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
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

☐ Interim Report ☒ Final Report

Name of Company	John H. Hendrix Corporation	Contact	Carolyn Doran Haynes
Address	110 N. Marienfeld, Midland, TX 79702	Telephone No.	432-684-6631
Facility Name	Brunson C	Facility Type	area east-northeast of facility

Surface Owner	P. Brunson West	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	3	T22S	R37E					Lea

Latitude_____ **Longitude**_____

NATURE OF RELEASE

Type of Release **HISTORICAL HYDROCARBON**	Volume of Release **HISTORICAL**	Volume Recovered **HISTORICAL**
Source of Release **HISTORICAL UNKNOWN**	Date and Hour of Occurrence	Date and Hour Discovery **HISTORICAL**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The area had historical, weathered hydrocarbon hardpan located east northeast of the Brunson C battery and surrounded by both abandoned and active oil/gas transportation pipelines of multiple ownership. JHHC voluntarily performed multiple housekeeping actions to return the surface to productive vegetation capacity. Mr. Greg Holt, leaseholder for Mrs. West, has been informed of all activities.

Describe Area Affected and Cleanup Action Taken.*
An approx. 7,200 ft^2 area was excavated and 4,057 yd^3 of impacted soils were transported to the JHHC landfarm (NM-2-21). A two-ft compacted clay layer was installed at the bottom of the excavation and then backfilled with clean soils purchased from the landowner. The final topsoil layer was then re-seeded and the remediated area has since achieved productive vegetative capacity. In accordance with conditional agreement with OCD for the preceding actions, a monitoring well was installed along the downgradient side (SSE) of the area and 4 quarters of monitoring for BTEX, chloride, and TDS was performed to determine groundwater quality at the site. BTEX concentrations are less than WQCC standards (below lab detection limits). An off-site upgradient source(s) is (are) likely responsible for the elevated chloride (5,150 mg/L) and TDS (10,200 mg/L) concentrations in groundwater at the site, most likely from the Eunice Gas Plant located only 400 ft north and one or more of at least nine historical environmental cases as identified on attached maps and report. A chloride concentration of 480 mg/kg obtained from a composited soil sample collected at the base of the excavation demonstrates the remediated area is not the source for chloride/TDS impact. Additional information is attached to document remedial actions taken and support the conclusion of offsite impact.

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.

Signature: Carolyn Doran Haynes	OIL CONSERVATION DIVISION	
Printed Name: Carolyn Doran Haynes	Approved by District Supervisor:	
Title:	Approval Date:	Expiration Date:
E-mail Address: cdoranhaynes@jhhc.org	Conditions of Approval:	Attached ☐
Date: 01-18-2013 Phone: 432-684-6631		

* Attach Additional Sheets If Necessary

RECEIVED
DEC 04 2008
HOBBS OCD

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
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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	Carolyn Doran Haynes
Address	110 N. Marienfeld, Midland, TX 79702	Telephone No.	575-390-9689
Facility Name	Brunson C	Facility Type	area east northeast of facility

Surface Owner	P. Brunson West	Mineral Owner	Lease No.

BRUNSON C 007 API # 30-025-04489-00-00

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	3	T22S	R37E					Lea

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release HISTORICAL HYDROCARBON	Volume of Release HISTORICAL	Volume Recovered HISTORICAL
Source of Release HISTORICAL UNKNOWN	Date and Hour of Occurrence	Date and Hour Discovery HISTORICAL
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The area is historical, weathered hydrocarbon hardpan located east northeast of the Brunson C battery and surrounded by both abandoned and active oil/gas transportation pipelines of multiple ownership. JHHC is voluntarily performing this housekeeping action to return the surface to productive capacity. Mr. Greg Holt, leaseholder for Mrs. West, has been informed of the activity.

Describe Area Affected and Cleanup Action Taken.*
The impacted pasture hardpan area will be excavated and restored with clean material purchased from the landowner. Impacted soils > 1000 ppm TPH will be transported to the John H. Hendrix Corp. landfarm. Ground water is 75-94' BGS at this location (USGS and NMOSE databases). Final bottom composite sample will be submitted to a certified lab for confirmation. Initial Chloride analysis was performed at Xenco Labs with results of non-detect. Photos are attached. When completed, a final C-141 with supporting documentation will be submitted.

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.

Signature: Carolyn Doran Haynes

Printed Name: Carolyn Doran Haynes

Title:

E-mail Address: cdoranhaynes@jhhc.org

Date: 12-03-08 Phone: 575-390-9689

OIL CONSERVATION DIVISION

Approved by District Supervisor: Geoffrey Leking

Approval Date: 05/13/09 Expiration Date: 07/13/09

Conditions of Approval: SUBMIT FINAL C-141 BY 07/13/09. FOLLOW GUIDELINES PROVIDED BY NMOCD. HOBBS OFFICES ON 05/12/09

Attached ☐

IRP-09-5-2179

* Attach Additional Sheets If Necessary

FGRL0913529643

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
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
DEC 04 2008
HOBBS OCD

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	Carolyn Doran-Haynes
Address	110 N. Marienfeld, Midland, TX 79702	Telephone No.	575-390-9689
Facility Name	Brunson C	Facility Type	area east northeast of facility

Surface Owner	P. Brunson West	Mineral Owner		Lease No.

LOCATION OF RELEASE

BRUNSON C 007 - API # 30 025 09989 00 00

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	3	T22S	R37E					Lea

Latitude _____ Longitude _____

WTR 30'

NATURE OF RELEASE

Type of Release **HISTORICAL HYDROCARBON**	Volume of Release **HISTORICAL**	Volume Recovered **HISTORICAL**
Source of Release **HISTORICAL UNKNOWN**	Date and Hour of Occurrence	Date and Hour Discovery **HISTORICAL**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The area is historical, weathered hydrocarbon hardpan located east northeast of the Brunson C battery and surrounded by both abandoned and active oil/gas transportation pipelines of multiple ownership. JHHC is voluntarily performing this housekeeping action to return the surface to productive capacity. Mr. Greg Holt, leaseholder for Mrs. West, has been informed of the activity.

Describe Area Affected and Cleanup Action Taken.*
The impacted pasture hardpan area will be excavated and restored with clean material purchased from the landowner. Impacted soils > 1000 ppm TPH will be transported to the John H. Hendrix Corp. landfarm. Ground water is 75-94' BGS at this location (USGS and NMOSE databases). Final bottom composite sample will be submitted to a certified lab for confirmation. Initial Chloride analysis was performed at Xenco Labs with results of non-detect. Photos are attached. When completed, a final C-141 with supporting documentation will be submitted.

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.

Signature: Carolyn Doran Haynes	OIL CONSERVATION DIVISION
Printed Name: Carolyn Doran Haynes	Approved by District Supervisor: ENVIRONMENTAL ENGINEER
Title:	Approval Date: 12-18-08 Expiration Date: 2-18-09
E-mail Address: cdoranhaynes@jhhc.org	Conditions of Approval: Attached ☐ IRP-09-5-2179
Date: 12-03-08 Phone: 575-390-9689	

* Attach Additional Sheets If Necessary

FORL 0913529643

PG RL 0913504362179

TRIDENT ENVIRONMENTAL

CERTIFIED MAIL
RETURN RECEIPT NO. 7099 3400 0017 1737 1827

February 18, 2010

Mr. Geoffrey Leking
New Mexico Oil Conservation Division, Environmental Bureau
1625 N. French Drive
Hobbs, Mexico 88240

RE: **Corrective Action Plan (1RP-2179)**
Brunson C Battery
Township 22 South, Range 37 East, Section 3, Lea County, NM

Dear Mr. Leking:

John H. Hendrix Corporation (JHHC) has retained Trident Environmental to address historical impact located east-northeast of the Brunson C Battery which is also surrounded by both abandoned and active oil/gas transportation pipelines of multiple ownership. JHHC is voluntarily performing this housekeeping action to return the surface to productive capacity.

Background

The Brunson C Battery is located at township 22 south, range 37 east, section 3, unit letter P approximately one mile southeast of Eunice, New Mexico, as shown on the attached Site Location Map (Figure 1). Land in the site area is primarily utilized for natural oil and gas production and pasture land for cattle grazing.

Groundwater in the site area occurs within the High Plains aquifer under water table (unconfined) conditions (Hart and McAda, 1985) at a depth of approximately 75 to 94 feet below ground surface (based on USGS and NMOSE online databases).

Description of Work Performed

In accordance with the work plan submitted to the District 1 NMOCD office on May 12, 2009, and the NMOCD-approved Form C-141 (Attachment A), excavation and removal of petroleum hydrocarbon-impacted soils was conducted over an approx. 7,200 ft^2 area which is the extent where productive and healthy vegetation was reached. Excavation terminated at a depth of approx. 10 ft below ground surface (bgs) which was the maximum extent capable using the backhoe due to the indurated caliche layer encountered. A total of 3,517 yd^3 was transported to the centralized surface waste management facility operated by JHHC (NM-02-021). Photo documentation of the completed excavation is included in Appendix B.

Soil Sampling Results

Target concentrations for closure and sample collection were as follows:

- 1,000 mg/kg TPH
- 100 ppm OVM, and/or 10 mg/kg benzene, and 50 mg/kg BTEX (EPA Method 8021B).
- One sample consisting of a composite from a grab sample collected along each wall (north, south, east and west sides).
- One five-point composite sample from the floor of the excavation.

Composite soil samples, as described above, were collected and submitted to Cardinal Laboratories in Hobbs, NM, for analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Methods 8015 and 8021B, respectively. The analytical results are summarized in the table below. The laboratory analytical reports and chain of custody documentation are included in Attachment C.

Sample (Depth)	Sample Type	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)
Floor (10 ft bgs)	5-pt Composite	<0.050	0.636	40	2,010	2,050
Wall (6 ft bgs)	4-pt Composite	<0.050	<0.300	<10	686	686

Corrective Action Plan

Target concentrations for closure have been met for the walls and productive and healthy vegetation has been reached at the perimeter of the excavated area. Although the target concentration for TPH was not met for the floor, there was an indurated caliche layer encountered at approximately 10 ft bgs. Therefore, JHHC proposes to install a one-ft compacted clay layer at the bottom of the excavation (10 ft bgs) prior to backfilling with clean soils purchased from the landowner. The final topsoil layer will then be re-seeded to restore the pasture land to productive vegetative capacity. The proposed corrective actions are protective of the surface vegetation and groundwater. Mr. Greg Holt, leaseholder for the landowner, has been informed.

Upon completion of the work described above, a Final C-141 form with supporting documentation will be prepared by Trident Environmental describing the clay layer installation and backfilling procedures for submission to the District 1 OCD office in Hobbs.

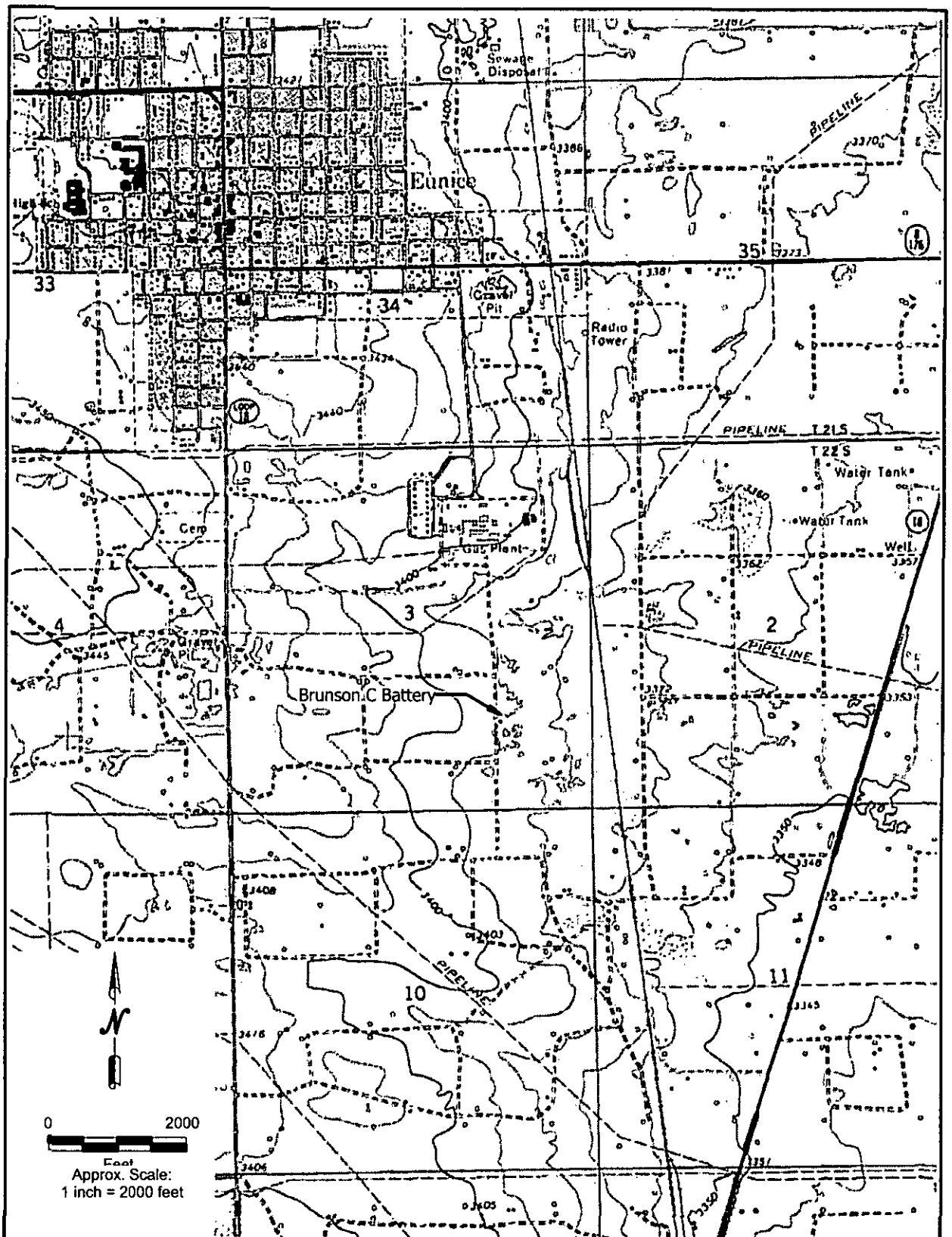
We appreciate the opportunity to work with you on this project. Please feel free to call me at 432-638-8740 or Carolyn Haynes at 575-390-9689, if you have any questions.

Sincerely,

Gilbert J. Van Deventer, REM, PG
Trident Environmental - Project Manager

cc: Carolyn Haynes (JHHC)

enclosures: site location map, C-141s, photo documentation, analytical reports



TRIDENT ENVIRONMENTAL

John H. Hendrix Corporation

Brunson C Battery

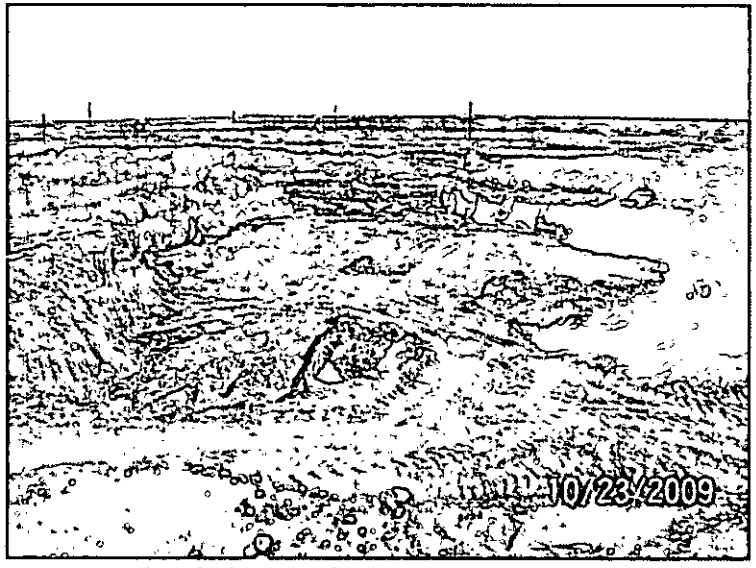
T22S - R37E - Section 3 - Unit P

Lea County, New Mexico

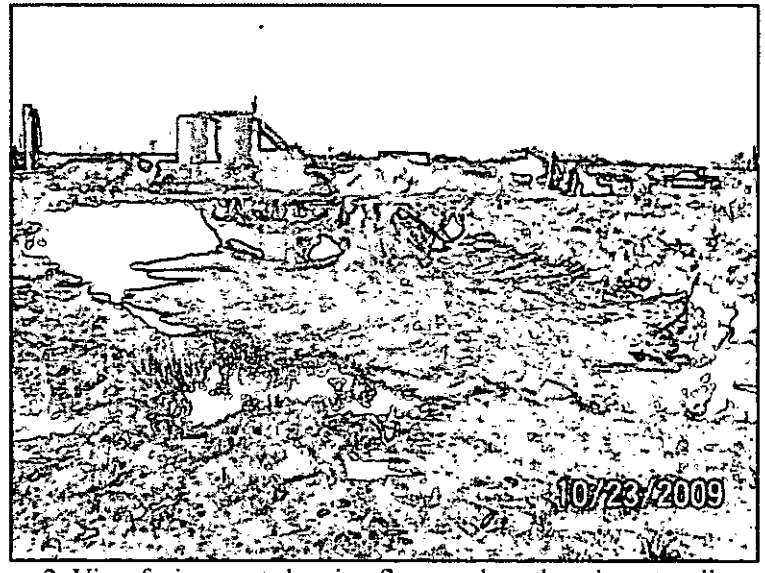
FIGURE 1

SITE LOCATION MAP

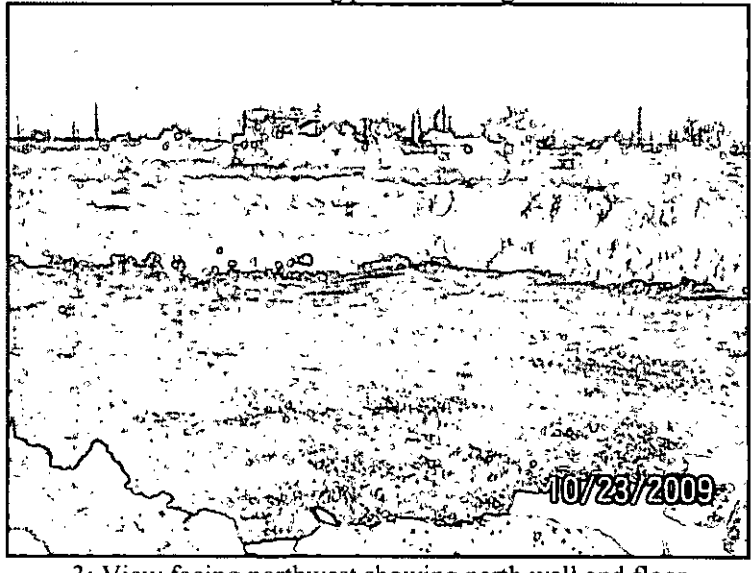
(USGS - Eunice NM Quadrangle (1979)



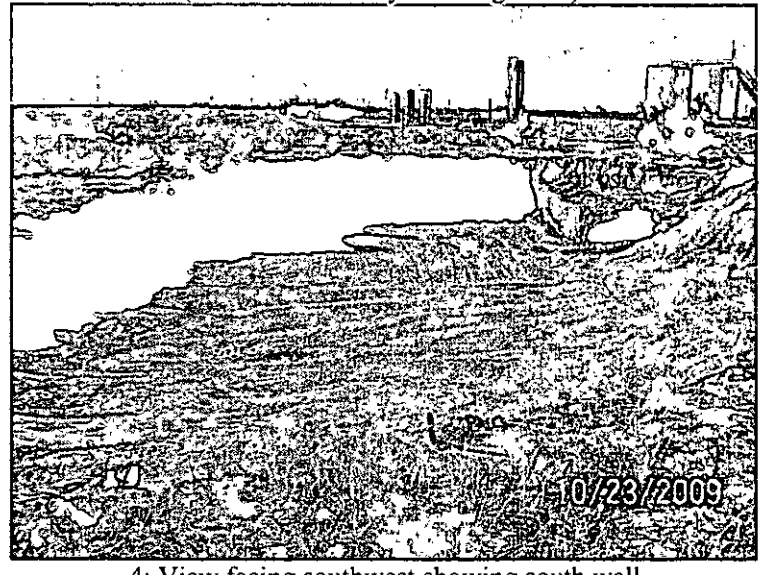
1: View facing east showing completed excavation and surrounding productive vegetation.



2: View facing west showing floor, and south and west walls (Brunson C Battery in background).



3: View facing northwest showing north wall and floor (Oxy tank battery shown in background).



4: View facing southwest showing south wall and tank battery in background.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
JOHN H. HENDRIX CORPORATION
ATTN: CAROLYN HAYNES
P.O. BOX 910
EUNICE, NM 88231
FAX TO (575) 394-2653

Receiving Date: 10/23/09
Reporting Date: 10/28/09
Project Owner: JOHN H. HENDRIX CORPORATION
Project Name: BRUNSON C BATTERY
Project Location: T22S, R37E, SEC 3, LEA CO., NM

Sampling Date: 10/23/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: ML
Analyzed By: AB/ZL

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)
ANALYSIS DATE:	10/26/09	10/26/09	10/27/09	10/27/09	10/27/09	10/27/09
H18567-1 FLOOR	40.0	2,010	<0.050	0.109	0.058	0.469
H18567-2 WALL*	<10.0	686	<0.050	<0.050	0.227	<0.300
Quality Control	422	434	0.043	0.046	0.047	0.134
True Value QC	500	500	0.050	0.050	0.050	0.150
% Recovery	84.4	86.8	86.0	92.0	94.0	89.3
Relative Percent Difference	6.5	8.0	<1.0	<1.0	<1.0	<1.0

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

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Not accredited for GRO/DRO.
*TPH second surrogate outside historical limits due to matrix interference.

Lab Director

Date: 10/29/09

H18567 BT JHHC

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
JOHN H. HENDRIX CORPORATION
ATTN: CAROLYN DORAN HAYNES
P.O. BOX 910
EUNICE, NM 88231

Receiving Date: 10/23/09
Reporting Date: 10/26/09
Project Owner: JOHN H. HENDRIX CORPORATION
Project Name: BRUNSON C BATTERY
Project Location: T22S, R37E, SEC 3, LEA COUNTY NM

Analysis Date: 10/23/09
Sampling Date: 10/23/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: ML
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H18567-1	FLOOR	480
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-ClB

Note: Analysis performed on a 1:4 w:v aqueous extract.
Not accredited for chloride.

Chemist

10/29/09
Date

H18567 J. Hendrix

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) Fax#: PO Box 3040, Midland TX 79702-3040
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: Brunson C Battery
Project Location: T22S, R37E, Sec 3, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX)	HNO_3 (Metals)	$NaHSO_4$	H_2SO_4	ICE	None (Ions/TDS)	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021 B	TPH 8015M	PAH 8270C	Total RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids (SM2540C)	Chlorides (325.3 / SM4500 B)	SPLP Chloride	Turn Around Time ~ 24 Hours
H18567-1	Floor	C	1		✓							✓		10-23-09	1040		✓	✓														✓		
-2	Wall	C	1		✓							✓		10-23-09	1100		✓	✓																

ANALYSIS REQUEST (Circle or Specify Method No.)

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	10/23/09	1:25p		10/23/09	1:26p
Relinquished by:	Date:	Time:	Received By (Laboratory Staff)	Date:	Time:

Phone Results: ☐ Yes ☐ No
Fax Results: ☐ Yes ☐ No Additional Fax Number:

REMARKS:

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ✓ / No ☐ Intact: Yes ✓ / No ☐ (OC #26)

CHECKED BY: (Initials) MCB

JHHC LEGALS ERRONEOUS

Leking, Geoffrey R, EMNRD

From: Leking, Geoffrey R, EMNRD
Sent: Tuesday, March 30, 2010 4:07 PM
To: 'Gil Van Deventer'
Subject: RE: Corrective Action Plan - Brunson C Battery (1RP-2179)

Gil

Please provide proof that ground water in Unit Letter P of Section 3-22S-37E is greater than 50 feet below ground surface (bgs) as the map at NMOCD indicates that water is at approximately 30 feet bgs. Thank you.

Geoffrey Leking
Environmental Engineer
NMOCD-Hobbs

From: Gil Van Deventer [mailto:gilbertvandeventer@suddenlink.net]
Sent: Thursday, February 18, 2010 9:23 AM
To: Leking, Geoffrey R, EMNRD
Cc: Carolyn Haynes
Subject: Corrective Action Plan - Brunson C Battery (1RP-2179)

Good Morning Geoff:

As agent for John H. Hendrix Corporation, Trident Environmental submits the attached *Corrective Action Plan* for the Brunson C Battery (NMOCD Case # 1RP-2179) located in T22S-R37E-Sec 3, Lea County, NM. One complete hard copy will be sent to you via USPS Certified Mail (# 7099 3400 0017 1737 1827) today.

We look forward to your reply to the proposed corrective actions. Please feel free to contact me at 432-638-8740, or Carolyn Haynes with JHHC at 575-390-9689.

Thank you,
Gil

Gilbert J. Van Deventer, PG, REM
Trident Environmental
P. O. Box 7624, Midland TX 79708
Work/Mobile: 432-638-8740
Fax: 413-403-9968
Home: 432-682-0727

CERTIFIED MAIL
RETURN RECEIPT NO. 7099 3400 0017 1737 1827

February 18, 2010

Mr. Geoffrey Leking
New Mexico Oil Conservation Division, Environmental Bureau
1625 N. French Drive
Hobbs, Mexico 88240

RE: **Corrective Action Plan (1RP-2179)**
Brunson C Battery
Township 22 South, Range 37 East, Section 3, Lea County, NM

Dear Mr. Leking:

John H. Hendrix Corporation (JHHC) has retained Trident Environmental to address historical impact located east-northeast of the Brunson C Battery which is also surrounded by both abandoned and active oil/gas transportation pipelines of multiple ownership. JHHC is voluntarily performing this housekeeping action to return the surface to productive capacity.

Background

The Brunson C Battery is located at township 22 south, range 37 east, section 3, unit letter P approximately one mile southeast of Eunice, New Mexico, as shown on the attached Site Location Map (Figure 1). Land in the site area is primarily utilized for natural oil and gas production and pasture land for cattle grazing.

Groundwater in the site area occurs within the High Plains aquifer under water table (unconfined) conditions (Hart and McAda, 1985) at a depth of approximately 75 to 94 feet below ground surface (based on USGS and NMOSE online databases).

Description of Work Performed

In accordance with the work plan submitted to the District 1 NMOCD office on May 12, 2009, and the NMOCD-approved Form C-141 (Attachment A), excavation and removal of petroleum hydrocarbon-impacted soils was conducted over an approx. 7,200 ft^2 area which is the extent where productive and healthy vegetation was reached. Excavation terminated at a depth of approx. 10 ft below ground surface (bgs) which was the maximum extent capable using the backhoe due to the indurated caliche layer encountered. A total of 3,517 yd^3 was transported to the centralized surface waste management facility operated by JHHC (NM-02-021). Photo documentation of the completed excavation is included in Appendix B.

Soil Sampling Results

Target concentrations for closure and sample collection were as follows:

- 1,000 mg/kg TPH
- 100 ppm OVM, and/or 10 mg/kg benzene, and 50 mg/kg BTEX (EPA Method 8021B).
- One sample consisting of a composite from a grab sample collected along each wall (north, south, east and west sides).
- One five-point composite sample from the floor of the excavation.

Composite soil samples, as described above, were collected and submitted to Cardinal Laboratories in Hobbs, NM, for analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Methods 8015 and 8021B, respectively. The analytical results are summarized in the table below. The laboratory analytical reports and chain of custody documentation are included in Attachment C.

Sample (Depth)	Sample Type	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)
Floor (10 ft bgs)	5-pt Composite	<0.050	0.636	40	2,010	2,050
Wall (6 ft bgs)	4-pt Composite	<0.050	<0.300	<10	686	686

Corrective Action Plan

Target concentrations for closure have been met for the walls and productive and healthy vegetation has been reached at the perimeter of the excavated area. Although the target concentration for TPH was not met for the floor, there was an indurated caliche layer encountered at approximately 10 ft bgs. Therefore, JHHC proposes to install a one-ft compacted clay layer at the bottom of the excavation (10 ft bgs) prior to backfilling with clean soils purchased from the landowner. The final topsoil layer will then be re-seeded to restore the pasture land to productive vegetative capacity. The proposed corrective actions are protective of the surface vegetation and groundwater. Mr. Greg Holt, leaseholder for the landowner, has been informed.

Upon completion of the work described above, a Final C-141 form with supporting documentation will be prepared by Trident Environmental describing the clay layer installation and backfilling procedures for submission to the District 1 OCD office in Hobbs.

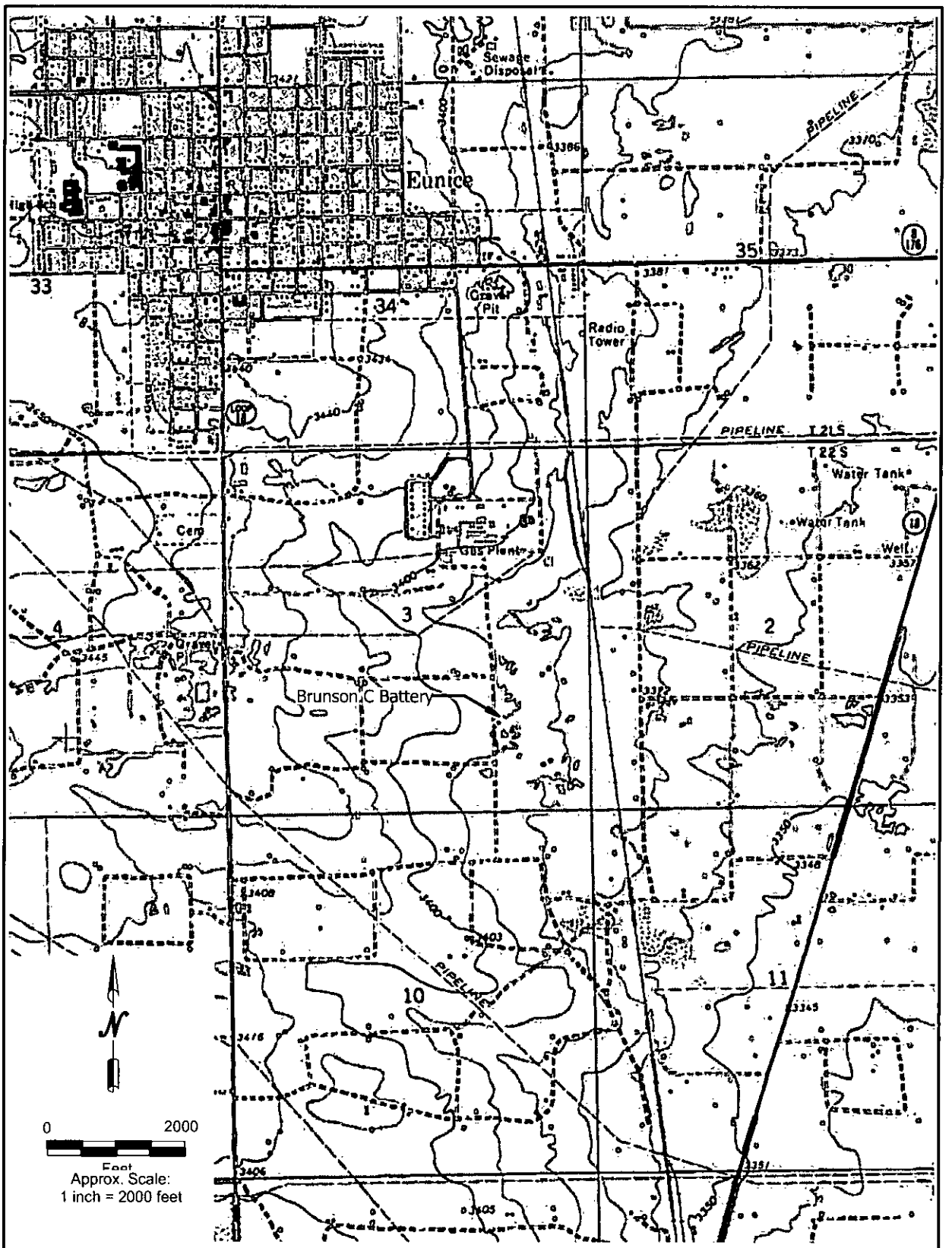
We appreciate the opportunity to work with you on this project. Please feel free to call me at 432-638-8740 or Carolyn Haynes at 575-390-9689, if you have any questions.

Sincerely,

Gilbert J. Van Deventer, REM, PG
Trident Environmental - Project Manager

cc: Carolyn Haynes (JHHC)

enclosures: site location map, C-141s, photo documentation, analytical reports

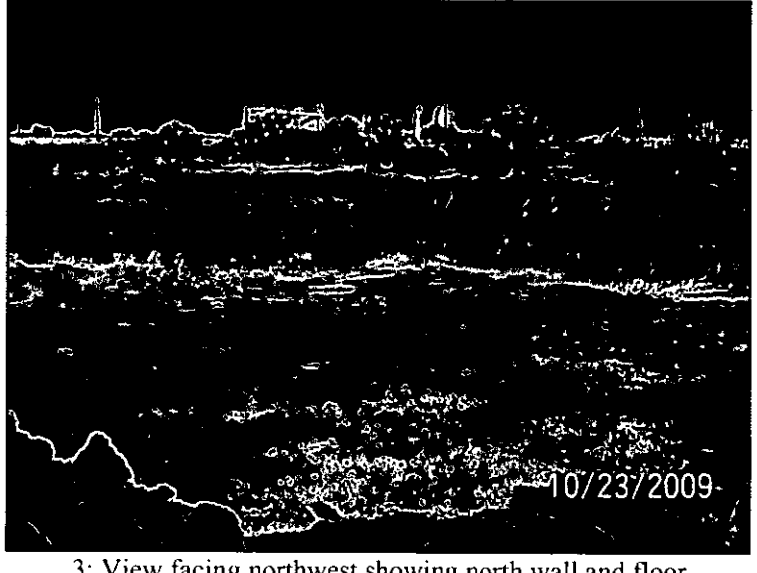


TRIDENT ENVIRONMENTAL	**John H. Hendrix Corporation** **Brunson C Battery** T22S - R37E - Section 3 - Unit P Lea County, New Mexico	FIGURE 1 SITE LOCATION MAP (USGS - Eunice NM Quadrangle (1979)

JHHC – Brunson C Battery
T22S-R37E-Section 3, Unit Letter P

1: View facing east showing completed excavation and surrounding productive vegetation.

2: View facing west showing floor, and south and west walls (Brunson C Battery in background).



3: View facing northwest showing north wall and floor (Oxy tank battery shown in background).

4: View facing southwest showing south wall and tank battery in background.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
JOHN H. HENDRIX CORPORATION
ATTN: CAROLYN HAYNES
P.O. BOX 910
EUNICE, NM 88231
FAX TO (575) 394-2653

Receiving Date: 10/23/09
Reporting Date: 10/28/09
Project Owner: JOHN H. HENDRIX CORPORATION
Project Name: BRUNSON C BATTERY
Project Location: T22S, R37E, SEC 3, LEA CO., NM

Sampling Date: 10/23/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: ML
Analyzed By: AB/ZL

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)
ANALYSIS DATE:		10/26/09	10/26/09	10/27/09	10/27/09	10/27/09	10/27/09
H18567-1	FLOOR	40.0	2,010	<0.050	0.109	0.058	0.469
H18567-2	WALL*	<10.0	686	<0.050	<0.050	0.227	<0.300
Quality Control		422	434	0.043	0.046	0.047	0.134
True Value QC		500	500	0.050	0.050	0.050	0.150
% Recovery		84.4	86.8	86.0	92.0	94.0	89.3
Relative Percent Difference		6.5	8.0	<1.0	<1.0	<1.0	<1.0

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

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Not accredited for GRO/DRO.
*TPH second surrogate outside historical limits due to matrix interference.

Lab Director

Date: 10/29/09

H18567 BT JHHC

ARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
JOHN H. HENDRIX CORPORATION
ATTN: CAROLYN DORAN HAYNES
P.O. BOX 910
EUNICE, NM 88231

Receiving Date: 10/23/09
Reporting Date: 10/26/09
Project Owner: JOHN H. HENDRIX CORPORATION
Project Name: BRUNSON C BATTERY
Project Location: T22S, R37E, SEC 3, LEA COUNTY NM

Analysis Date: 10/23/09
Sampling Date: 10/23/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: ML
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H18567-1	FLOOR	480
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-ClB

Note: Analysis performed on a 1:4 w:v aqueous extract.
Not accredited for chloride.

Chemist

10/29/09
Date

H18567 J. Hendrix

101 East Marland, Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address (Street, City, Zip): PO Box 910, Eunice NM 88231	Address (Street, City, Zip) Fax#: PO Box 3040, Midland TX 79702-3040
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: Brunson C Battery
Project Location: T22S, R37E, Sec 3, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX)	HNO_3 (Metals)	$NaHSO_4$	H_2SO_4	ICE	None (Ions/TDS)	SAMPLING: DATE	TIME
H18567-1	Floor	C	1		✓							✓		10-23-09	1040
-2	Wall	C	1		✓							✓		10-23-09	1100

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021 B	TPH 8015M	PAH 8270C	Total RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids (SM2540C)	Chlorides (325.3 / SM4500 B)	SPLP Chloride	Turn Around Time ~ 24 Hours
	✓	✓														✓		
	✓	✓																

Relinquished by:	Date: 10/23/09	Time: 1:25p	Received by: Date: 10/23/09 Time: 1:26p
Relinquished by:	Date:	Time:	Received By (Laboratory Staff) Date: Time:

Phone Results: ☐ Yes ☐ No
Fax Results: ☐ Yes ☐ No Additional Fax Number:

REMARKS:

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ✓ / No; Intact: Yes ✓ / No — COC #26

CHECKED BY: (Initials) MC/B

Gonzales, Elidio L, EMNRD

From: Hill, Larry, EMNRD
Sent: Tuesday, November 02, 2010 1:08 PM
To: Johnson, Larry, EMNRD
Cc: Leking, Geoffrey R, EMNRD; Gonzales, Elidio L, EMNRD
Subject: FW: Notification of Sampling Activities / JHHC CSWMF NM-2-0021
Attachments: gil.vcf

From: Gil Van Deventer [mailto:gil@trident-environmental.com]
Sent: Tuesday, November 02, 2010 7:52 AM
To: Jones, Brad A., EMNRD
Cc: Carolyn Haynes; Hill, Larry, EMNRD
Subject: Re: Notification of Sampling Activities / JHHC CSWMF NM-2-0021

I meant Wednesday Nov 3rd. - had my dates wrong. Nov 3rd is when we have a backhoe scheduled. If you have any questions please feel free to contact me at 432-638-8740 or Carolyn Haynes with JHHC at 432-684-6631.

Thanks Gil

--
Gilbert J. Van Deventer, PG, REM

On 10/27/10 5:54 PM, Gil Van Deventer wrote:
Facility: John H. Hendrix Corp. Centralized Surface Waste Management Facility (NM-2-0021)
Location: W/2 NW/4, W2 SW/4, Section 15, Township 24 South, Range 36 East, Lea County, New Mexico
Acitivity: Treatment and vadose zone sampling
Scheduled Date: November 4, 2010

Brad:

On behalf of John H. Hendrix Corp. (JHHC) please let this email serve as notification for the annual sampling of the treatment and vadose zone at the above-referenced facility. Work will be conducted in accordance with permit # NM-2-0021 and lab results will be submitted to NMOCD within 45 days following receipt from the laboratory.

If you have any questions please feel free to contact me at 432-638-8740 or Carolyn Haynes with JHHC at 432-684-6631.

Thanks - Gil

Gilbert J. Van Deventer, PG, REM
Trident Environmental
P. O. Box 12177, Odessa TX 79768

Work: 432-682-0008

JHHC PG.RL 09135 30430

TRIDENT ENVIRONMENTAL

January 11, 2013

Mr. Geoffrey Leking
New Mexico Oil Conservation Division, Environmental Bureau
1625 N. French Drive
Hobbs, Mexico 88240

HOBBS OCD

JAN 30 2013

RECEIVED

RE: **Completion of Remedial Actions (Final C-141)**
Brunson C Battery (1RP-2179)
Township 22 South, Range 37 East, Section 3, Lea County, NM

Dear Mr. Leking:

As agent for John H. Hendrix Corporation (JHHC), Trident Environmental submits this report and final C-141 form (Attachment A) to describe and document completion of remedial actions at the above-referenced facility. Copies of the *Corrective Action Plan*, initial C-141 forms, and NMOCD email correspondence are included in Attachment B. JHHC voluntarily performed this housekeeping action to return the surface to productive vegetation capacity.

Background

The Brunson C Battery is located at township 22 south, range 37 east, section 3, unit letter P approximately one mile southeast of Eunice, New Mexico, as shown on Figure 1 (Site Topographic Map). Land in the site area is primarily utilized for oil and gas production and pasture land for cattle grazing.

Groundwater in the site area occurs within the High Plains (alluvium and/or Ogallala Formation) aquifer under water table (unconfined) conditions (Hart and McAda, 1985) at a depth of approximately 35 feet below ground surface. The prevailing direction of groundwater flow is to the south-southeast in that area.

Description of Work Performed

An approximately 7,200 ft^2 area was excavated which is the extent where productive and healthy vegetation was reached, and 4,057 yd^3 of impacted soils were transported to the JHHC landfarm (NM-2-21) as described in more detail in the previously submitted *Corrective Action Plan* (Attachment B). After obtaining approval from OCD on June 10, 2010 (email, Attachment B), a two-ft compacted clay layer was installed at the bottom of the

DEC 22 2015

excavation and then backfilled with clean soils purchased from the landowner. The final topsoil layer was then re-seeded. In accordance with OCD's conditional approval of the *Corrective Action Plan* to progress forward with the backfilling activities, a monitoring well was installed along the downgradient side (SSE) of the area on September 28, 2011, after landowner negotiations were finalized, to assess groundwater quality at the site over a four quarter period. A copy of the well construction diagram and lithologic log is included in Attachment C. Photo documentation of backfilling activities and monitoring well construction is attached.

Groundwater Monitoring Results

Groundwater samples were collected and submitted to local laboratories (Cardinal Laboratories in Hobbs NM or Xenco Laboratories in Odessa TX), for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021B, and for chloride and total dissolved solids (TDS), using Standard Methods 4500Cl-B and 160.1, respectively. Results of four quarters of monitoring for BTEX, chloride, and TDS are tabulated below and depicted on the Site Groundwater Monitoring Map (Figure 2). The laboratory analytical reports, chain of custody documentation, and the field sampling data form are included in Attachment D.

Summary of Groundwater Monitoring Results (MW-1)

Sample Date	Depth to Groundwater (feet BTOC)	Chloride (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Xylene (mg/L)
10/05/11	40.10	6,360	11,400	<0.001	<0.002	<0.001	<0.004
01/24/12	40.17	6,000	11,000	<0.001	<0.001	<0.001	<0.003
04/15/12	40.19	6,000	11,000	<0.001	<0.001	<0.001	<0.003
08/29/12	40.27	5,150	10,200	<0.001	<0.001	<0.001	<0.003

BTEX concentrations are less than WQCC standards and consistently below lab detection limits. Chloride and TDS concentrations at the site exceed NMWQCC standards of 250 mg/L and 1,000 mg/L, respectively, as would be expected for regional groundwater impairment (see conclusions).

Conclusions

A chloride concentration of 480 mg/kg obtained from a composited soil sample collected at the bottom of the excavation on October 29, 2009, demonstrates the remediated area at the Brunson C Battery is not the source for chloride/TDS impact.

The lack of any measurable BTEX concentrations in the on site monitoring well further demonstrates JHHC operations have not impacted groundwater at the site.

An off-site upgradient source(s) is (are) likely responsible for the elevated chloride and TDS concentrations in groundwater at the site, possibly from the Eunice Gas Plant located less than a ¼ mile north and one or more of at least nine historical environmental investigations with NMOCD-assigned case numbers in section 3 as identified on Figure 1. The Eunice Gas Plant has been undergoing groundwater monitoring for over a decade under its Discharge Plan (GW-005) requirements due to extensive petroleum hydrocarbon and brine impacts from their past operations. Based on the most recently accessible results from a November 11, 2010 sampling event at the gas plant, chloride and TDS concentrations for the four upgradient wells closest to MW-1 at the Brunson C Battery are listed as follows:

Summary of Chloride/TDS Concentrations in Nearby Monitoring Wells

Sample Date	Chloride (mg/L)	TDS (mg/L)	Distance from MW-1 at Brunson C Battery
MW-14	43,900	68,500	1,500 ft North-Northeast
MW-19	12,100	21,200	1,120 ft Northeast
MW-20	2,760	6,420	700 ft North
MW-21	4,210	7,310	1,300 ft North

Figure 3 is a Site Vicinity Map depicting the chloride and TDS concentrations for the four Targa monitoring wells referenced above and the single monitoring well at the Brunson C Battery. The highly impacted Targa monitoring wells strongly suggest that the gas plant is a source of regional impact extending southward onto property where JHHC has operations. The exact source of the brine impact at the Eunice Gas Plant is not known, however Targa operates an active saltwater disposal well (SWD-1; API # 30-025-22583) which is located in close proximity, and upgradient, of the most severe brine-impacted groundwater (MW-14).

The Site Vicinity Topographic Map (Figure 1) identifies NMOCD-assigned case numbers for numerous environmental investigations by various operators involving past releases that have taken place in close proximity to the Brunson C Battery. Based on the limited data available in the NMOCD online database, these other investigations did not include groundwater assessment even though chloride impact into the vadose zone was documented in several cases. In some cases chloride impact was not even assessed even though it should have been a constituent of concern. These sites, along with other potential undocumented off site releases, may also be a source of the regional impact. The Site Vicinity Aerial Map (Figure 4) depicts the site in relation to other oil & gas operations including an Oxy tank battery, numerous pipelines, oil wells, and the Eunice Gas Plant where there is a saltwater disposal well, large landfarming areas, closed pits, and past releases.

Closure

JHHC has thoroughly and successfully remediated the historical petroleum hydrocarbon impact to the vadose zone via massive source removal, installation of a clay layer to inhibit downward migration, and restoration of vegetation capacity. Groundwater assessment for this site demonstrates there is no petroleum hydrocarbon impact to groundwater on site and that the source of chloride and TDS impact is from an upgradient off site source.

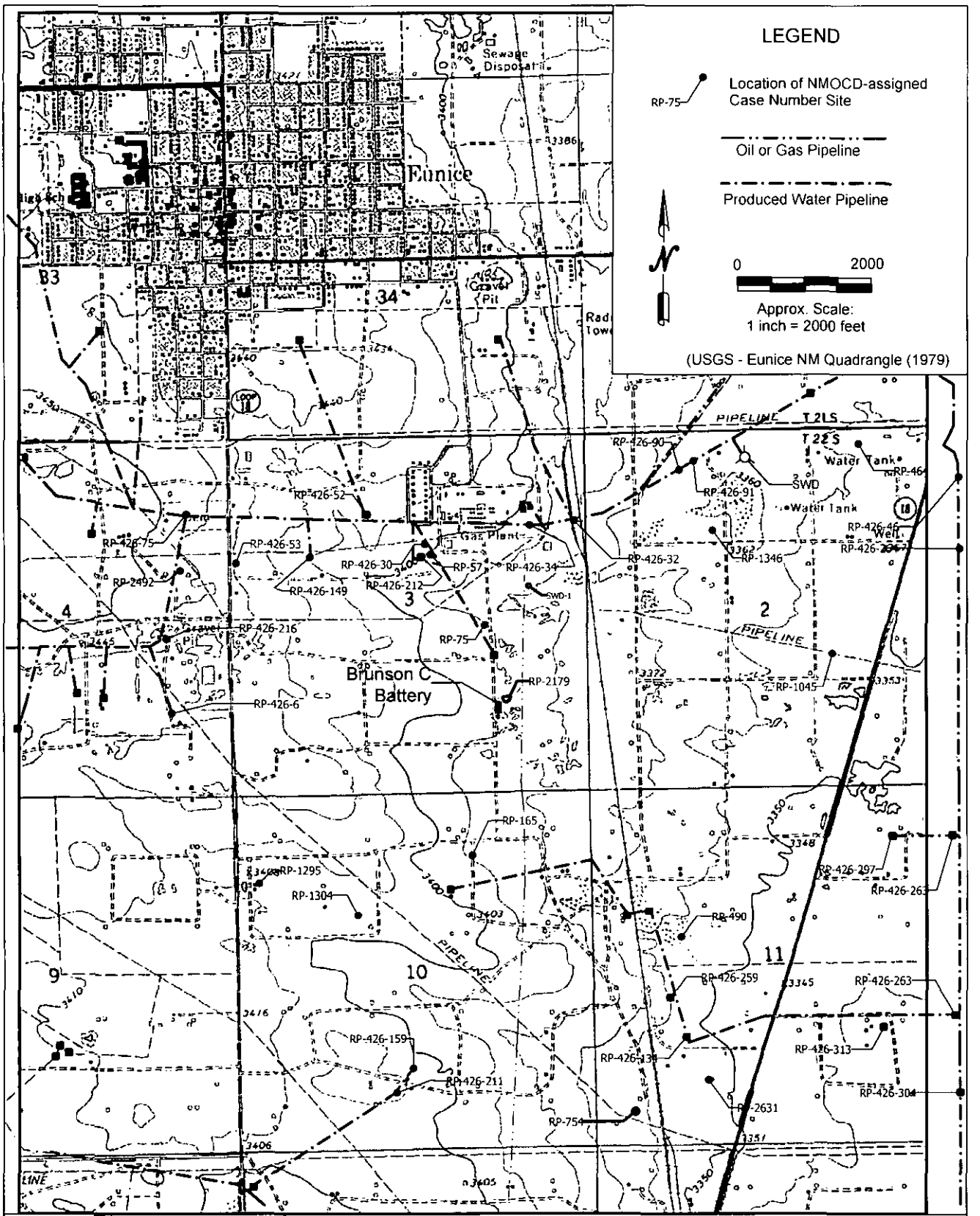
On behalf of JHHC, we look forward to receiving NMOCD approval of the enclosed final C-141. Please feel free to call me at 432-638-8740 or Carolyn Haynes at 432-684-6631, if you have any questions.

Sincerely,

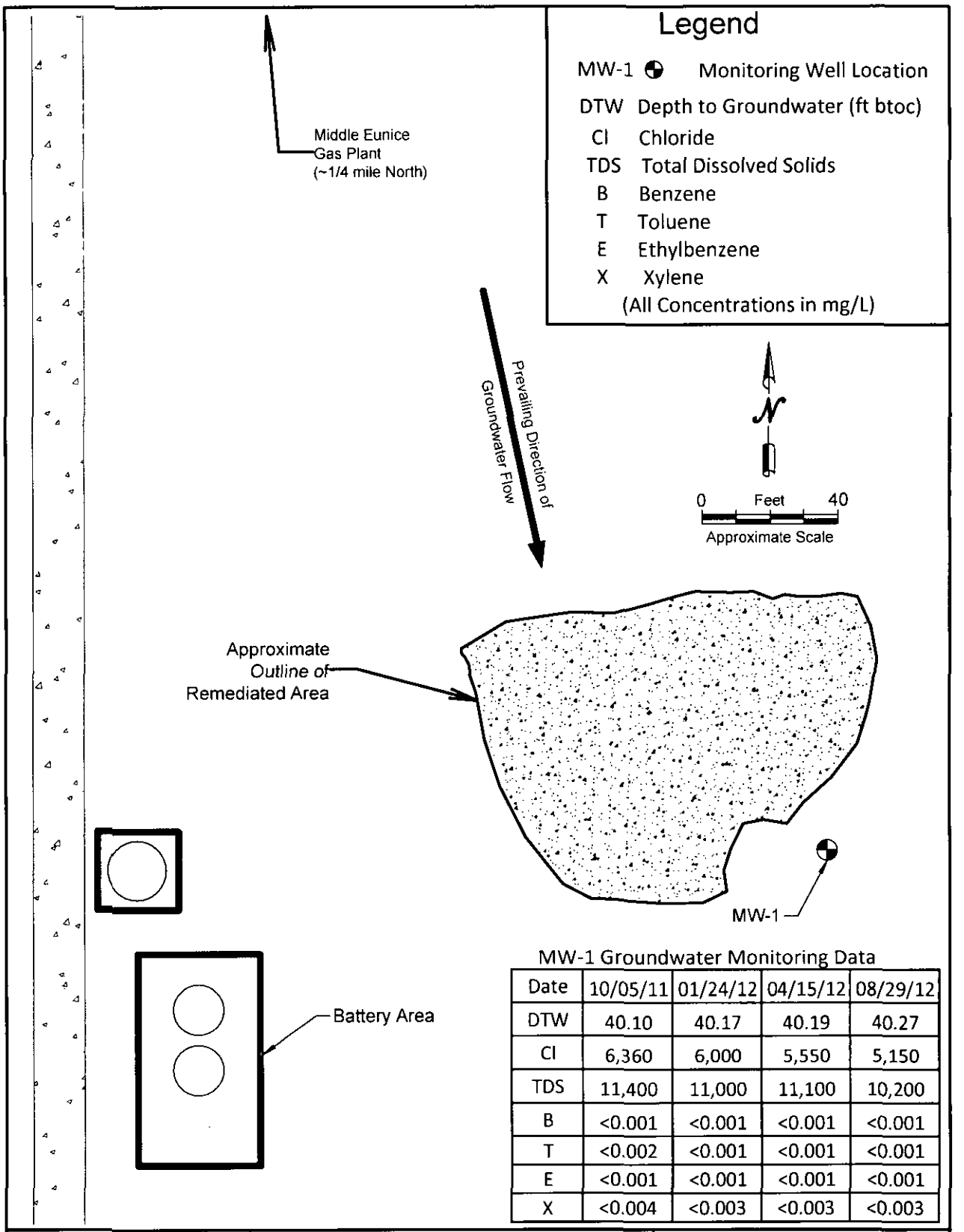
Gilbert J. Van Deventer, REM, PG
Trident Environmental - Project Manager

cc: Carolyn Haynes (JHHC)

enclosures: site maps, photo documentation, Corrective Action Plan, C-141 forms, analytical reports



TRIDENT ENVIRONMENTAL	John H. Hendrix Corporation Brunson C Battery (RP-2179) T22S - R37E - Section 3 - Unit P Lea County, New Mexico	FIGURE 1 SITE TOPOGRAPHIC MAP



MW-1 Groundwater Monitoring Data

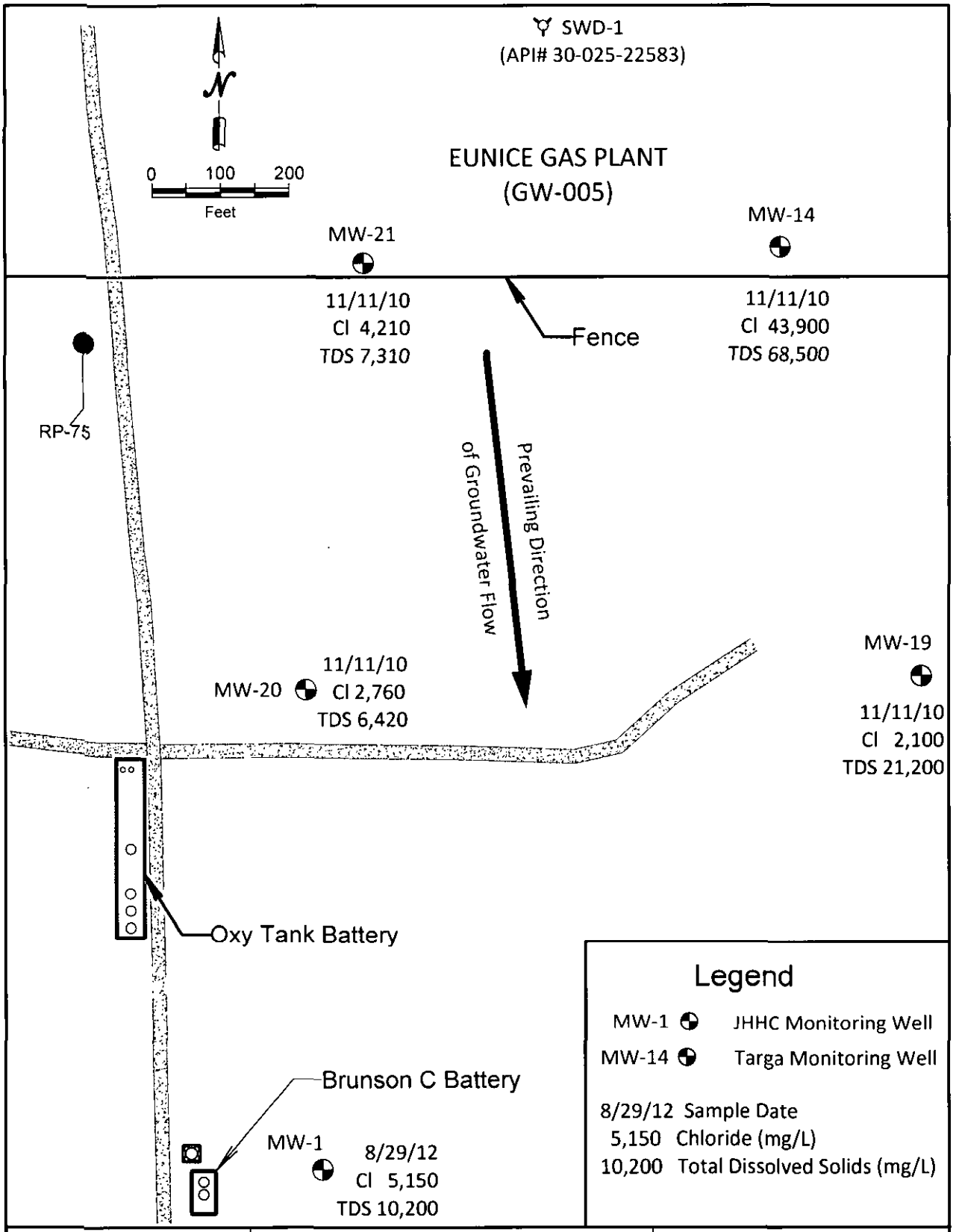
Date	10/05/11	01/24/12	04/15/12	08/29/12
DTW	40.10	40.17	40.19	40.27
Cl	6,360	6,000	5,550	5,150
TDS	11,400	11,000	11,100	10,200
B	<0.001	<0.001	<0.001	<0.001
T	<0.002	<0.001	<0.001	<0.001
E	<0.001	<0.001	<0.001	<0.001
X	<0.004	<0.003	<0.003	<0.003

TRIDENT ENVIRONMENTAL

John H. Hendrix Corporation
Brunson C Battery
T22S - R37E - Section 3 - Unit P
Lea County, New Mexico

FIGURE 2

SITE GROUNDWATER MONITORING MAP



TRIDENT ENVIRONMENTAL

John H. Hendrix Corporation
Brunson C Battery
T22S - R37E - Section 3 - Unit P
Lea County, New Mexico

FIGURE 3

SITE VICINITY MAP

TRIDENT ENVIRONMENTAL

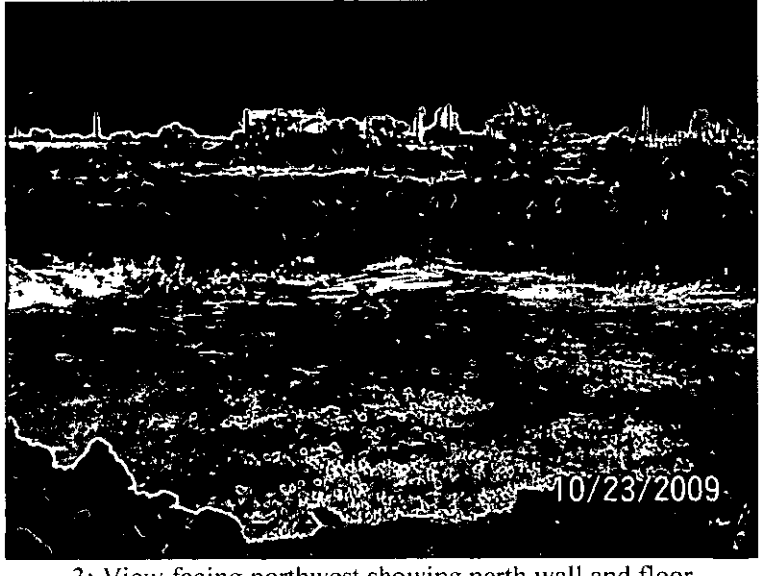
John H. Hendrix Corporation
Brunson C Battery
T22S - R37E - Section 3 - Unit P
Lea County, New Mexico

FIGURE 4

SITE VICINITY AERIAL MAP

1: View facing east showing completed excavation and surrounding productive vegetation.

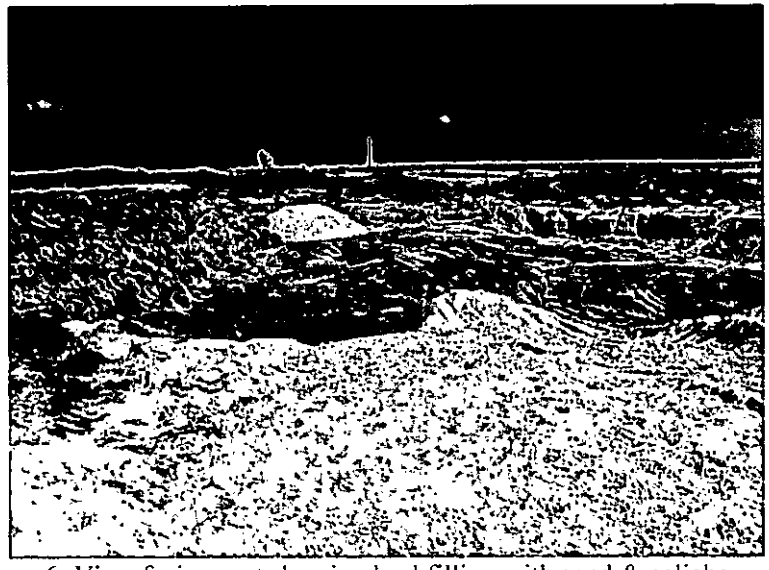
2: View facing west showing floor, and south and west walls (Brunson C Battery in background).



3: View facing northwest showing north wall and floor (Oxy tank battery shown in background).

4: View facing southwest showing south wall and tank battery in background.

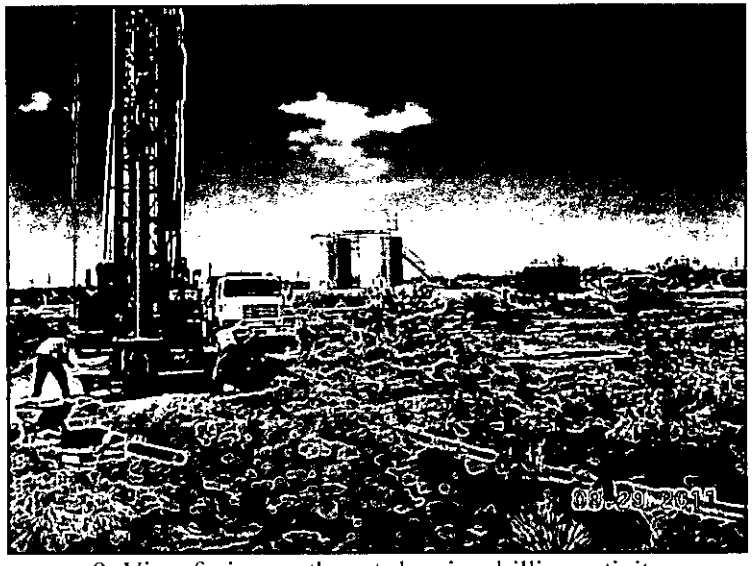
5: View facing north-northeast showing two-ft layer of clay at base of excavation (11/20/2010).



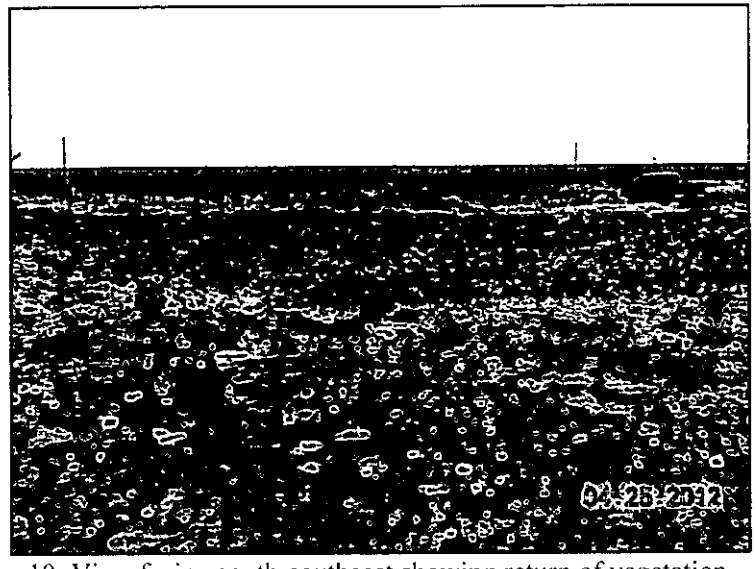
6: View facing east showing backfilling with sand & caliche material purchased from landowner (12-27-2010).

7: View facing east-northeast showing completed backfill to grade.

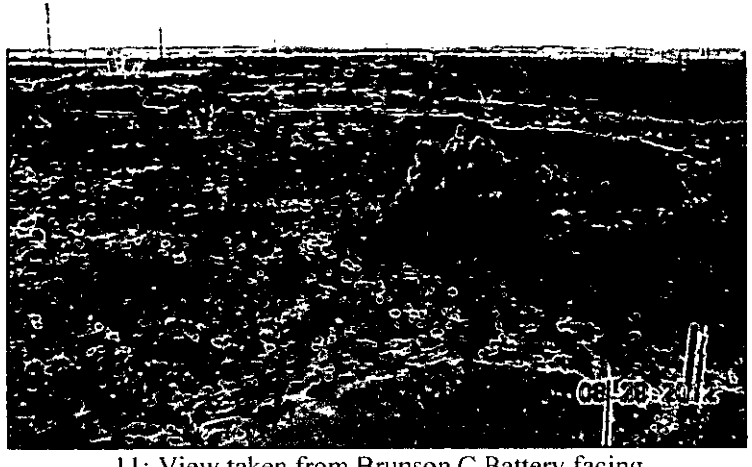
8: View facing north showing completed backfill. Gas plant in background and staked location for MW-1 in foreground.



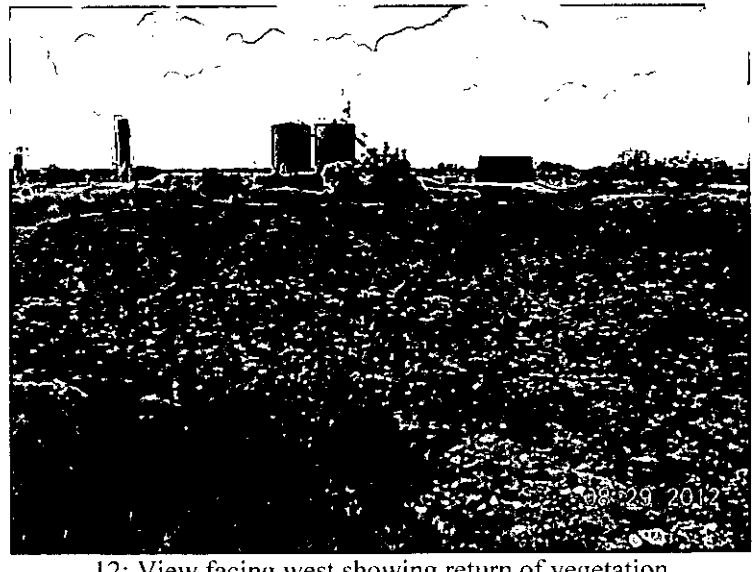
9: View facing northwest showing drilling activity during installation of monitoring well MW-1.



10: View facing south-southeast showing return of vegetation.



11: View taken from Brunson C Battery facing northeast showing return of vegetation.



12: View facing west showing return of vegetation With Brunson C Battery in background..

CERTIFIED MAIL
RETURN RECEIPT NO. 7099 3400 0017 1737 1827

February 18, 2010

Mr. Geoffrey Leking
New Mexico Oil Conservation Division, Environmental Bureau
1625 N. French Drive
Hobbs, Mexico 88240

RE: **Corrective Action Plan (1RP-2179)**
Brunson C Battery
Township 22 South, Range 37 East, Section 3, Lea County, NM

Dear Mr. Leking:

John H. Hendrix Corporation (JHHC) has retained Trident Environmental to address historical impact located east-northeast of the Brunson C Battery which is also surrounded by both abandoned and active oil/gas transportation pipelines of multiple ownership. JHHC is voluntarily performing this housekeeping action to return the surface to productive capacity.

Background

The Brunson C Battery is located at township 22 south, range 37 east, section 3, unit letter P approximately one mile southeast of Eunice, New Mexico, as shown on the attached Site Location Map (Figure 1). Land in the site area is primarily utilized for natural oil and gas production and pasture land for cattle grazing.

Groundwater in the site area occurs within the High Plains aquifer under water table (unconfined) conditions (Hart and McAda, 1985) at a depth of approximately 75 to 94 feet below ground surface (based on USGS and NMOSE online databases).

Description of Work Performed

In accordance with the work plan submitted to the District 1 NMOCD office on May 12, 2009, and the NMOCD-approved Form C-141 (Attachment A), excavation and removal of petroleum hydrocarbon-impacted soils was conducted over an approx. 7,200 ft^2 area which is the extent where productive and healthy vegetation was reached. Excavation terminated at a depth of approx. 10 ft below ground surface (bgs) which was the maximum extent capable using the backhoe due to the indurated caliche layer encountered. A total of 3,517 yd^3 was transported to the centralized surface waste management facility operated by JHHC (NM-02-021). Photo documentation of the completed excavation is included in Appendix B.

Soil Sampling Results

Target concentrations for closure and sample collection were as follows:

- 1,000 mg/kg TPH
- 100 ppm OVM, and/or 10 mg/kg benzene, and 50 mg/kg BTEX (EPA Method 8021B).
- One sample consisting of a composite from a grab sample collected along each wall (north, south, east and west sides).
- One five-point composite sample from the floor of the excavation.

Composite soil samples, as described above, were collected and submitted to Cardinal Laboratories in Hobbs, NM, for analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Methods 8015 and 8021B, respectively. The analytical results are summarized in the table below. The laboratory analytical reports and chain of custody documentation are included in Attachment C.

Sample (Depth)	Sample Type	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)
Floor (10 ft bgs)	5-pt Composite	<0.050	0.636	40	2,010	2,050
Wall (6 ft bgs)	4-pt Composite	<0.050	<0.300	<10	686	686

Corrective Action Plan

Target concentrations for closure have been met for the walls and productive and healthy vegetation has been reached at the perimeter of the excavated area. Although the target concentration for TPH was not met for the floor, there was an indurated caliche layer encountered at approximately 10 ft bgs. Therefore, JHHC proposes to install a one-ft compacted clay layer at the bottom of the excavation (10 ft bgs) prior to backfilling with clean soils purchased from the landowner. The final topsoil layer will then be re-seeded to restore the pasture land to productive vegetative capacity. The proposed corrective actions are protective of the surface vegetation and groundwater. Mr. Greg Holt, leaseholder for the landowner, has been informed.

Upon completion of the work described above, a Final C-141 form with supporting documentation will be prepared by Trident Environmental describing the clay layer installation and backfilling procedures for submission to the District 1 OCD office in Hobbs.

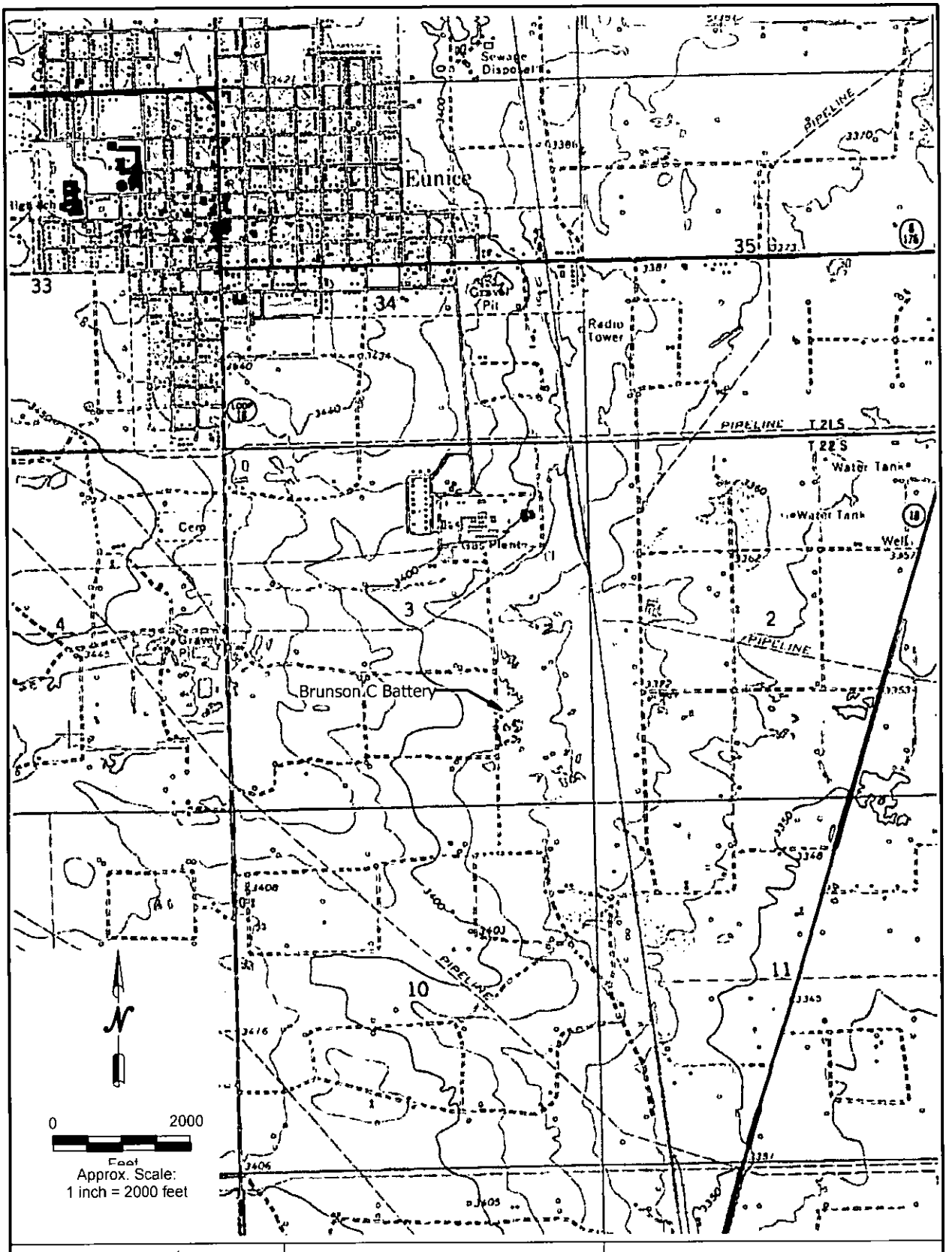
We appreciate the opportunity to work with you on this project. Please feel free to call me at 432-638-8740 or Carolyn Haynes at 575-390-9689, if you have any questions.

Sincerely,

Gilbert J. Van Deventer, REM, PG
Trident Environmental - Project Manager

cc: Carolyn Haynes (JHHC)

enclosures: site location map, C-141s, photo documentation, analytical reports



TRIDENT ENVIRONMENTAL

John H. Hendrix Corporation
Brunson C Battery
T22S - R37E - Section 3 - Unit P
Lea County, New Mexico

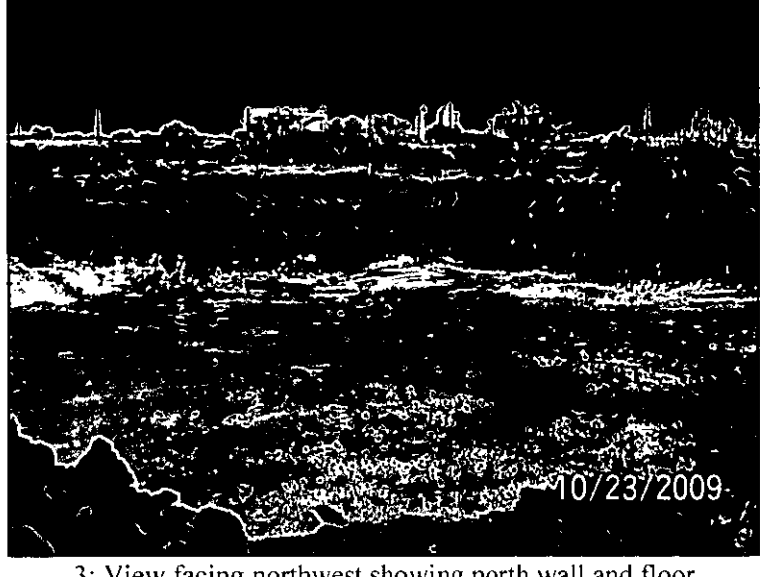
FIGURE 1

SITE LOCATION MAP

(USGS - Eunice NM Quadrangle (1979)

1: View facing east showing completed excavation and surrounding productive vegetation.

2: View facing west showing floor, and south and west walls (Brunson C Battery in background).



3: View facing northwest showing north wall and floor (Oxy tank battery shown in background).

4: View facing southwest showing south wall and tank battery in background.

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
JOHN H. HENDRIX CORPORATION
ATTN: CAROLYN HAYNES
P.O. BOX 910
EUNICE, NM 88231
FAX TO (575) 394-2653

Receiving Date: 10/23/09
Reporting Date: 10/28/09
Project Owner: JOHN H. HENDRIX CORPORATION
Project Name: BRUNSON C BATTERY
Project Location: T22S, R37E, SEC 3, LEA CO., NM

Sampling Date: 10/23/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: ML
Analyzed By: AB/ZL

LAB NO. SAMPLE ID	GRO (C_5-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)
ANALYSIS DATE:	10/26/09	10/26/09	10/27/09	10/27/09	10/27/09	10/27/09
H18567-1 FLOOR	40.0	2,010	<0.050	0.109	0.058	0.469
H18567-2 WALL*	<10.0	686	<0.050	<0.050	0.227	<0.300
Quality Control	422	434	0.043	0.046	0.047	0.134
True Value QC	500	500	0.050	0.050	0.050	0.150
% Recovery	84.4	86.8	86.0	92.0	94.0	89.3
Relative Percent Difference	6.5	8.0	<1.0	<1.0	<1.0	<1.0

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

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Not accredited for GRO/DRO.
*TPH second surrogate outside historical limits due to matrix interference.

Lab Director

Date 10/29/09

H18567 BT JHHC

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
JOHN H. HENDRIX CORPORATION
ATTN: CAROLYN DORAN HAYNES
P.O. BOX 910
EUNICE, NM 88231

Receiving Date: 10/23/09
Reporting Date: 10/26/09
Project Owner: JOHN H. HENDRIX CORPORATION
Project Name: BRUNSON C BATTERY
Project Location: T22S, R37E, SEC 3, LEA COUNTY NM

Analysis Date: 10/23/09
Sampling Date: 10/23/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 6°C
Sample Received By: ML
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H18567-1	FLOOR	480
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-ClˉB

Note: Analysis performed on a 1:4 w:v aqueous extract.
Not accredited for chloride.

Chemist

10/29/09
Date

H18567 J. Hendrix

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) PO Box 3040, Midland TX 79702-3040 Fax#:
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: Brunson C Battery
Project Location: T22S, R37E, Sec 3, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX)	HNO_3 (Metals)	$NaHSO_4$	H_2SO_4	ICE	None (Ions/TDS)	SAMPLING: DATE	TIME
H18567-1	Floor	C	1		✓							✓		10-23-09	1040
-2	Wall	C	1		✓							✓		10-23-09	1100

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B	TPH 8015M	PAH 8270C	Total RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids (SM2540C)	Chlorides (325.3 / SM4500 B)	SPLP Chloride	Turn Around Time ~ 24 Hours
	✓	✓														✓		
	✓	✓																

Relinquished by:	Date: 10/23/09	Time: 1:25p	Received by: Date: 10/23/09 Time: 1:26p
Relinquished by:	Date:	Time:	Received By (Laboratory Staff) Date: Time:

Phone Results: Yes / No
Fax Results: Yes / No Additional Fax Number:

REMARKS:

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ✓ / No; Intact: Yes ✓ / No — COC #26

CHECKED BY: (Initials) GVD

Subject: RE: Corrective Action Plan - Brunson C Battery (1RP-2179)
From: "Leking, Geoffrey R, EMNRD" <GeoffreyR.Leking@state.nm.us>
Date: 06/07/10 1:05 PM
To: "Gil Van Deventer" <gil@trident-environmental.com>
CC: "Carolyn Haynes" <cdoranhaynes@jhhc.org>

Gil

The NMOCD agrees with the statements made below in yoiur email. JHHC should proceed with the path forward as described below.

Geoffrey Leking
Environmental Engineer
NMOCD-Hobbs
1625 N. French Drive
Hobbs, NM 88240
Office: (575) 393-6161 Ext. 113
Cell: (575) 399-2990
email: geoffreyr.leking@state.nm.us

From: Gil Van Deventer [mailto:gil@trident-environmental.com]
Sent: Monday, June 07, 2010 11:51 AM
To: Leking, Geoffrey R, EMNRD
Cc: Gil Van Deventer; Carolyn Haynes
Subject: Re: Corrective Action Plan - Brunson C Battery (1RP-2179)

Geoff

Per our conversation at your office the morning of June 3rd, it is my understanding that you have approved the *Corrective Action Plan* for the Brunson C Battery (NMOCD Case # 1RP-2179) under the condition that JHHC installs a downgradient monitoring well, and that JHHC collects groundwater samples for four quarters to determine groundwater quality conditions. A site map is attached to depict the approximate location of the monitoring well outside the southeast corner of the excavation subject to existing flow lines, drilling rig accessibility, safety concerns, such that it will characterize downgradient conditions. Groundwater samples will be analyzed for BTEX, chloride, and TDS. Based on information at the OCD office in Hobbs, groundwater is expected to occur at approximately 35 ft below ground surface; therefore it is expected that the 2-inch diameter monitoring well will have a total depth of approx 50 ft with 20 ft of well screen. If it is determined that groundwater conditions meet WQCC standards or they are at or below background levels after four quarters of sampling the monitoring well may be plugged in accordance with NMOSE requirements.

Please confirm your agreement with the above so that we may initiate backfilling the excavation with the compacted clay layer and clean soils purchased from the landowner, and install the monitoring well.

Thank you,
Gil

Gilbert J. Van Deventer, PG, REM
Trident Environmental
PO Box 12177
Odessa TX 79768-2177
432-638-8740 (Office/Mobile)
413-403-9968 (Fax)

----- Original Message -----
From: Gil Van Deventer
To: Geoffrey Leking
Cc: Carolyn Haynes
Sent: Thursday, February 18, 2010 11:22 AM
Subject: Corrective Action Plan - Brunson C Battery (1RP-2179)

Good Morning Geoff:

As agent for John H. Hendrix Corporation, Trident Environmental submits the attached *Corrective Action Plan* for the Brunson C Battery (NMOCD Case # 1RP-2179) located in T22S-R37E-Sec 3, Lea County, NM. One complete hard copy will be sent to you via USPS Certified Mail (# 7099 3400 0017 1737 1827) today.

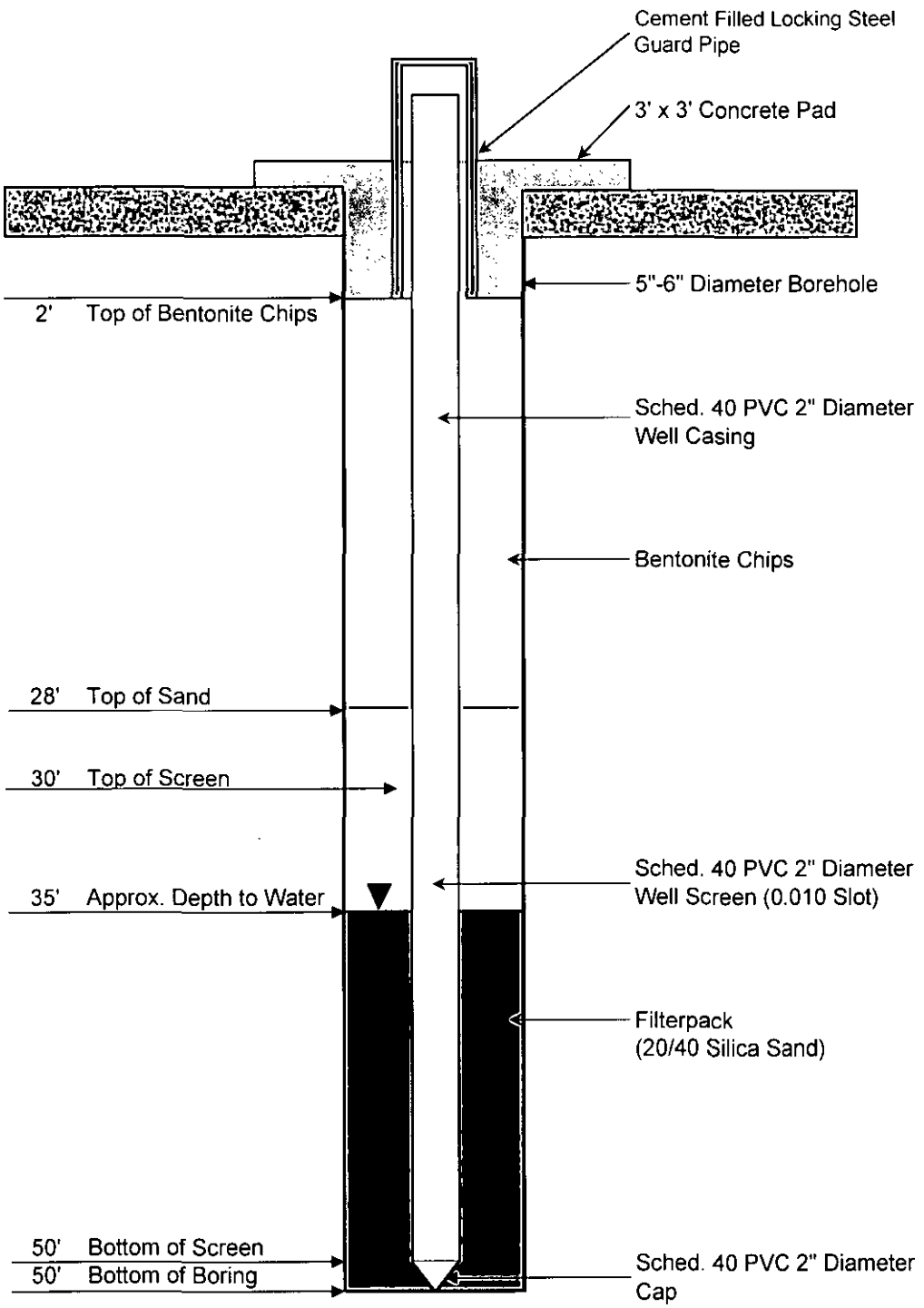
We look forward to your reply to the proposed corrective actions. Please feel free to contact me at 432-638-8740, or Carolyn Haynes with JHHC at 575-390-9689.

Thank you,
Gil

Gilbert J. Van Deventer, PG, REM
Trident Environmental
P. O. Box 7624, Midland TX 79708
Work/Mobile: 432-638-8740
Fax: 413-403-9968
Home: 432-682-0727

MONITORING WELL (MW-1) CONSTRUCTION DIAGRAM

(Not to Scale)



Client:	John H. Hendrix Corp.
Site Name:	Brunson C Battery
Location:	T22S, R37E, Sec 3, Lea County, NM
Completion Date:	September 28, 2011
Driller:	Harrison & Cooper
Geologist:	Gil Van Deventer

TRIDENT ENVIRONMENTAL

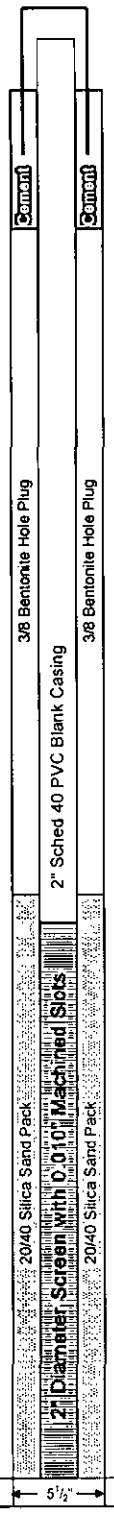
Monitoring Well (MW-1) Construction Diagram

LITHOLOGIC LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

TRIDENT ENVIRONMENTAL

ONITOR WELL NO.: MW - 1
SITE ID: Brunson C Battery
CONTRACTOR: Harrison & Cooper, Inc.
RILLING METHOD: Air Rotary
START DATE: 09/28/11
OMPLETION DATE: 09/28/11
COMMENTS: Montoring well located adjacent to southeast side of excavation.
Latitude: N 32°25' 2.3", Longitude: W 103° 8' 46.5"

TOTAL DEPTH: 50 feet below ground surface
CLIENT: John H. Hendrix Corp.
COUNTY: Lea
STATE: New Mexico
LOCATION: T22S-R37E-Sec 3-Unit P
FIELD REP.: Gil Van Deventer



Sample Depth	Time	Type	USCS	LITHOLOGIC DESCRIPTION: LITHOLOGY, COLOR, GRAIN SIZE, SORTING, ROUNDING, CONSOLIDATION, DISTINGUISHING FEATURES
5	1040	Cuttings	SW	Sand, fine-medium grained, light brown (5 YR 5/6), subrounded, moderately sorted, dry
10	1042	Cuttings	CAL	Caliche, pinkish-gray (5 YR 8/1), indurated and fractured, dry
15	1044	Cuttings		Caliche, pinkish-gray (5 YR 8/1), indurated and fractured, dry
20	1045	Cuttings	SM/CAL	Sand, fine grained, light brown (5YR 6/4), subrounded, moderately well sorted with calcium carbonate and caliche, grayish-orange (10 YR 7/4), dry
25	1047	Cuttings		Sand, fine grained, light brown (5YR 6/4), subrounded, moderately well sorted with calcium carbonate and caliche, grayish-orange (10 YR 7/4), dry
30	1048	Cuttings		Sand, fine grained, light brown (5YR 6/4), subrounded, moderately well sorted with calcium carbonate and caliche, grayish-orange (10 YR 7/4), dry
35	1049	Cuttings	SW	Sand, medium grained, light brown (5 YR 5/5), subrounded, moderately well sorted, dry Sand, fine-medium grained, light brown (5 YR 6/4), subrounded, moderately sorted (bimodal), dry
▼				Groundwater encountered at ~38 ft bgs
40	1050	Cuttings		Sand, fine-medium grained, light brown (5 YR 5/6), subrounded, moderately sorted (bimodal), damp
45	1052	Cuttings		Sand, fine-medium grained, light brown (5 YR 5/6), subrounded, moderately sorted (bimodal), wet
50	1054	Cuttings		Sand, medium grained, light brown (5 YR 5/6), subrounded, moderately well sorted, wet

CARDINAL Laboratories

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

January 30, 2012

CAROLYN DORAN HAYNES

JOHN H. HENDRIX CORPORATION

P. O. BOX 3040

MIDLAND, TX 79702

RE: BRUNSON C BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/24/12 12:27.

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 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

JOHN H. HENDRIX CORPORATION
CAROLYN DORAN HAYNES
P. O. BOX 3040
MIDLAND TX, 79702
Fax To: (575) 394-2653

Received:	01/24/2012	Sampling Date:	01/24/2012
Reported:	01/30/2012	Sampling Type:	Water
Project Name:	BRUNSON C BATTERY	Sampling Condition:	Cool & Intact
Project Number:	JHHC	Sample Received By:	Jodi Henson
Project Location:	T22S, R37E, SEC 3, LEA COUNTY, NM		

Sample ID: MW-1 (H200171-01)

BTEX 8260B mg/L **Analyzed By: CMS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	01/30/2012	ND	0.022	110	0.0200	10.1	
Toluene*	<0.001	0.001	01/30/2012	ND	0.019	97.0	0.0200	10.4	
Ethylbenzene*	<0.001	0.001	01/30/2012	ND	0.020	100	0.0200	10.1	
Total Xylenes*	<0.003	0.003	01/30/2012	ND	0.060	100	0.0600	10.7	

Surrogate: Dibromofluoromethane	*119 %*	*59.8-161*
Surrogate: Toluene-d8	*88.2 %*	*75.2-115*
Surrogate: 4-Bromofluorobenzene	*93.0 %*	*53.7-120*

Chloride, SM4500Cl-B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**7200**	4.00	01/25/2012	ND	104	104	100	7.41	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**11800**	5.00	01/25/2012	ND	238	99.2	240	1.50	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Celey D. Keene, Lab Director/Quality Manager

12600 West I-20 East - Odessa TX
797658
Tel (432) 563-1800
Fax (432) 563-1713

Xenco Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: _____

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) PO Box 3040, Midland TX 79702-3040 Fax#:
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: Brunson C Battery
Project Location: T22S, R37E, Sec 3, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY) H20017	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX)	HNO_3 (Metals)	$NaHSO_4$	H_2SO_4	ICE	None (Ions/TDS)	SAMPLING: DATE	TIME
1	MW-1	G	5	X				3	1			5	1	01/24/12	

MTBE 8021B/602	BTEX 8021 B	TPH 8015M	PAH 8270C	Total RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids (SM2540C)	Chlorides (325.3 / SM4500 B)	SPLP Chloride	Turn Around Time ~ 24 Hours
	X														X	X		

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by: [signature] Date: 1/24/12 Time: 12:27	Received by: Addi Henson Date: 1/24/12 Time: 17:27	Phone Results		Yes		No	
---	---	---	---	---	---	---	---
		Fax Results		Yes		No	Additional Fax Number:
Relinquished by: Date: Time:	Received By: (Laboratory Staff) Date: Time:	REMARKS:					

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other:	Cool: Yes / No; Intact: Yes / No	(Initials)

#26

Analytical Report 429107

for

John H. Hendrix Corp.

Project Manager: Carolyn Haynes

Brunson C Battery

John H. Hendrix Corporation

14-OCT-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALII), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

14-OCT-11

Project Manager: **Carolyn Haynes**
John H. Hendrix Corp.
P.O. Box 910
1310 N. 18th Street
Eunice, NM 88231

Reference: XENCO Report No: **429107**
Brunson C Battery
Project Address: T22S, R37E, Sec 3, Lea County NM

Carolyn Haynes:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 429107. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 429107 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron II

Odessa Laboratory Manager

Sample Cross Reference 429107

John H. Hendrix Corp., Eunice, NM

Brunson C Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	10-05-11 15:34		429107-001

CASE NARRATIVE

Client Name: John H. Hendrix Corp.
Project Name: Brunson C Battery

Project ID:	*John H. Hendrix Corporat*	*Report Date:*	*14-OCT-11*
Work Order Number:	*429107*	*Date Received:*	*10/06/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 429107

John H. Hendrix Corp., Eunice, NM

Project Name: Brunson C Battery

Project Id: John H. Hendrix Corporation
Contact: Carolyn Haynes
Project Location: T22S, R37E, Sec 3, Lea County NM

Date Received in Lab: Thu Oct-06-11 04:45 pm
Report Date: 14-OCT-11
Project Manager: *Brent Barron II*

Analysis Requested								
	Lab Id:	429107-001						
	Field Id:	MW-1						
	Depth:							
	Matrix:	WATER						
	Sampled:	Oct-05-11 15:34						
BTEX by EPA 8021B	***Extracted:***	Oct-12-11 09:00						
	Analyzed:	Oct-12-11 20:00						
	Units/RL:	mg/L	RL					
Benzene		ND	0.00100					
Toluene		ND	0.00200					
Ethylbenzene		ND	0.00100					
m_p-Xylenes		ND	0.00200					
o-Xylene		ND	0.00100					
Total Xylenes		ND	0.00100					
Total BTEX		ND	0.00100					
Chloride by E300	***Extracted:***							
	Analyzed:	Oct-07-11 16:57						
	Units/RL:	mg/L	RL					
Chloride		6360	125					
TDS by SM2540C	***Extracted:***							
	Analyzed:	Oct-10-11 17:00						
	Units/RL:	mg/L	RL					
Total dissolved solids		11400	5.00					

Brent Barron II
Odessa Laboratory Manager

Final 1.000

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Brunson C Battery

rk Orders : 429107,

Project ID: John H. Hendrix Corporation

Lab Batch #: 872241 **Sample:** 429107-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/12/11 20:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 872241 **Sample:** 612636-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/12/11 11:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 872241 **Sample:** 612636-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/12/11 10:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 872241 **Sample:** 612636-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/12/11 10:28

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 872241 **Sample:** 429163-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/12/11 20:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

results are based on MDL and validated for QC purposes.

Final 1.000

Form 2 - Surrogate Recoveries

Project Name: Brunson C Battery

Work Orders : 429107,

Project ID: John H. Hendrix Corporation

Lab Batch #: 872241 **Sample:** 429163-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/12/11 20:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Brunson C Battery

Work Order #: 429107 **Project ID:** John H. Hendrix Corporation

Analyst: ASA **Date Prepared:** 10/12/2011 **Date Analyzed:** 10/12/2011

Lab Batch ID: 872241 **Sample:** 612636-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.100	100	0.100	0.0968	97	3	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0992	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.107	107	0.100	0.104	104	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.215	108	0.200	0.210	105	2	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.106	106	3	71-133	25	

Analyst: BRB **Date Prepared:** 10/07/2011 **Date Analyzed:** 10/07/2011

Lab Batch ID: 872003 **Sample:** 872003-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.500	10.0	10.6	106	10.0	10.6	106	0	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Brunson C Battery

Work Order #: 429107
Analyst: WRU
Lab Batch ID: 872135
Sample: 872135-1-BKS
Units: mg/L

Date Prepared: 10/10/2011
Batch #: 1

Project ID: John H. Hendrix Corporation
Date Analyzed: 10/10/2011
Matrix: Water

TDS by SM2540C	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Total dissolved solids	<5.00	1000	918	92	1000	928	93	1	80-120	30	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Final 1.000

Form 3 - MS Recoveries

Project Name: Brunson C Battery

Work Order #: 429107
Lab Batch #: 872003
Project ID: John H. Hendrix Corporation
Date Analyzed: 10/07/2011
Date Prepared: 10/07/2011
Analyst: BRB
QC- Sample ID: 429107-001 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	6360	2500	8440	83	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200(C-A)/(C+B)*
All Results are based on MDL and Validated for QC Purposes

B Below Reporting Limit

Final 1.000

Form 3 - MS / MSD Recoveries

Project Name: Brunson C Battery

Work Order # : 429107 **Project ID:** John H. Hendrix Corporation

Lab Batch ID: 872241 **QC- Sample ID:** 429163-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: *10/12/2011* ***Date Prepared:*** 10/12/2011 ***Analyst:*** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0949	95	0.100	0.106	106	11	70-125	25	
Toluene	<0.00200	0.100	0.0956	96	0.100	0.107	107	11	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0990	99	0.100	0.112	112	12	71-129	25	
m&p-Xylenes	<0.00200	0.200	0.190	95	0.200	0.213	107	11	70-131	25	
o-Xylene	<0.00100	0.100	0.0963	96	0.100	0.109	109	12	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(C-F)/(C+F)

Matrix Spike Duplicate Percent Recovery [G] = 100*(G-A)/E

ND = Not Detected J = Present Below Reporting Limit B = Present in Blank R = Not Requested I = Interference NA = Not Applicable S = See Narrative EQL = Estimated Quantitation Limit

Final 1.000

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Brunson C Battery

Work Order #: 429107

Lab Batch #: 872003 **Project ID:** John H. Hendrix Corporation

Date Analyzed: 10/07/2011 16:57 **Date Prepared:** 10/07/2011 **Analyst:** BRB

QC- Sample ID: 429107-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Chloride by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	6360	6350	0	20	

Lab Batch #: 872135

Date Analyzed: 10/10/2011 17:00 **Date Prepared:** 10/10/2011 **Analyst:** WR□

QC- Sample ID: 429105-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TDS by SM2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	5670	5940	5	30	

Spike Relative Difference RPD 200 * [(B-A)/(B+A) □

All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

12600 West I-20 East - Odessa TX
797658
Tel (432) 563-1800
Fax (432) 563-1713

Xenco Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 429107

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) Fax#: PO Box 3040, Midland TX 79702-3040
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: Brunson C Battery
Project Location: T22S, R37E, Sec 3, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX)	HNO_3 (Metals)	$NaHSO_4$	H_2SO_4	ICE	None (Ions/TDS)	SAMPLING: DATE	TIME
-001	MW-1	G	5	X				3	1			5	1	10/05/11	1534

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B	TPH 8015M	PAH 8270C	Total RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	~~Cations (Ca, Mg, Na, K)~~	~~Anions (Cl, SO4, CO3, HCO3)~~	Total Dissolved Solids (SM2540C)	Chlorides (325.3/ SM4500 B)	SPLP Chloride	Turn Around Time ~ 24 Hours
	X														X	X		

Relinquished by:	Date: 10/6/11	Time: 4:45p	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date: 10/6/11	Time: 4:45

Phone Results: Yes / No
Fax Results: Yes / No Additional Fax Number:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ✓ / No; Intact: Yes ✓ / No — 1.5

CHECKED BY: (Initials)

REMARKS:

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

XENCO Laboratories	XENCO Laboratories Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa	Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Trident

Date/Time: 10/6/11

Lab ID #: 429107

Initials: KB

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	Yes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No		
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	N/A	
17. VOC sample have zero head space?	Yes	No	N/A	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	1.5 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Contact:_____ Contacted by:_____ Date/Time:_____

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

CARDINAL Laboratories

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

August 31, 2012

CAROLYN DORAN HAYNES

JOHN H. HENDRIX CORPORATION

P. O. BOX 3040

MIDLAND, TX 79702

RE: BRUNSON C BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/29/12 12:40.

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 of 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

JOHN H. HENDRIX CORPORATION
CAROLYN DORAN HAYNES
P. O. BOX 3040
MIDLAND TX, 79702
Fax To: (575) 394-2653

Received:	08/29/2012	Sampling Date:	08/29/2012
Reported:	08/31/2012	Sampling Type:	Water
Project Name:	BRUNSON C BATTERY	Sampling Condition:	** (See Notes)
Project Number:	JHHC	Sample Received By:	Jodi Henson
Project Location:	T22S, R37E, SEC 3, LEA COUNTY, NM		

Sample ID: MW-1 (H202081-01)

BTEX 8260B mg/L **Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	08/30/2012	ND	0.020	99.3	0.0200	0.505	
Toluene*	<0.001	0.001	08/30/2012	ND	0.020	102	0.0200	0.927	
Ethylbenzene*	<0.001	0.001	08/30/2012	ND	0.022	109	0.0200	1.32	
Total Xylenes*	<0.003	0.003	08/30/2012	ND	0.060	100	0.0600	1.06	

Surrogate: Dibromofluoromethane	*116 %*	*59.8-161*
Surrogate: Toluene-d8	*101 %*	*75.2-115*
Surrogate: 4-Bromofluorobenzene	*84.2 %*	*53.7-120*

Chloride, SM4500Cl-B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**5150**	4.00	08/30/2012	ND	100	100	100	3.92	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**10200**	5.00	08/30/2012	ND	219	91.2	240	1.93	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) PO Box 3040, Midland TX 79702-3040 Fax#:
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: Brunson C Battery
Project Location: T22S, R37E, Sec 3, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX)	HNO_3 (Metals)	$NaHSO_4$	H_2SO_4	ICE	None (Ions/TDS)	SAMPLING: DATE	TIME
H20208	MW-1	G	4	X				3				4	1	08/29/12	12:00

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021 B	TPH 8015M	PAH 8270C	Total RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids (SM2540C)	Chlorides (325.3 / SM4500 B)	SPLP Chloride	Turn Around Time ~ 24 Hours
	X														X	X		

Relinquished by:	Date: 8/29/12	Time: 12:40	Received by: Gil Brunson Date: 8/29/12 Time: 12:40
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Date: Time:

Phone Results: ☐ Yes ☐ No
Fax Results: ☐ Yes ☐ No Additional Fax Number:

REMARKS:

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: 12C
Cool: Yes ☐ No ☑
Intact: Yes ☑ No ☐

CHECKED BY: (Initials)

#26

CARDINAL Laboratories

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

May 02, 2012

CAROLYN DORAN HAYNES

JOHN H. HENDRIX CORPORATION

P. O. BOX 3040

MIDLAND, TX 79702

RE: BRUNSON C BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/25/12 13:00.

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 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

JOHN H. HENDRIX CORPORATION
CAROLYN DORAN HAYNES
P. O. BOX 3040
MIDLAND TX, 79702
Fax To: (575) 394-2653

Received:	04/25/2012	Sampling Date:	04/25/2012
Reported:	05/02/2012	Sampling Type:	Water
Project Name:	BRUNSON C BATTERY	Sampling Condition:	Cool & Intact
Project Number:	JHHC	Sample Received By:	Jodi Henson
Project Location:	T22S, R37E, SEC 3, LEA COUNTY, NM		

Sample ID: MW-1 (H200949-01)

BTEX 8260B mg/L **Analyzed By: CMS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	05/01/2012	ND	0.022	112	0.0200	7.82	
Toluene*	<0.001	0.001	05/01/2012	ND	0.020	102	0.0200	3.78	
Ethylbenzene*	<0.001	0.001	05/01/2012	ND	0.020	102	0.0200	4.80	
Total Xylenes*	<0.003	0.003	05/01/2012	ND	0.062	103	0.0600	4.40	

Surrogate: Dibromofluoromethane	*105 %*	*59.8-161*
Surrogate: Toluene-d8	*99.8 %*	*75.2-115*
Surrogate: 4-Bromofluorobenzene	*89.1 %*	*53.7-120*

Chloride, SM4500Cl-B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**5550**	4.00	04/27/2012	ND	100	100	100	3.92	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**11100**	5.00	04/26/2012	ND	220	91.7	240	0.428	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name:	BILL TO Company:	PO#:
John H. Hendrix Corporation	John H. Hendrix Corporation	
Project Manager:	**Project Manager:**	
Carolyn Haynes	Carolyn Haynes	
Address: (Street, City, Zip)	**Address: (Street, City, Zip)**	**Fax#:**
PO Box 910, Eunice NM 88231	PO Box 3040, Midland TX 79702-3040	
Phone #: / **Fax#:**	**Phone #:** / **Email:**	
(575) 394-2649 / (575) 394-2653	(432) 684-6631 / cdoranhaynes@jhhc.org	
Project #:	**Project Name:**	
John H. Hendrix Corporation	Brunson C Battery	
Project Location:	**Sampler Name:**	
T22S, R37E, Sec 3, Lea County NM	Gil Van Deventer	

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (BTEX)	HNO_3 (Metals)	$NaHSO_4$	H_2SO_4	ICE	None (Ions/TDS)	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021 B	TPH 8015M	PAH 8270C	Total RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, CO_3, HCO_3)	Total Dissolved Solids (SM2540C)	Chlorides (325.3 / SM4500 B)	SPLP Chloride	Turn Around Time - 24 Hours
H200944 - 1	MW-1	G	4	X				3				4	1	04/25/12	1240		X														X	X		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	4/25/12	12:55	Wade Henson	4/25/12	1:00
Relinquished by:	**Date:**	**Time:**	**Received By: (Laboratory Staff)**	**Date:**	**Time:**

Phone Results		Yes		No	
Fax Results		Yes		No	Additional Fax Number:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition
Cool: Yes ✓ / No
Intact: Yes ✓ / No
1.5 Yes / No

CHECKED BY: (Initials) JH

REMARKS:

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

WELL SAMPLING DATA FORM (MW-1)

CLIENT: John H. Hendrix Corporation
SITE NAME: Brunson C Battery
SITE LOCATION: T22S, R37E, Sec 3, Lea County NM
SAMPLER: Gil Van Deventer

PURGING METHOD: ☐ Hand Bailed ☑ Pump, Type: 3-stage Submersible Pump
SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:
DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

Sampling Event	Date	Time	Depth to Water (ft btoc)	Total Depth (ft)	Water Column Height (ft)	Well Factor 2"=.16 4"=.65	Calc. Well Vol. (gal)	Volume Purged (gal)	No. of Well Volumes Purged	Temp. °C	Cond. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
First	10/05/11	15:34	40.10	52.18	12.08	0.16	1.9	40	20.7	21.1	18.89	6.95	Pinkish/tan; cleared during purging
Second	01/24/12	12:00	40.17	52.18	12.01	0.16	1.9	24	12.5	18.8	17.84	6.88	Pinkish/tan; cleared during purging
Third	04/25/12	12:00	40.19	52.18	11.99	0.16	1.9	32	16.7	22.6	17.05	7.28	Pinkish/tan; cleared during purging
Fourth	08/29/12	12:00	40.27	52.18	11.91	0.16	1.9	35	18.4	22.0	15.71	7.03	Pinkish/tan; cleared during purging

COMMENTS: Equipment decontamination consists of gloves, Alconox, and Distilled Water Rinse.
Hanna Model 98130 instrument used to obtain pH, conductivity, and temperature measurements.
Delivered samples to Cardinal Laboratories in Hobbs NM for chloride and TDS analysis.