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# REPORT

# 9/28/2005

September 28, 2005

SSOCIATES, INC.

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Via e-mail: paul.sheeley@state.nm.us

Mr. Paul R. Sheeley Environmental Engineering Specialist State of New Mexico Energy, Mineral and Natural Resources Department Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240

# Re: Closure Report for Unlined Pit Excavation and Results of Groundwater Sample Analysis, John H. Hendrix Corporation, Will Cary Lease, Unit Letter F (SE/4, NW/4), Section 22, Township 22 South, Range 37 East, Lea County, New Mexico

# Dear Mr. Sheeley:

This letter is submitted to the New Mexico Oil Conservation Division ("OCD") on behalf of John H. Hendrix Corporation ("JHHC") by Larson and Associates, Inc. ("LA"), its agent, and details the closure of an unlined pit excavation ("Site"), as well as, laboratory analysis of a groundwater sample collected from a monitoring well installed near the excavation. The unlined pit was located about 300 feet east of the Will Cary #5 well in unit letter F ("SE/4, NW/4"), Section 22, Township 22 South, Range 37 East, Lea County, New Mexico. A GPS coordinate for the Site is N. 32° 22.809' and W. 103° 09.063". Figure 1 presents a location and topographic map.

## Background

On July 8, 2004, JHHC received notification from the OCD to empty and remediate the pit according to its rules and guidelines. On January 20 – 21, 2005, an investigation was performed following a work plan approved by OCD ("Revised Unlined Surface Impoundment Investigation Work Plan, John H. Hendrix Corp., Will Cary Lease, Unit Letter F (SE/4, NW/4), Section 22, Township 22 South, Range 37 East, Lea County, New Mexico, January 7, 2005") that revealed vadose-zone impacts to about 28 feet below ground surface ("bgs"). These findings were presented in a report to the OCD on February 21, 2005 ("Investigation Report and Remediation Plan for Unlined Surface Impoundment, John H. Hendrix Corp., Will Cary Lease, Unit Letter F (SE/4, NW/4), Section 22, Township 22 South, Range 37 East, Lea County, New Mexico"), and included a remedial action plan to excavate soil until the OCD recommended remediation action levels ("RRAL") for benzene, total BTEX (sum of benzene, toluene, ethyl benzene and xylene) and total petroleum hydrocarbons ("TPH") was achieved.

Mr. Paul R. Sheeley September 28, 2005 Page 2

On April 19 – 22 and July 21, 2005, approximately 2,500 cubic yards of soil was excavated from the pit and transported to the JHHC landfarm (NM-02-0021) located northwest of Jal, New Mexico. Final soil samples collected from the bottom and sides of the excavation revealed no benzene, total BTEX or TPH above the RRAL of 10 milligrams per kilogram ("mg/kg") for benzene, 50 mg/kg (BTEX) and 1,000 mg/kg (TPH). Chloride ranged from 93.5 mg/kg in the bottom sample to 2,500 mg/kg in a sample from the west side at about 20 feet bgs.

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On August 4, 2005, the OCD requested JHHC to submit a plan to install a clay barrier in the excavation, a monitoring well down gradient (southeast) of the excavation and analyze a groundwater sample for BTEX, anions (alkalinity, sulfate, chloride), ions (calcium, magnesium, potassium, sodium) and metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver). The plan was submitted to the OCD on August 9, 2005.

# **Excavation Closure**

On August 11, 2005, the excavation was filled with clean soil to about 6 feet bgs. Clay was placed over the clean soil from about 4 to 6 feet bgs, slightly crowned and compacted using a vibrating roller. Pettigrew and Associates, Inc., measured the in-situ density of the clay at 4 locations (SG-1 through SG-4) using a portable instrument, and concluded that the clay had been compacted to at least 95% standard proctor. Clean soil was placed over the clay and slightly crowned above ground surface. The Site will be seeded to range grass. Attachment A presents the density test report.

## **Monitoring Well and Groundwater Samples**

On September 13, 2005, Scarborough Drilling, Inc., located in Lameas, Texas, drilled monitoring well TMW-1 to approximately 90 feet bgs. The well was drilled about 20 feet southeast (down-gradient) of the excavation using air and water rotary techniques. Clay commonly referred as "redbed" was observed at about 86 feet bgs. The well was constructed using 2-inch diameter schedule 40 PVC threaded casing, and screen. The screen was placed from about 68.81 to 89.50 feet bgs, and surrounded with size 10 to 20 graded silica sand. Bentonite chips were placed from ground surface to about 56 feet bgs. The static depth-to-groundwater was measured at approximately 68.87 feet bgs. Water was bailed from the well to remove fine-grained sediment. Figure 2 presents a Site drawing showing the approximate location of the well. Table 1 presents a summary of the well construction details. Appendix B presents a geologic log and well diagram.

On September 20, 2005, approximately 3 casing-volumes of groundwater was removed from the well using a dedicated bailer before a groundwater sample was collected, labeled, chilled in an ice chest, delivered under chain-of-custody control to Environmental Lab of Texas, Inc. ("ELTI"). The laboratory analyzed the sample for BTEX, anions (alkalinity, sulfate, chloride), ions (calcium, magnesium, potassium, sodium) and metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium,

Mr. Paul R. Sheeley September 28, 2005 Page 3

silver). The metal sample was filtered using 0.45-micron disposable filters prior to preservation. Table 2, Table 3 and Table 4 present summaries of the BTEX, metals general chemistry (anion and ion) results, respectively. Appendix C presents the analytical report.

No BTEX was present in the sample. Arsenic, barium and selenium were 0.0162 milligrams per liter ("mg/L)", 0.371 mg/L and 0.0061 mg/L, respectively, and were below the New Mexico Water Quality Control Commission ("WQCC") human health standards. Chloride, sulfate and total dissolved solids ("TDS") were 9,550 mg/L, 1,200 mg/L and 19,300 mg/L, respectively, and exceeded the WQCC domestic water quality standards.

# **Proposed Action**

JHHC proposes to install a monitoring well northwest (up gradient) of the former pit to evaluate background conditions for chloride, sulfate and TDS in groundwater. The well will be constructed in the manner previously described, and a groundwater sample will be collected and analyzed for chloride, sulfate and TDS. JHHC will notify the OCD at least 72-hours prior to drilling the well and submit a report within 45 days after receipt of the laboratory report.

Your approval of the proposed action is requested. Please contact Mr. Marvin Burrows with JHHC at (505) 390-9689 or myself at (432) 687-0901 if you have questions. We may be reached by email at <u>Mburrows@valornet.com</u> or <u>Mark@LAEnvironmental.com</u>.

# Sincerely,

Larson and Associates, Inc.

Mark J. Larson, P.G., C.P.G., C.G.W.P. Senior Hydrogeologist/President

Encl.

cc: Mr. Wayne Price – OCD Santa Fe Mr. Marvin Burrows – JHHC Eunice Mr. Ron Westbrook – JHHC Midland TABLES

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Unit Letter F (SE/4, NW/4), Section 22, Township 22 South, Range 37 East Summary of Monitoring Well Drilling and Completion Details John H. Hendrix Corporation, Will Cary #5 Emergency Pit

Lea County. New Mexico

| (Feet BGS)     (Feet BGS)     (Inches)     (Feet)     (0)       09/13/05     90.14     88.89     2     3.25     68       Well constructed with 2-inch Schedule 40 threaded PVC casing and 0.010-inch factory-slotted screen.     Depth in feet below ground surface | Well    | Date<br>Drilled     | Depth                | Depth Dy Manual Diar | Well                | Casing<br>Stickun    | Screen        | Water<br>Level         |
|---|---------|---------------------|----------------------|----------------------|---------------------|----------------------|---------------|------------------------|
| IW-1 09/13/05 90.14 88.89 2 3.25   W-1 09/13/05 90.14 88.89 2 3.25   Well constructed with 2-inch Schedule 40 threaded PVC casing and 0.010-inch factory-slotted screen Depth in feet below ground surface Depth in feet below ground surface                       |         |                     | (Feet BGS)           | (Feet BGS)           | (Inches)            | (Feet)               | (Feet BGS)    | 09/21/05<br>(Feet BGS) |
| IW-1 09/13/05 90.14 88.89 2 3.25   W-1 09/13/05 90.14 88.89 2 3.25   Well constructed with 2-inch Schedule 40 threaded PVC casing and 0.010-inch factory-slotted screen Depth in feet below ground surface 1010-inch factory-slotted screen                         |         |                     |                      |                      |                     |                      |               |                        |
| IW-1 09/13/05 90.14 88.89 2 3.25   Well constructed with 2-inch Schedule 40 threaded PVC casing and 0.010-inch factory-slotted screen Depth in feet below ground surface  |         |                     |                      |                      |                     |                      |               |                        |
|   | TMW-1   | 09/13/05            | 90.14                | 88.89                | 2                   | 3.25                 | 68.81 - 89.59 | 68.87                  |
|   |         |                     |                      |                      |                     |                      |               |                        |
|   |         |                     |                      |                      |                     |                      |               |                        |
|   | Notes:  | Well constructed w  | rith 2-inch Schedule | 40 threaded PVC ca   | sing and 0.010-inch | factory-slotted scre | cen.          |                        |
|   | 1. BGS: | Depth in feet below | v ground surface     |                      |                     |                      |               |                        |

Elevation in feet above mean sea level 2: AMSL:

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# Summary of BTEX Analysis of Groundwater Samples from Monitoring Well John H. Hendrix Corporation, Will Cary #5 Emergency Pit

Unit Letter F (SE/4, NW/4), Section 22, Township 22 South, Range 37 East Lea County. New Mexico

|                  |                      | Ter                 | Lea County, New Mexico | Lea County, New Mexico  |                        | Page 1 of 1    |
|------------------|----------------------|---------------------|------------------------|---|------------------------|----------------|
| Well<br>Number   | Sample<br>Date       | Benzene<br>(mg/L)   | Toluene<br>(mg/L)      | Ethylbenzene<br>(mg/L)  | Total Xylene<br>(mg/L) | BTEX<br>(mg/L) |
| NMWQCC Standard: |                      | 0.01                | 0.75                   | 0.75  | 0.62                   |                |
|                  |                      |                     |                        |   |                        |                |
| 1-WMT            | 60/02/60             | <0.001              | <0.001                 | <0.001  | <0.001                 | <0.005         |
|                  |                      |                     |                        |   |                        |                |
| Notes:           | Analysis performed b | y Environmental Lab | of Texas, inc., Odes   | Analysis performed by Environmental Lab of Texas, inc., Odessa, Texas, using method SW-846-8021B. | od SW-846-8021B.       |                |

1. mg/L:

Milligrams per liter Less than method detection limit

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Summary of General Chemistry Analysis of Groundwater Samples from Monitoring Well

John H. Hendrix Corporation, Will Cary #5 Emergency Pit Unit Letter F, Section 22, Township 22 South, Range 37 East

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|                  |          |         | Lea County | Lea County, New Mexico | lew Mexico |                     |          | Page 1 of 1 |        |
|------------------|----------|---------|------------|------------------------|------------|---------------------|----------|-------------|--------|
| Well             | Sample   | Calcium | Potassium  | Magnesium              | Sodium     | Total<br>Alkalinity | Chloride | Sulfate     | TDS    |
| Number           | Date     | (mg/L)  | (mg/L)     | (mg/L)                 | (mg/L)     | (mg/L)              | (mg/L)   | (mg/L)      | (mg/L) |
| NMWOCC Standard: | tandard: |         |            | I                      | 1          | ł                   | 250      | 600         | 1,000  |
| 2                |          |         |            |                        | -          |                     |          |             | -      |
|                  |          |         |            |                        | -          |                     |          |             |        |
| TMW-1            | 09/20/05 | 870     | 102        | 519                    | 4,300      | 233                 | 9,550    | 1,200       | 19,300 |
|                  |          |         |            |                        |            |                     |          |             |        |
|                  |          |         |            |                        |            |                     |          |             |        |
|                  |          |         |            |                        |            |                     |          |             |        |
|                  |          |         |            |                        | E          |                     |          |             |        |

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

Milligrams per liter 1. mg/L: 2. -:

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# Summary of Disspolved Metals Analysis of Groundwater Samples from Monitoring Well Unit Letter F (SE/4, NW/4), Section 22, Township 22 South, Range 37 East John H. Hendrix Corporation, Will Cary #5 Emergency Pit

Selenium Page 1 of 1 (mg/L) 0.0061 0.05 (mg/L) <0.005 Silver 0.05 Mercury <0.0005 (mg/L) 0.002 (mg/L) <0.011 Lead 0.05 Chromium Lea County, New Mexico (mg/L) <0.005 0.05 Cadmium (mg/L) <0.001 0.01 Barium (mg/L) 0.371 1.0 Arsenic (mg/L) 0.0162 0.1 Sample 09/20/05 NMWQCC Standard: Date TMW-1 Well

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

Milligrams per liter 1. mg/L: ₹. .

Less than method detection limit

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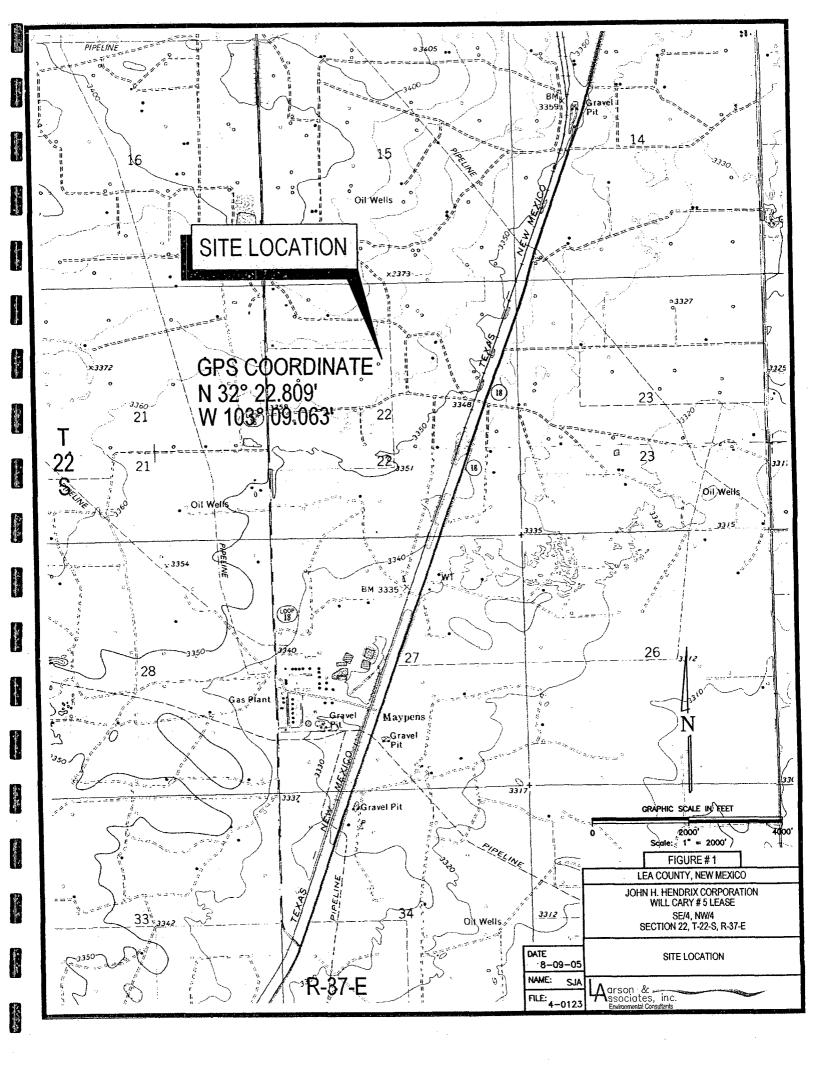
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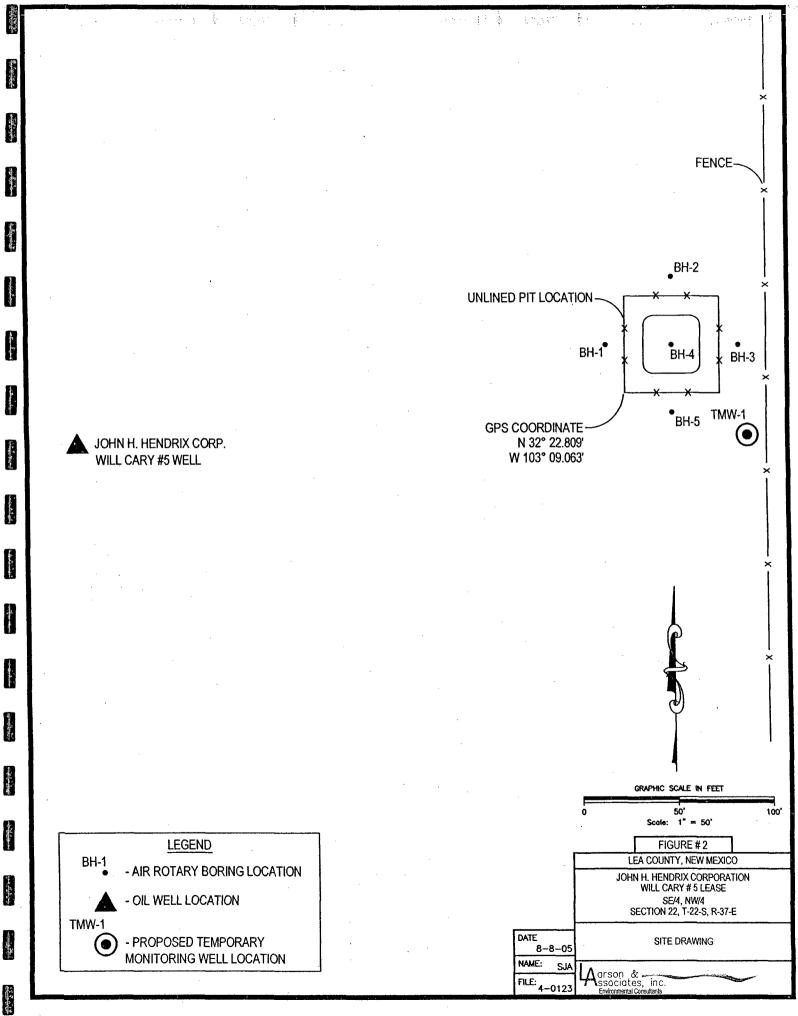
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# APPENDIX A

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# **Density Test Report**

507 North Marienfeld, Suite 202 Midland, Texas 79701 Ph. (432) 687-0901 Fax (432) 687-0456

| TETTICREA<br>NCLARENCE SUBJECT |   | LABORATORY TEST R<br>PETTIGREW & ASSOC<br>1110 N. GRIMES<br>HOBBS, NM 88240<br>(505) 393-9827 | EPORT                     | ASHTO RIB<br>DEBRA P. HICKS, P.E./L.S.I.<br>WILLIAM M. HICKS. III, P.E./P.S. |
|--------------------------------|---|---|---------------------------|--|
| То:                            | Larson & Associates<br>Attn: Mark Larson<br>507 N. Marienseld<br>Suite 202<br>Midland, TX 79701 |   | Material:<br>Test Method: | Red Clay<br>ASTM: D 2922   |
| Project:                       | Will Cary #5  |   |                           |  |
| Date of Test:                  | August 11, 2005   |   | Depth:                    | Finished Subgrade  |

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| Test No. | Location                               | Dry Density<br>% Maximum | % Moisture | Depth |
|----------|--|--------------------------|------------|-------|
| SG-1     | Pit - 15' W. & 30' S. of the NE Corner | 97.3                     | 12.5       |       |
| SG-2     | Pit - 15' E. & 15' N. of the SW Corner | 97.0                     | 12.1       | •     |
| SG-3     | Pit - 22' N. & 25' W. of the SE Corner | 97.2                     | 13.9       |       |
| SG-4     | Pit - 12' W. & 20' N. of the SE Corner | 100.2                    | 12.2       |       |

| Control Density | /: 111.4<br>ASTM: D 698 | Optimum Moisture: |
|-----------------|-------------------------|-------------------|
| Required Comp   | paction: 95%            |                   |
| Lab No.:        | 05 8582-8585            | PETT              |
| Copies To:      | Larson & Associates 🗸   | BY:2              |

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# APPENDIX B

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# Geologic Log and Well Diagram

507 North Marienfeld, Suite 202 & Midland, Texas 79701 & Ph. (432) 687-0901 & Fax (432) 687-0456

Client: John Hendrix Corpration

Project: Will Cary # 5

**Project No.:** 4-0123

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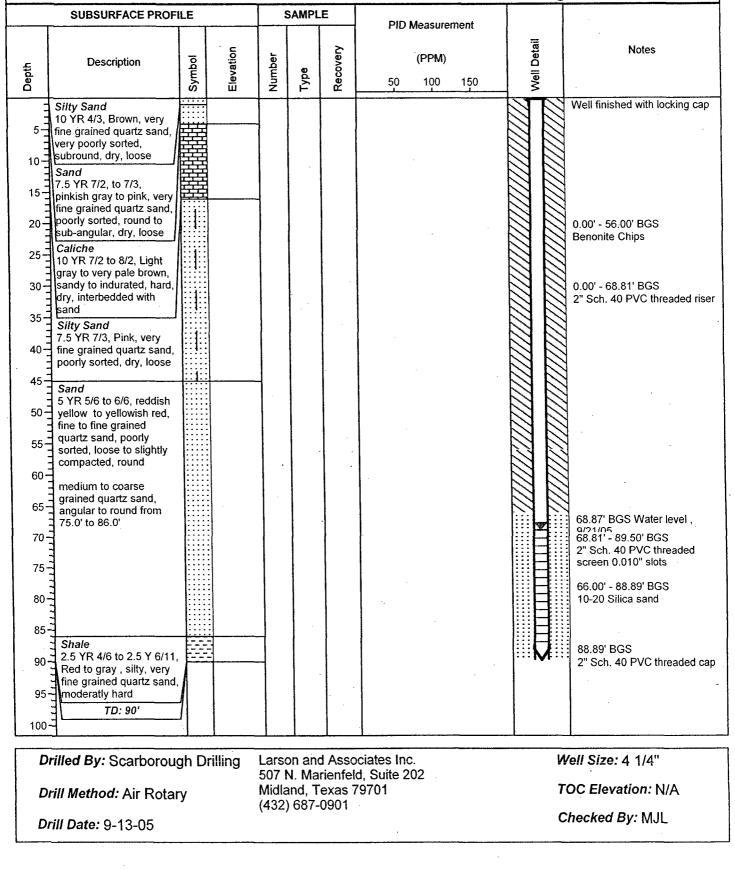
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# Location: Lea County, New Mexico

# Log: MW-1

# Geologist: Mark Larson

Page: 1 of 1



# APPENDIX C

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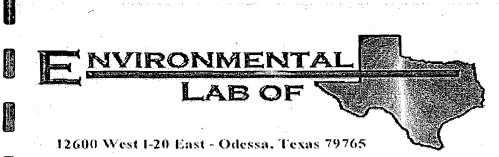
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# Laboratory Report

507 North Marienfeld, Suite 202 & Midland, Texas 79701 & Ph. (432) 687-0901 & Fax (432) 687-0456



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# Analytical Report

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

Project: John H. Hendrix/ Will Cary #5 Project Number: 4-0123 Location: None Given

Lab Order Number: 5I21001

Report Date: 09/28/05

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

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Midland TX, 79710

# Project: John H. Hendrix/ Will Cary #5 Project Number: 4-0123 Project Manager: Mark Larson

# Fax: (432) 687-0456

Reported: 09/28/05 08:28

# ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| MW-1      | 5121001-01    | Water  | 09/20/05 11:30 | 09/21/05 09:05 |

Larson & Associates, Inc.Project:John H. Hendrix/ Will Cary #5Fax: (432) 687-0456P.O. Box 50685Project Number:4-0123Reported:Midland TX, 79710Project Manager:Mark Larson09/28/05 08:28

# Organics by GC

Environmental Lab of Texas

| Analyte                           | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed              | Method     | Notes |
|-----------------------------------|--------|--------------------|-------|----------|---------|----------|-----------------------|------------|-------|
| MW-1 (5121001-01) Water           |        |                    |       |          |         |          |                       |            |       |
| Benzene                           | ND     | 0.00100            | mg/L  | 1        | EI52622 | 09/26/05 | 09/26/05              | EPA 8021B  |       |
| Toluene                           | ND     | 0.00100            | u     | "        | *       | n        | π                     | **         |       |
| Ethylbenzene                      | ND     | 0.00100            | . *   | м        | н       | "        | ۳                     | "          |       |
| Xylene (p/m)                      | ND     | 0.00100            | "     |          |         | **       | "                     | <b>H</b> . |       |
| Xylene (o)                        | ND     | 0.00100            |       | "        | "       | "        | M                     | n          |       |
| Surrogate: a,a,a-Trifluorotoluene |        | 93.2 %             | 80-12 | 20       | "       | n        | <i>"</i> <del>и</del> | N          |       |
| Surrogate: 4-Bromofluorobenzene   |        | 96.0 %             | 80-12 | 20       |         | "        | "                     | "          |       |

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

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

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Project: John H. Hendrix/ Will Cary #5 Project Number: 4-0123 Project Manager: Mark Larson

Fax: (432) 687-0456

Reported:

09/28/05 08:28

# General Chemistry Parameters by EPA / Standard Methods

**Environmental Lab of Texas** 

| Analyte                 | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method     | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| MW-1 (5121001-01) Water |        |                    |       |          |         |          |          |            |       |
| Total Alkalinity        | 233    | 2.00               | mg/L  | 1        | EI52214 | 09/21/05 | 09/21/05 | EPA 310.2M |       |
| Chloride                | 9550 - | 250                | n     | 500      | EI52207 | 09/22/05 | 09/22/05 | EPA 300.0  |       |
| Total Dissolved Solids  | 19300  | 5.00               | "     | 1        | EI52607 | 09/21/05 | 09/22/05 | EPA 160.1  |       |
| Sulfate                 | 1200   | 250                | п     | 500      | EI52207 | 09/22/05 | 09/22/05 | EPA 300.0  |       |

Environmental Lab of Texas

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

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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

# Project: John H. Hendrix/ Will Cary #5 Project Number: 4-0123 Project Manager: Mark Larson

**Reported:** 09/28/05 08:28

# Total Metals by EPA / Standard Methods

**Environmental Lab of Texas** 

| Analyte                 | Result  | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method      | Notes |
|-------------------------|---------|--------------------|-------|----------|---------|----------|----------|-------------|-------|
| MW-1 (5121001-01) Water |         |                    |       |          |         |          | ·····    |             |       |
| Silver                  | ND      | 0.00500            | mg/L  | 1        | E152603 | 09/22/05 | 09/23/05 | EPA 6010B . |       |
| Arsenic                 | 0.0162  | 0.00800            |       |          | "       | n        | "        | н           |       |
| Barium                  | 0.371   | 0.00100            | "     | н        | "       | · •      | n        | 6010B       |       |
| Calcium                 | 870     | 2.00               | "     | 200      | EI52709 | 09/27/05 | 09/27/05 | EPA 6010B   |       |
| Magnesium               | 519     | 0.0500             | n     | 50       |         | n        | n        | . "         |       |
| Potassium               | 102     | 10.0               |       | 200      | n       | "        |          | "           |       |
| Sodium                  | 4300    | 20.0               | n     | 2000     | . *     | м        | н        | *           |       |
| Cadmium                 | ND      | 0.00100            | "     | 1        | EI52603 | 09/22/05 | 09/23/05 |             |       |
| Chromium                | ND      | 0.00500            | 11    | "        | n       | n        | "        | "           |       |
| Mercury                 | ND      | 0.000500           | *1    | м        | EI52712 | 09/27/05 | 09/27/05 | EPA 7470A   |       |
| Lead                    | ND      | 0.0110             | ۳     | ۳        | EI52603 | 09/22/05 | 09/23/05 | EPA 6010B   |       |
| Selenium                | 0.00610 | 0.00400            | "     | "        |         |          | "        | "           |       |

Environmental Lab of Texas

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

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| Larson & Associates, Inc.<br>P.O. Box 50685<br>Midland TX, 79710 |        | Pro<br>Project Nur<br>Project Man | nber: 4-0 |                | / Will Cary      | r #5        |                |     | Fax: (432)<br>Repo<br>09/28/0 | rted:                                 |
|--|--------|-----------------------------------|-----------|----------------|------------------|-------------|----------------|-----|-------------------------------|---------------------------------------|
|  |        | ganics by<br>Environm             | _         | •              |                  |             |                |     |                               |                                       |
|  |        |                                   |           |                | .as              |             |                |     |                               | · · · · · · · · · · · · · · · · · · · |
| Analyte  | Result | Reporting<br>Limit                | Units     | Spike<br>Level | Source<br>Result | %REC        | %REC<br>Limits | RPD | RPD<br>Limit                  | Notes                                 |
| Batch EI52622 - EPA 5030C (GC)                                   |        |                                   |           |                |                  |             |                |     |                               |                                       |
| Blank (EI52622-BLK1)   |        |                                   |           | Prepared &     | Analyzed         | 09/26/05    |                |     |                               |                                       |
| Benzene  | ND     | 0.00100                           | mg/L      |                |                  |             |                |     |                               |                                       |
| Foluene  | ND     | 0.00100                           | н         |                |                  |             |                |     |                               |                                       |
| Ethylbenzene   | ND     | 0.00100                           | "         |                |                  |             |                |     |                               |                                       |
| Xylene (p/m)   | ND     | 0.00100                           | #         |                |                  |             |                |     |                               |                                       |
| Xylene (o)   | ND     | 0.00100                           |           |                |                  |             |                |     |                               |                                       |
| Surrogate: a,a,a-Trifluorotoluene                                | 44.5   |                                   | ug/l      | 40.0           |                  | 111         | 80-120         |     |                               |                                       |
| Surrogate: 4-Bromofluorobenzene                                  | 47.8   |                                   | "         | 40.0           |                  | 120         | 80-120         |     |                               |                                       |
| LCS (EI52622-BS1)  |        |                                   |           | Prepared &     | Analyzed         | 09/26/05    |                |     |                               |                                       |
| Benzene  | 43.1   |                                   | ug/l      | 50.0           |                  | 86.2        | 80-120         |     |                               |                                       |
| Toluene  | 41.6   |                                   | *         | 50.0           |                  | 83.2        | 80-120         |     |                               |                                       |
| Ethylbenzene   | 49.3   |                                   |           | 50.0           |                  | 98.6        | 80-120         |     |                               |                                       |
| Xylene (p/m)   | 91.4   |                                   | N         | 100            |                  | 91.4        | 80-120         |     |                               |                                       |
| Xylene (0)   | 52.4   |                                   | "         | 50.0           |                  | 105         | 80-120         |     |                               |                                       |
| Surrogate: a,a,a-Trifluorotoluene                                | 38.0   |                                   | 14        | 40.0           |                  | 95.0        | 80-120         |     |                               |                                       |
| Surrogate: 4-Bromofluorobenzene                                  | 42.0   |                                   | . 7       | 40.0           |                  | 105         | 80-120         |     |                               |                                       |
| Calibration Check (EI52622-CCV1)                                 | •      |                                   |           | Prepared: 0    | 9/26/05 A        | nalyzed: 0  | 9/27/05        |     |                               |                                       |
| Benzene  | 49.9   |                                   | ug/l      | 50.0           |                  | 99.8        | 80-120         |     |                               |                                       |
| Toluene  | 44.9   |                                   | "         | 50.0           |                  | 89.8        | 80-120         |     |                               |                                       |
| Ethylbenzene   | 50.2   | -                                 | "         | 50.0           |                  | 100         | 80-120         |     |                               |                                       |
| Xylene (p/m)   | 92.4   |                                   | "         | 100            |                  | 92.4        | 80-120         |     |                               |                                       |
| Xylene (o)   | 50.9   |                                   | "         | 50.0           |                  | 102         | 80-120         |     |                               |                                       |
| Surrogate: a,a,a-Trifluorotoluene                                | 40.2   |                                   | N         | 40.0           |                  | 100         | 0-200          |     |                               |                                       |
| Surrogate: 4-Bromofluorobenzene                                  | 39.6   |                                   | "         | 40.0           |                  | 99.0        | 0-200          |     |                               |                                       |
| Matrix Spike (EI52622-MS1)                                       | Sou    | ırce: 5123008-                    | 07        | Prepared: (    | 09/26/05 A       | analyzed: 0 | 9/27/05        |     |                               |                                       |
| Benzene  | 0.0413 | 0.00100                           | mg/L      | 0.0500         | ND               | 82.6        | 80-120         |     |                               |                                       |
| Toluene  | 0.0406 | 0.00100                           | "         | 0.0500         | ND               | 81.2        | 80-120         |     |                               |                                       |
| Ethylbenzene   | 0.0483 | 0.00100                           | н         | 0.0500         | ND               | 96.6        | 80-120         | ,   |                               |                                       |
| Xylene (p/m)   | 0.0887 | 0.00100                           | **        | 0.100          | ND               | 88.7        | 80-120         |     |                               |                                       |
| Xylene (o)   | 0.0537 | 0.00100                           | *         | 0.0500         | ND               | 107         | 80-120         |     |                               |                                       |
| Surrogate: a, a, a-Trifluorotoluene                              | 33.5   |                                   | ug/l      | 40.0           |                  | 83.8        | 80-120         | -   |                               |                                       |
| Surrogate: 4-Bromofluorobenzene                                  | 43.5   |                                   | "         | 40.0           |                  | 109         | 80-120         |     |                               |                                       |

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# Project: John H. Hendrix/ Will Cary #5 Project Number: 4-0123 Project Manager: Mark Larson

Fax: (432) 687-0456

**Reported:** 09/28/05 08:28

# **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

|                                   |          | Reporting      |       | Spike       | Source     |             | %REC   |      | RPD   |       |
|-----------------------------------|----------|----------------|-------|-------------|------------|-------------|--------|------|-------|-------|
| Analyte                           | Result   | Limit          | Units | Level       | Result     | %REC        | Limits | RPD  | Limit | Notes |
| Batch EI52622 - EPA 5030C (GC)    | <u> </u> |                | •     |             |            |             |        |      |       |       |
| Matrix Spike Dup (EI52622-MSD1)   | Sour     | -ce: 5123008-0 | )7    | Prepared: ( | )9/26/05 A | nalyzed: 09 | /27/05 |      |       |       |
| Benzene                           | 0.0461   | 0.00100        | mg/L  | 0.0500      | ND         | 92.2        | 80-120 | 11.0 | 20    |       |
| Toluene                           | 0.0448   | 0.00100        | **    | 0.0500      | ND         | 89.6        | 80-120 | 9.84 | 20    |       |
| Ethylbenzene                      | 0.0553   | 0.00100        | "     | 0.0500      | ND         | 111         | 80-120 | 13.9 | 20    |       |
| Xylene (p/m)                      | 0.0985   | 0.00100        | "     | 0.100       | ND         | 98.5        | 80-120 | 10.5 | 20    |       |
| Xylene (o)                        | 0.0572   | 0.00100        | "     | 0.0500      | ND -       | 114         | 80-120 | 6.33 | 20    |       |
| Surrogate: a,a,a-Trifluorotoluene | 34.5     |                | ug/l  | 40.0        |            | 86.2        | 80-120 |      |       |       |
| Surrogate: 4-Bromofluorobenzene   | 46.8     |                | "     | 40.0        |            | 117         | 80-120 |      |       |       |

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| Larson & Associates, Inc.                |              |               | piect Joh | n H. Hendrix       | / Will Carv | #5                        |                  |       | Fax: (432) | 687-0456 |
|--|--------------|---------------|-----------|--------------------|-------------|---------------------------|------------------|-------|------------|----------|
| P.O. Box 50685                           |              | Project Nur   | 2         |                    | Cury        |                           |                  |       | Repo       | rted:    |
| Midland TX, 79710                        |              | Project Man   |           |                    |             |                           |                  |       | 09/28/0    |          |
|  | • • •        |               | -         |                    |             |                           |                  |       |            |          |
| General Chem                             | istry Paran  | neters by     | EPA /     | Standard           | Method      | ls - Qual                 | ity Cont         | rol   |            |          |
|  | I            | Environm      | ental L   | ab of Tex          | tas         |                           |                  |       |            |          |
|  | _            | Reporting     |           | Spike              | Source      |                           | %REC             |       | RPD        |          |
| Analyte                                  | Result       | Limit         | Units     | Level              | Result      | %REC                      | Limits           | RPD   | Limit      | Notes    |
| Batch EI52207 - General Preparation (Wet | Chem)        |               |           |                    |             |                           |                  |       |            |          |
| Blank (EI52207-BLK1)                     |              |               |           | Prepared &         | Analyzed:   | 09/22/05                  |                  |       |            |          |
| Sulfate                                  | ND           | 0.500         | mg/L      |                    | <u> </u>    |                           |                  |       |            |          |
| Chloride                                 | ND           | 0.500         | ۳         |                    |             |                           |                  |       |            |          |
| LCS (EI52207-BS1)                        |              |               |           | Prepared &         | Analyzed    | 09/22/05                  |                  |       |            |          |
| Sulfate                                  | 8.98         |               | mg/L      | 10.0               | muly200.    | 89.8                      | 80-120           |       |            |          |
| Chloride                                 | 8.42         |               | л —<br>П  | 10.0               |             | 84.2                      | 80-120           |       |            |          |
| California Charle (FIE2207 CONVA)        |              |               |           | D                  |             | 00/02/07                  |                  |       |            |          |
| Calibration Check (EI52207-CCV1)         | 8.44         |               | mc/ſ      | Prepared &<br>10.0 | Analyzed:   |                           | 80-120           |       | ·          |          |
| Sulfate                                  | 8.44<br>8.99 |               | mg/L<br>" | 10.0               |             | 84.4<br>89.9              | 80-120<br>80-120 |       |            |          |
| - Antare                                 | 0.27         |               |           | 10.0               |             | 02.7                      | 00-120           |       |            |          |
| Duplicate (EI52207-DUP1)                 | Sour         | ce: 5119032-( | 16        | Prepared &         |             | 09/22/05                  |                  |       |            |          |
| Chloride                                 | 2040         | 100           | mg/L      |                    | 2070        |                           |                  | 1.46  | 20         |          |
| Sulfate                                  | 796          | 100           | . "       |                    | 804         |                           |                  | 1.00  | 20         |          |
| Batch EI52214 - General Preparation (Wet | Chem)        |               |           |                    |             |                           |                  |       |            |          |
| Blank (EI52214-BLK1)                     |              |               |           | Prepared &         | k Analyzed  | : 09/21/05                |                  |       |            |          |
| Total Alkalinity                         | ND           | 2.00          | mg/L      | ······             |             | in the state of the state |                  |       |            |          |
| Calibration Check (EI52214-CCV1)         |              |               |           | Prepared &         | k Analyzed  | 09/21/05                  |                  |       |            |          |
| Bicarbonate Alkalinity                   | 229          |               | mg/L      | 200                | c Analyzeu  | 114                       | 80-120           |       |            |          |
|  |              |               | -         |                    |             |                           |                  |       |            |          |
| Duplicate (EI52214-DUP1)                 |              | ce: 5119006-  |           | Prepared &         | & Analyzed  | : 09/21/05                |                  |       |            | ···      |
| Total Alkalinity                         | 174          | 2.00          | mg/L      |                    | 173         |                           | •                | 0.576 | 20         |          |
|  |              |               |           |                    |             |                           |                  |       |            |          |
|  |              |               |           |                    |             |                           |                  |       |            |          |
|  |              | ÿ             |           |                    |             |                           |                  |       |            |          |
|  |              |               |           |                    |             |                           |                  |       |            |          |
|  |              |               |           |                    |             |                           |                  |       |            |          |
|  |              |               |           |                    |             |                           |                  |       |            |          |
|  |              |               |           |                    |             |                           |                  |       |            |          |
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Page 7 of 12

| Larson & Associates, Inc.Project:John H. Hendrix/ Will Cary #5Fax: (432) 687-0436P.O. Box 50685Project Number:4-0123Reported:Midland TX, 79710Project Manager:Mark Larson09/28/05 08:28 |                        |                        |       |                |                  |          |                |     |              |       |  |
|---|------------------------|------------------------|-------|----------------|------------------|----------|----------------|-----|--------------|-------|--|
|   | General Chemistry Para | imeters by<br>Environm |       |                |                  | s - Qual | ity Cont       | rol |              |       |  |
| Analyte   | Result                 | Reporting<br>Limit     | Units | Spike<br>Level | Source<br>Result | %REC     | %REC<br>Limits | RPD | RPD<br>Limit | Notes |  |

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Source: 5119003-01

Source: 5119033-08

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Duplicate (EI52607-DUP1)

Duplicate (EI52607-DUP2)

Total Dissolved Solids

Total Dissolved Solids

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

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| Larson & Associates, Inc.        |               | Pro                | oject: Joh     | n H. Hendrix   | / Will Cary #5     |            |                  |       | Fax: (432)   | 687-0456 |
|----------------------------------|---------------|--------------------|----------------|----------------|--------------------|------------|------------------|-------|--------------|----------|
| P.O. Box 50685                   |               | Project Nur        | •              |                | ÷                  |            |                  |       | Repor        | ted:     |
| Midland TX, 79710                |               | Project Man        | ager: Ma       | rk Larson      |                    |            |                  |       | 09/28/05     | 5 08:28  |
| Т                                | otal Metals b | y EPA / Sta        | andard         | Methods        | - Quality (        | Contr      | ol               |       |              |          |
| ·                                |               | Environm           | ental L        | ab of Tex      | as                 |            |                  |       |              |          |
| Analyte                          | Result        | Reporting<br>Limit | Units          | Spike<br>Level | Source<br>Result % | REC        | %REC<br>Limits   | RPD   | RPD<br>Limit | Notes    |
| Batch EI52603 - EPA 3005A        |               |                    |                |                |                    |            |                  |       |              |          |
| Blank (EI52603-BLK1)             |               |                    |                | Prepared: 0    | 9/22/05 Analy      | zed: 09    | /23/05           |       |              |          |
| Selenium                         | ND            | 0.00400            | mg/L           |                |                    |            |                  |       |              |          |
| Lead                             | ND            | 0.0110             |                |                |                    |            |                  |       |              |          |
| Chromium                         | ND            | 0.00500            | Ħ              |                |                    |            |                  |       |              |          |
| Cadmium                          | ND            | 0.00100            | u              |                | •                  |            |                  |       |              |          |
| Barium                           | ND            | 0.00100            | ۳.             |                |                    |            |                  |       |              |          |
| Arsenic                          | ND            | 0.00800            | "              |                |                    |            |                  |       |              |          |
| Silver                           | ND            | 0.00500            | "              |                |                    |            |                  |       |              |          |
| LCS (E152603-BS1)                |               |                    |                | Prepared: (    | )9/22/05 Analy     | zed: 09    | /23/05           |       |              |          |
| Cadmium                          | 0.203         | 0.00100            | mg/L           | 0.200          |                    | 102        | 85-115           |       |              |          |
| Selenium                         | 0.424         | 0.00400            | м              | 0.400          |                    | 106        | 85-115           |       |              |          |
| Silver                           | 0.103         | 0.00500            | н              | 0.100          |                    | 103        | 85-115           |       |              |          |
| Chromium                         | 0.205         | 0.00500            | n              | 0.200          |                    | 102        | 85-115           |       |              |          |
| Barium                           | 0.215         | 0.00100            | "              | 0.200          |                    | 108        | 85-115           |       |              |          |
| Arsenic                          | 0.822         | 0.00800            | "              | 0.800          |                    | 103        | 85-115           |       | 4            |          |
| Lead                             | 1.08          | 0.0110             | "              | 1.10           | ·                  | 98.2       | 85-115           |       | `            |          |
| LCS Dup (EI52603-BSD1)           |               |                    |                | Prepared:      | 09/22/05 Analy     | zed: 09    | /23/05           |       |              |          |
| Silver                           | 0.0953        | 0.00500            | mg/L           | 0.100          |                    | 95.3       | 85-115           | 7.77  | 20           |          |
| Chromium                         | 0.213         | 0.00500            | Ħ              | 0.200          |                    | 106        | 85-115           | 3.83  | 20           |          |
| Cadmium                          | 0.200         | 0:00100            | н              | 0.200          |                    | 100        | 85-115           | 1.49  | 20           |          |
| Barium                           | 0.212         | 0.00100            | "              | 0.200          | -                  | 106        | 85-115           | 1.41  | 20           |          |
| Arsenic                          | 0.835         | 0.00800            | "              | 0.800          |                    | 104        | 85-115           | 1.57  | 20           |          |
| Selenium                         | 0.434         | 0.00400            |                | 0.400          |                    | 108        | 85-115           | 2.33  | 20           |          |
| Lead                             | 1.07          | 0.0110             | t <del>i</del> | 1.10           |                    | 97.3       | 85-115           | 0.930 | 20           |          |
| Calibration Check (EI52603-CCV1) |               |                    |                |                | 09/22/05 Anal      |            |                  |       |              |          |
| Lead                             | 1.04          |                    | mg/L           | 1.00           |                    | 104        | 90-110           |       |              |          |
| Barium                           | 1.08          |                    | *              | 1.00           |                    | 108        | 90-110           |       |              |          |
| Cadmium                          | 1.08          |                    | 9<br>11        | 1.00           |                    | 108        | 90-110           |       |              |          |
| Selenium<br>Arsenic              | 1.03          |                    | . "            | 1.00           |                    | 103        | 90-110           |       |              |          |
| Chromium                         | 1.06          |                    |                | 1.00<br>1.00   |                    | 106<br>110 | 90-110<br>90-110 |       |              |          |
| Silver                           | 0.521         |                    | -              | 0.500          |                    | 104        | 90-110<br>90-110 |       |              |          |

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

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Midland TX, 79710

# Project: John H. Hendrix/ Will Cary #5 Project Number: 4-0123 Project Manager: Mark Larson

Fax: (432) 687-0456

Reported:

09/28/05 08:28

# Total Metals by EPA / Standard Methods - Quality Control

**Environmental Lab of Texas** 

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

### Batch EI52603 - EPA 3005A

| Matrix Spike (EI52603-MS1)      | Sour  | -ce: 5I21001-0 | )1   | Prepared: | 09/22/05 An | alyzed: 09 | 9/23/05 |       |    |     |
|---------------------------------|-------|----------------|------|-----------|-------------|------------|---------|-------|----|-----|
| Chromium                        | 0.185 | 0.00500        | mg/L | 0.200     | ND          | 92.5       | 75-125  |       |    |     |
| Cadmium                         | 0.193 | 0.00100        | "    | 0.200     | ND          | 96.5       | 75-125  |       |    |     |
| Lead                            | 1.19  | 0.0110         | Ħ    | 1.10      | ND          | 108        | 75-125  |       |    |     |
| Selenium                        | 0.443 | 0.00400        | "    | 0.400     | 0.00610     | 109        | 75-125  |       |    |     |
| Silver                          | 0.150 | 0.00500        | ۳.   | 0.100     | ND          | 150        | 75-125  |       |    |     |
| Arsenic                         | 0.882 | 0.00800        | "    | 0.800     | 0.0162      | 108        | 75-125  |       |    |     |
| Barium                          | 0.577 | 0.00100        | н    | 0.200     | 0.371       | 103        | 75-125  |       |    |     |
| Matrix Spike Dup (EI52603-MSD1) | Sou   | rce: 5121001-0 | 01   | Prepared: | 09/22/05 An | alyzed: 0  | 9/23/05 |       |    |     |
| Barium                          | 0.575 | 0.00100        | mg/L | 0.200     | 0.371       | 102        | 75-125  | 0.347 | 20 |     |
| Cadmium                         | 0.195 | 0.00100        |      | 0.200     | ND          | 97.5       | 75-125  | 1.03  | 20 |     |
| Chromium                        | 0.197 | 0.00500        |      | 0.200     | ND          | 98.5       | 75-125  | 6.28  | 20 |     |
| Lead                            | 1.16  | 0.0110         | 'n   | 1.10      | ND          | 105        | 75-125  | 2.55  | 20 |     |
| Selenium                        | 0.435 | 0.00400        | н    | 0.400     | 0.00610     | 107        | 75-125  | 1.82  | 20 |     |
| Arsenic                         | 0.866 | 0.00800        | ņ    | 0.800     | 0.0162      | 106        | 75-125  | 1.83  | 20 |     |
| Silver                          | 0.157 | 0.00500        | n    | 0.100     | ND          | 157        | 75-125  | 4.56  | 20 |     |
| Post Spike (EI52603-PS1)        | Sou   | rce: 5I21001-  | 01   | Prepared: | 09/22/05 Ar | alyzed: 0  | 9/23/05 |       |    |     |
| Silver                          | 0.170 |                | mg/L | 0.100     | ND          | 170        | 85-115  |       |    | PS- |

## Batch EI52709 - 6010B/No Digestion

| Blank (EI52709-BLK1) |    |         |      | Prepared & Analyzed: 09/27/05 |  |
|----------------------|----|---------|------|-------------------------------|--|
| Calcium              | ND | 0.0100  | mg/L | · ·                           |  |
| Magnesium            | ND | 0.00100 | "    |                               |  |
| Potassium            | ND | 0.0500  | n    |                               |  |
| Sodium               | ND | 0.0100  | n    |                               |  |
|                      |    |         |      | 1                             |  |

Environmental Lab of Texas

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Larson & Associates, Inc. Project: John H. Hendrix/ Will Cary #5 P.O. Box 50685 Project Number: 4-0123 Midland TX, 79710 Project Manager: Mark Larson Total Metals by EPA / Standard Methods - Quality Control **Environmental Lab of Texas** RPD %REC Reporting Spike Source Level Limit Analyte Result Limit Units Result %REC Limits RPD Batch EI52709 - 6010B/No Digestion

Calibration Check (EI52709-CCV1) Prepared & Analyzed: 09/27/05 Calcium 2.00 85-115 2.02 mg/L 101 2.00 91.5 -85-115 Magnesium 1.83 2.00 85-115 Potassium 2.08 104 Sodium 1.77 2.00 88.5 85-115 Duplicate (EI52709-DUP1) Source: 5119003-01 Prepared & Analyzed: 09/27/05 Calcium 2.78 20 78.0 0.500 80.2 mg/L 20 Magnesium 32.2 0010.0 " 32.6 . 1.23 Potassium \* 8.08 0.124 20 8.07 0.250 н 87.7 Sodium 88.9 0.500 1.36 20

### Batch EI52712 - EPA 7470A

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| Blank (EI52712-BLK1)             |          |                |      | Prepared & A | Analyzed: | 09/27/05 |        |      |    |  |
|----------------------------------|----------|----------------|------|--------------|-----------|----------|--------|------|----|--|
| Мегситу                          | ND       | 0.000500       | mg/L |              |           |          |        |      |    |  |
| LCS (E152712-BS1)                |          |                |      | Prepared & A | Analyzed: | 09/27/05 |        |      |    |  |
| Мегсигу                          | 0.000860 | 0.000500       | mg/L | 0.00100      |           | 86.0     | 85-115 |      |    |  |
| Calibration Check (EI52712-CCV1) |          |                |      | Prepared & A | Analyzed: | 09/27/05 |        |      |    |  |
| Мегсигу                          | 0.000900 |                | mg/L | 0.00100      |           | 90.0     | 90-110 |      |    |  |
| Matrix Spike (EI52712-MS1)       | Sou      | rce: 5121001-0 | 01   | Prepared & A | Analyzed: | 09/27/05 |        |      |    |  |
| Mercury                          | 0.000750 | 0.000500       | mg/L | 0.00100      | ND        | 75.0     | 75-125 |      |    |  |
| Matrix Spike Dup (EI52712-MSD1)  | Sou      | arce: 5I21001- | D1   | Prepared & A | Analyzed: | 09/27/05 |        |      |    |  |
| Mercury                          | 0.000760 | 0.000500       | mg/L | 0.00100      | ND        | 76.0     | 75-125 | 1.32 | 20 |  |

Environmental Lab of Texas

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Fax: (432) 687-0456

Reported: 09/28/05 08:28

Notes

| Larson & A | Associates, Inc.   | Project: John H. Hendrix/ Will Cary #5  | Fax: (432) 687-0456 |
|------------|--|---|---------------------|
| P.O. Box 5 | 0685   | Project Number: 4-0123  | Reported:           |
| Midland T  | X, 79710   | Project Manager: Mark Larson  | 09/28/05 08:28      |
|            |  | Notes and Definitions   |                     |
| PS-1       | Matix spike recoveries were outside<br>by similar results from a post matrix | method and/or historical control limits due to matrix interference. Interferen spike. | ce was confirmed    |
| DET        | Analyte DETECTED   |   |                     |
| ND         | Analyte NOT DETECTED at or above the   | he reporting limit  |                     |
| NR         | Not Reported   |   |                     |
| dry        | Sample results reported on a dry weight                                      | basis   |                     |
| RPD        | Relative Percent Difference  |   |                     |
| LCS        | Laboratory Control Spike   |   |                     |
| MS         | Matrix Spike   |   |                     |
| Dup        | Duplicate  |   |                     |
|            |  |   |                     |

Report Approved By:

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Raland K Julies

Date:

9/28/2005

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

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Environmental Lab of Texas

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Page 12 of 12

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

| CLIENT NAME:                      |           |                   |             | SITE MANAGER:               |                           |                         | ٧d               | RAMF               | TFRS/      | PARAMETERS/METHOD  |         | NUMBER        | <u>م</u>     | CHAIN-                                | CHAIN-OF-CUSTODY   | <b>FODY RECORD</b>  |
|-----------------------------------|-----------|-------------------|-------------|-----------------------------|---------------------------|-------------------------|------------------|--------------------|------------|--|---------|---------------|--------------|---------------------------------------|--|---|
|                                   |           |                   |             | Mark Larson                 | 5                         |                         | -                |                    |            | 5  |         |               |              | et<br>uncu                            |  |   |
| PROJECT NO                        | m         |                   |             | PROJECT NAME<br>Will Cary#5 | Ś                         | Sajniatno               |                  | ~                  |            | 7 <del>V</del> LƏV   | ···.    |               |              |                                       | CISON & Convertigents 432-687-0901<br>Environmental Convertants 432-687-0901 | c: 432-687-0456<br>432-687-0901   |
| PAGE / OF                         | -         |                   | LAB.        | LAB. PO #                   |                           | 0 <del>.</del> CC       | SN               |                    |            |  |         |               |              | 507 N. Mari                           | enfeld, Ste. 202 •   | 507 N. Marienfeld, Ste. 202 • Midland, TX 79701                                       |
| JUNI<br>JUNI                      | MAJER     | , <sup>1</sup> 05 | d'stylo     | SAMPLE IDENTIFICATION       | . '                       | NUMBER                  | 01747            | VIINV              | 919<br>501 |  | -       | <u>.</u>      |              | LAB. I.D.<br>NUMBER<br>(LAB USE ONLY) | F. ALTE<br>PRESERVE<br>GRAE  | REMARKS<br>(1.E., Filtered, Unfritered,<br>Preserved, Unfriserved,<br>Grab, composite |
| 9120                              | 7         |                   |             | 1.mu                        |                           | 4                       | -                | -                  | 5          | -  |         |               |              | 512100                                | 0  |   |
|                                   |           |                   |             |                             |                           |                         |                  |                    |            |  | _       | _             |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         |                  | •                  |            |  |         |               |              |                                       |  |   |
|                                   |           | ŀ                 |             |                             |                           |                         | ;                |                    |            |  |         |               |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         | i                |                    |            |  |         |               |              |                                       |  |   |
|                                   |           | -                 |             | · · ·                       |                           |                         |                  |                    |            |  |         |               |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         |                  |                    |            |  |         |               |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         | <del>  .</del>   |                    | <u> </u>   |  |         | <br>          |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         | +                | <u> .</u>          |            | <u> </u>   |         |               |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         |                  |                    |            |  |         |               | •••          |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         | $\left  \right $ |                    |            |  |         | <br>          | <br>         |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         |                  |                    |            |  | -       |               |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         |                  |                    |            |  |         |               |              |                                       | - V<br>- V   | · · ·   |
|                                   | .<br>  .  |                   |             |                             |                           |                         |                  | <br>               |            |  |         | ļ             |              |                                       |  |   |
|                                   | -         |                   |             |                             |                           |                         | - <u>`-</u> -    |                    |            |  |         |               |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         |                  |                    |            |  |         |               |              |                                       |  |   |
|                                   | -         |                   |             |                             |                           |                         | ;-<br>           |                    |            |  |         |               |              | •                                     |  |   |
|                                   |           |                   |             |                             |                           |                         |                  | .<br>              |            |  |         |               |              |                                       |  |   |
| SAMPLED BY (Signature)            | Binoture  | 1.                |             | DATE: 3/20                  | REINVOOISHED BY Signature | R                       | anat             | (e)                |            |  | DATE: O | DATE: 9/2     |              | RECEIVED BY: (Signature)              | ature)   | DATE:<br>TIME:  |
| RELINQUISHED BY: (Signature)      | Y: (Signe | iture)            |             |                             | RECEIVED BY: (Signature)  | (Signal                 | ure)             |                    |            |  | DATE    |               | 1            | SAMPLE SHIPPED BY: (Circle)           | Y: (Circle)  |   |
|                                   | · ·.      |                   |             | TIME                        |                           |                         |                  |                    |            |  | TIME.   |               | 뷴            | FEDEX                                 |  | AIRBILL #:  |
| COMMENTS:                         |           |                   |             |                             | •                         |                         |                  |                    | TURNA      | Turnaround time needed   | TIME A  | <b>JEEDED</b> | ₽ <b> \$</b> | HAND DELIVERED                        | NG LAB   | OTHEK:  |
|                                   |           |                   | tet         | - Area                      | IQ                        | DECENTED BY. (Signatura | N 10             |                    | . 10       |  |         |               | <u>ष्ट्र</u> | VELLOW - RECEIVIN                     | - RECEIVING LAB (TO BE RETURNED TO   | URNED TO  |
| RECEIVING LABORALORY:<br>ADDRESS; | KAIUKY    | 1                 | $ \dot{1} $ |                             |                           |                         |                  | $\frac{9}{2}$      | g          | 8  |         |               | Mid          | ł                                     | LA AFIEK KELEIFIJ<br>PROJECT MANAGER   |   |
|                                   |           |                   |             | STATE: ZIP: ZIP: ZIP:       |                           | DATE: 9                 | Irzl.            | 5                  | . INGE     | 9:6  | R       |               | Ğ            | 1                                     | QA/QC COORDINATOR  |   |
|                                   | WHEN REC  | EWED:             | ĺ           |                             | 1.0°C                     | IA CO                   | NTACI            | LA CONTACT PERSON: | Ä          |  |         | •             | Ş            | SAMPLE TYPE:                          |  |   |
| 2108                              |           | ŝ                 | TX1         | 1 SOOML-HNDZ                |                           |                         | and a star       | A NUMBER OF        |            | The second s |         |               |              |                                       |  |   |
|                                   |           |                   |             |                             |                           |                         |                  |                    |            |  |         |               |              |                                       |  |   |

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Environmental Lab of Texas Variance / Corrective Action Report - Sample Log-In.

|           | Client:   | USON         |
|-----------|-----------|--------------|
|           | •         | 9/21/05 9:05 |
|           | Order #:  | 5I21001      |
| 3-A-2-0-1 | Initials: | CH           |

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# Sample Receipt Checklist

| Temperature of container/cooler?                          | Yes    | No | [.0 C]         |
|---|--------|----|----------------|
| Shipping container/cooler in good condition?              | LES    | No | 1              |
| Custody Seals intact on shipping container/cooler?        | Yes    | No | Not present    |
| Custody Seals intact on sample bottles?                   | Yes    | No | Not present    |
| Chain of custody present?                                 | Xes    | No |                |
| Sample Instructions complete on Chain of Custody?         | Yes    | No |                |
| Chain of Custody signed when relinquished and received?   | Ves    | No |                |
| Chain of custody agrees with sample label(s)              | des    | No |                |
| Container labels legible and intact?                      | Kes    | No |                |
| Sample Matrix and properties same as on chain of custody? | Yes    | No |                |
| Samples in proper container/bottle?                       | Yes    | No | }              |
| Samples properly preserved?                               | Ves    | No |                |
| Sample bottles intact?                                    | Æ      | No | [              |
| Preservations documented on Chain of Custody?             | 1 Yes  | No | 1              |
| Containers documented on Chain of Custody?                | 1 cres | No |                |
| Sufficient sample amount for indicated test?              | Xes    | No |                |
| All samples received within sufficient hold time?         | 1 Ves  | No |                |
| VOC samples have zero headspace?                          | Kes    | No | Not Applicable |

Other observations:

Variance Documentation:

Contact Person: -\_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Regarding:

.

Corrective Action Taken:

•\_\_\_\_\_

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