAROUND TIME NEEDED	WHITE - RECEIVING LAB	UPS OTHER: ING LAB	
RECEIVIN	RECEIVING LABORATORY:	4TORY:			RE	RECEIVE	BY: (Signatore)	- YOUY (a	≷	- Receiving Lab (to be returned to La after receipt)	
ADDRESS: CITY:	 			STA	STATE: ZIP: DHONF	DATE	4/10/06	7	GOLD - QA/QC	GA/QC COORDINATOR	
SAMPLE C	SAMPLE CONDITION WHEN RECEIVED	HEN REC	IVED:			<u>S</u>	LA CONTACT PERSON:	Ž	SAMPLE TYPE:		t en terreschion
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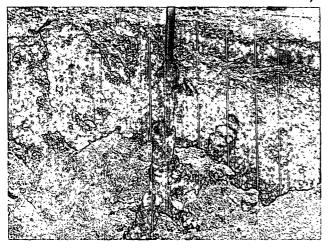
# Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

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lient:				
Pate/Time: 4/18/010 110:55				
Pate/Time: 4118(00 110:55				•
order #: <u>UDI90</u>				
nitials:				
110613.				
Sample Receip	t Checkl	ist		
emperature of container/cooler?	Yes	No	4.0 C	
nipping container/cooler in good condition?	<b>E</b>	No		
ustody Seals intact on shipping container/cooler?	Yes	No	Not present	
ustody Seals intact on sample bottles?	Yes	No	Not present	
hain of custody present?	XES.	No		į
ample Instructions complete on Chain of Custody?	Yes	No		Ī
hain of Custody signed when relinquished and received?	Zes	No		
hain of custody agrees with sample label(s)	Yes	l No		1
ontainer labels legible and intact?	Jas	No		Ī
ample Matrix and properties same as on chain of custody?	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	No		Ī
amples in proper container/bottle?	1 Xes	No	•	Ī
amples properly preserved?	(ES)	No		1
ample bottles intact?	) Zes	No		Ī
reservations documented on Chain of Custody?		No		1
ontainers documented on Chain of Custody?	Yes	No		
Sufficient sample amount for indicated test?	₩ <del>Yes</del>	No		İ
All samples received within sufficient hold time?	Yes	l No		•
/OC samples have zero headspace?	res	No	Not Applicable	<u> </u>
				,
Contact Person: Date/Time: Regarding:			_Contacted by:	
Corrective Action Taken:		· · · · · · · · · · · · · · · · · · ·		
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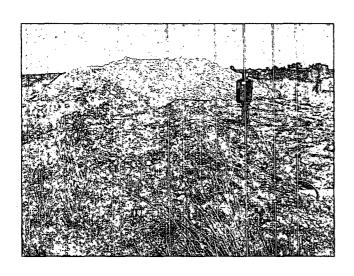
Appendix C

**Photographs** 

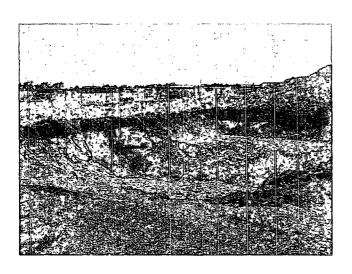
# CARDINAL # 1 UL G, (SW/NW), SECTION 27, T-19-S, R-38-E LEA COUNTY, NEW MEXICO



1. JHHC, Cardinal #1 - Wellhead Remediation Area, April 24, 2006



2. JHHC, Cardinal #1 - Transfer Pump Remediation Area, Looking East, April 24, 2006



3. JHHC, Cardinal #1 - Heater Treater - Separator Remediation Area, Looking Southwest, April 24, 2006

# CARDINAL # 1 UL G, (SW/NW), SECTION 27, T-19-S, R-38-E LEA COUNTY, NEW MEXICO



4. JHHC, Cardinal #1 - Heater Treater - Separator Remediation Area, Looking Northwest, April 24, 2006 District I 1625 N. French Dr., Hobbs, NM 88240 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 1220 S. St. Francis Dr., Santa Fe, NM 87505

Attach Additional Sheets If Necessary

#### State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

#### **Release Notification and Corrective Action OPERATOR** ☐ Initial Report Final Report Name of Company: John H. Hendrix Corporation Contact: Marvin Burrows Address: 1310 18th Street, Eunice, NM 88231 Telephone No.: (505) 394-2649 Facility Name: Cardinal #1 Facility Type: Well/Tank Battery (Closed) Surface Owner: John H. Hendrix Corporation | Mineral Owner Lease No. LOCATION OF RELEASE Section Township Feet from the North/South Line Feet from the Unit Letter Range East/West Line County: Lea 27 19 S 38 E G API#30025297930000 Latitude: 32° 37' 58.7" Longitude: 103° 08' 01.17" NATURE OF RELEASE Type of Release: Spills Volume of Release: Unknown Volume Recovered" 0 bbl Source of Release: Production Equipment Date and Hour of Occurrence: Date and Hour of Discovery: Unknown Unknown Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ No ☐ Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ☑ No If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* OCD inspected location during well plugging and requested soil remediation where spills had occurred, including the separators, heater treater and circulating pump. Soil was remediated per an OCD approved work plan. Describe Area Affected and Cleanup Action Taken.\*: Areas affected included 35'x50' area around the separators, heater treaters, 6'x 22' around circulating and transfer pump and 20' x 20' area around the wellhead. Soil was excavated and will be hauled to the JHHC centralized surface waste management facility. Excavations will be filled with clean soil. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: Approved by District Supervisor: Printed Name: Mark J. Larson - Larson and Associates, Inc. Expiration Date: Title: Agent/Consultant Approval Date: Conditions of Appremior Participation of Appremi E-mail Address: mark@laenvironmental.com Sent email approval April 28, 2006 Phone: (432) 67-0901