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# REPORTS

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**PHASE I AND PHASE II  
ENVIRONMENTAL SITE ASSESSMENT  
AND SITE RESTORATION REPORT  
RUNCO ACIDIZING AND FRACTURING COMPANY  
UTAH STREET AT NEW MEXICO HIGHWAY 18  
JAL, LEA COUNTY, NEW MEXICO**

Topical Report RSI-1815

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## EXECUTIVE SUMMARY

RESPEC was retained by the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department (EMNRD) of the State of New Mexico to perform a Phase I and Phase II Environmental Site Assessment (ESA) and Site Restoration of the property known as the RUNCO Acidizing and Fracturing Company site, located at the southwest corner of Highway 18 and East Utah Avenue in Jal, Lea County, New Mexico (hereafter referred to as "the subject property"). This ESA and site restoration were performed in a manner consistent with the methods and procedures described in the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*.

The objective of RESPEC's ESA was to determine whether current or past activities on or adjacent to the subject property may have resulted in significant contamination by hazardous materials or wastes, a condition referred to in this report as a "Recognized Environmental Condition."

The objective of the site restoration was to remove from the site any known tanks, contaminated soil, fluids, and debris identified during the ESA portion of the project.

RESPEC's scope of services for the Phase I and Phase II ESA and Site Restoration consisted of the following:

- An inspection of the subject property and nearby area.
- A review of historical information about activities on the subject property.
- A review of readily available regulatory information concerning the subject property and nearby properties of environmental concern.
- An investigation into the presence of asbestos-containing material (ACM) in the warehouse building.
- An investigation of the extent of total petroleum hydrocarbons (TPH), chloride, and total dissolved solids (TDS) in soil and groundwater beneath the subject property.
- An investigation to determine if groundwater had been impacted as a result of an on-site release or on-site operations.
- The decommissioning, decontamination, and removal of eleven aboveground storage tanks (ASTs) for recycling.

- The removal of contaminated soil, fluids, and debris for off-site disposal.
- The preparation of this report detailing RESPEC's results, conclusions, and recommendations.

The search radius distances for facilities of potential environmental concern in the vicinity of the subject property are in conformance with ASTM Standard E1527-00.

The subject property is located in the SW/4 of Section 20, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico. An area map is presented as Figure 1 and a site map is presented as Figure 2.

Based on RESPEC's site inspection and review of available information, on-site sources that have created, or have the potential to create, a Recognized Environmental Condition, were identified on the subject property. These sources, identified during the ESA phase of the project, included:

- Eleven (11) large-capacity corroded steel aboveground storage tanks
- Solids and fluids of unknown composition in the aboveground tanks
- Hydrocarbon-stained surface soils
- Four (4) large debris piles of wood, steel, iron, and trash
- A large storage warehouse of unknown age and contents

Site restoration procedures were implemented for the above conditions after completion of the ESA, as required by the scope of work included in the contract for services.



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## 1.0 INTRODUCTION

RESPEC was retained in July 2004 by the Oil Conservation Division (OCD) to perform a Phase I ESA and Phase II Site Investigation and Site Restoration for the subject property, the former site of the RUNCO Acidizing and Fracturing Company, located at the southwest corner of NM Highway 18 and East Utah Avenue, in Jal, Lea County, New Mexico. The ESA was performed in a manner consistent with the methods and procedures described in the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessment: Phase I and Phase II Environmental Site Assessment Process* (Standard Designation E 1527-00), published in July 2000. Signatures of RESPEC personnel involved in the preparation of this report are included in Appendix A. The ESA and site restoration objectives and the scope of work are presented in the following sections.

### 1.1 PURPOSE

The purpose of the Phase I and Phase II ESA was to determine whether current or past activities on the subject property may have resulted in significant contamination by hazardous materials or regulated wastes, a condition referred to in this report as a "Recognized Environmental Condition." A Recognized Environmental Condition is defined in the ASTM Phase I Standard as:

"The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

## **1.2 SCOPE OF SERVICES**

RESPEC's scope of services for the Phase I and Phase II ESA and Site Restoration consisted of the following:

- An inspection of the subject property and nearby area.
- A review of historical information about activities on the subject property.
- A review of readily available regulatory information concerning the subject property and nearby properties of environmental concern.
- An investigation into the presence of asbestos-containing material (ACM) in the warehouse building.
- An investigation of the extent of hazardous or regulated substances, including hydrocarbons (volatile and semivolatile), hydrocarbon constituents (volatile and semivolatile), and inorganic compounds (total dissolved solids, chlorides, and fluorides) in shallow subsurface and surface soils.
- An investigation of the nature and extent of groundwater contamination by completing four groundwater monitoring wells on the subject property.
- The decommissioning, decontamination, and removal of eleven aboveground storage tanks (ASTs) and one underground storage tank (UST), including all contents, for proper disposal and recycling.
- The removal and disposal of all hazardous and regulated substances and all debris and trash from the entire 1.82 acres.
- The preparation of this report detailing RESPEC's results, conclusions, and recommendations.

Search radius distances for facilities of potential environmental concern in the vicinity of the subject property are in conformance with ASTM Standard E1527-00.

## **2.0 SITE DESCRIPTION**

Information concerning the subject property was obtained from a site inspection conducted by representatives of RESPEC and a review of the documents referenced in Section 7.0 of this report.

## **2.1 LOCATION AND LEGAL DESCRIPTION**

The subject property (approximately 1.82 acres) is located in the SW/4 of Section 20, Township 25 South, Range 37 East, NMPM, in Jal, Lea County, New Mexico, at the southwest corner of the intersection of Utah Street and NM State Highway 18. A vicinity map is presented as Figure 1 and a site map is presented as Figure 2.

## **2.2 SITE AND VICINITY GENERAL CHARACTERISTICS**

Site and vicinity characteristics, including topography, geology, and hydrogeology, were evaluated on the basis of site observations, published literature, and maps.

The 1:24,000 scale topographic map for Jal, New Mexico, produced with the software package DeLorme Topo USA® 3.0, Southwest Region © 2001, shows the subject property at an elevation of approximately 3,030 feet above mean sea level. Depth to groundwater at the subject property is approximately 28 feet below ground surface (BGS) and has a gradient direction generally toward the southeast, as confirmed by monitoring well completions.

Regional geology of Lea County, in the area known as the "Llano Estacado" because of the flat-lying surface topography, includes Cenozoic deposits of sands and gravels. The base of the Cenozoic sediments marks the disconformity to Paleozoic sedimentary bedrock deposits of sandstones, shales, and limestones that are prolific oil and gas producers of the Permian Basin.

Monitoring well drilling revealed subsurface lithology at the subject property consisting of alluvial deposits overlying an approximate 25-foot layer of caliche. At the base of the caliche at approximately 27 feet BGS, the top of the Ogallala Formation was penetrated. The water-bearing Ogallala consisted of unconsolidated poorly graded sands and gravels in this area. Groundwater, with a southeasterly gradient, was encountered at approximately 28 feet BGS (see Figure 3. Groundwater Gradient Map).

## **2.3 CURRENT USE OF THE PROPERTY**

The subject property is currently not being used. Anchor Drilling Fluids Company of Oklahoma City, Oklahoma, was contacted and indicated that the future use of the property would be supplying oilfield drilling mud from this location.

## **2.4 DESCRIPTION OF STRUCTURES**

The subject property is an unpaved lot with one warehouse building and a loading dock.

## **2.5 ADJOINING PROPERTIES**

RESPEC performed a visual inspection of readily visible areas of adjacent properties as well as a review of plat maps at the County Assessor's Office in order to document adjacent property owners. Appendix B lists all owners of adjacent properties and their addresses.

## **3.0 USER-PROVIDED INFORMATION**

### **3.1 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION**

According to the Lea County Assessor's Office, the current owners of the subject property are Harold and Dorothy Runnels.

### **3.2 REASON FOR PERFORMING THE ESA**

The client required the ESA to be implemented as the initial phase of the project, as outlined in the Scope of Work section of the contract.

## **4.0 SITE INSPECTION**

Mr. Jorge Armstrong, a representative of RESPEC, conducted a site inspection on August 2, 2004. Weather conditions at the time of the inspection were mostly sunny, with a temperature of approximately 87°F. RESPEC's site inspection included a walking inspection of the subject property and adjacent and surrounding properties, and a windshield survey of the surrounding neighborhood. Photographs taken during RESPEC's site inspection are provided in Appendix C.



## **4.1 CURRENT USES OF THE PROPERTY**

The subject property is currently vacant, without any commercial activity.

## **4.2 PAST USES OF THE PROPERTY**

The subject property formerly housed an acidizing and fracturing plant. Eleven ASTs and an underground mixing tank were used for the production and storage of drilling mud and acidizing fluids.

## **4.3 SITE OBSERVATIONS**

RESPEC's environmental professional noted that the ASTs on the subject property were extremely corroded, with evidence of spilled and leaking drilling mud fluids throughout the tank area. Soils with minor oil stains were observed between the two tank battery areas. Wind-blown trash, as well as numerous discarded items and other solid waste, was observed.

### **4.3.1 Hazardous Wastes**

The laboratory tests conducted on the contents of the ASTs revealed exempt nonhazardous oil field waste. The laboratory results were certified by the OCD Hobbs District Office in Hobbs, New Mexico, as exempt nonhazardous oil field waste.

ACM was identified in the warehouse building during an ACM investigation of the subject property on August 17, 2004. The sheet vinyl flooring in the southwest office area was the only identified ACM. Abatement for the flooring will be necessary if the building is renovated or demolished. The complete report of the ACM investigation, complete with all laboratory results as well as conclusions and recommendations, is included in Appendix D of this report.

### **4.3.2 Underground/Aboveground Storage Tanks**

Eleven ASTs—six steel-bolted 500-barrel tanks, four steel-bolted 250-barrel tanks, and one 4 ft. x 16 ft. mixing tank—were observed on the subject property. An underground mixing tank with an estimated capacity of 25 barrels was located approximately 50 feet south of the warehouse building. All of the ASTs were observed to be full of exempt nonhazardous oil field waste with an estimated volume of 4,500 barrels. The 25-barrel UST was empty and dry.

#### **4.3.3 Drums and Containers**

No drums or containers were observed on the subject property.

#### **4.3.4 Polychlorinated Biphenyl (PCB)-Containing Equipment**

No PCB-containing equipment was observed on the subject property at the time of the inspection.

#### **4.3.5 Solid Waste**

Four large piles of scrap metal (an estimated 5,000 to 6,000 pounds), wind-blown trash and numerous discarded items, and other solid waste, such as discarded pallets, concrete rubble, and piping, were observed on the subject property.

#### **4.3.6 Liquid Waste**

No liquid waste was observed on the subject property.

#### **4.3.7 Drains and Sumps**

No drains or sumps were observed on the subject property during the site inspection.

#### **4.3.8 Wastewater**

No wastewater or wastewater treatment systems were observed on the subject property during the site inspection.

#### **4.3.9 Wells**

No water wells were observed on the subject property.

#### **4.3.10 Pits, Ponds, and Lagoons**

No pits, ponds, or lagoons were observed on the subject property.

#### **4.3.11 Other Physical Evidence of Contamination (If Any)**

Oil-stained surface soil was observed between the tank batteries.

## **5.0 HISTORIC SITE AND SURROUNDING PROPERTY CONDITIONS**

### **5.1 AERIAL PHOTOGRAPHS**

RESPEC reviewed six available aerial photographs of the town of Jal, New Mexico, filed at the University of New Mexico Earth Data Analysis Center (UNM/EDAC). The following aerial photographs can be viewed in Appendix E:

- 1949 aerial photograph (good quality): The subject property is developed with several large buildings. The ASTs are not present on the subject property. Residential development can be seen east and west of the subject property, and the Jal High School football field can be seen west of the site.
- 1955 aerial photograph (fair quality): The buildings observed in the 1949 photograph appear to be gone. The residential area to the east appears to have grown larger.
- 1968 aerial photograph (good quality): New buildings and ASTs are now visible on the subject property; however, the ASTs appear to be south of the ASTs addressed in this report. Increased commercial and residential development is observed throughout the town of Jal.
- 1977 aerial photograph (poor quality): The subject property and surrounding areas appear about the same as in the 1968 photograph.
- 1986 aerial photograph (poor quality): The photograph is too poor for any observations to be made.
- 1996 aerial photograph (good quality): The current warehouse, loading dock, and ASTs can be seen on the subject property. The previous ASTs observed in the 1968 photograph are now gone or moved.

## **6.0 REGULATORY AGENCY REVIEW**

### **6.1 REVIEW OF ENVIRONMENTAL DATABASES**

RESPEC reviewed information gathered from several environmental databases through Environmental Data Resources, Inc. (EDR) to determine whether activities on or near the subject property have the potential to create a Recognized Environmental

Condition on the subject property. EDR reviews databases compiled by federal, state, and local governmental agencies. EDR's database report is included as Appendix F.

The information obtained from the databases searched is summarized in Sections 7.2 through 7.5.

## 6.2 SUBJECT PROPERTY

The subject property was not found in EDR's search of available government records, which would identify it as having a preexisting or known environmental condition.

## 6.3 DATABASES SEARCHED WITH NO MAPPED SITES FOUND

No mapped sites were found in EDR's search of available government records, either on the subject property or within the ASTM E 1527-00 search radius (one mile) for the following databases:

### FEDERAL ASTM STANDARD

NPL.....National Priority List  
Proposed NPL ..... Proposed National Priority List Sites  
CERCLIS .Comprehensive Environmental Response, Compensation and Liability  
Information System  
CERC-NFRAP CERCLIS ..... No Further Remedial Action Planned  
CORRACTS ..... Corrective Action Report  
RCRIS-TSD ..... Resource Conservation and Recovery Information System  
RCRIS-LQG ..... Resource Conservation and Recovery Information System  
RCRIS-SQG ..... Resource Conservation and Recovery Information System  
ERNS ..... Emergency Response Notification System

### STATE ASTM STANDARD

SHWS .....This state does not maintain a SHWS list. See the Federal CERCLIS list.  
SWF/LF ..... Solid Waste Facilities

**FEDERAL ASTM SUPPLEMENTAL**

CONSENT ..... Superfund (CERCLA) Consent Decrees  
ROD ..... Records of Decision  
Delisted NPL ..... National Priority List Deletions  
FINDS ..... Facility Index System/Facility Identification Initiative Program Summary  
Report  
HMIRS ..... Hazardous Materials Information Reporting System  
MLTS ..... Material Licensing Tracking System  
MINES ..... Mines Master Index File  
NPL ..... Liens Federal Superfund Liens  
PADS ..... PCB Activity Database System  
RAATS ..... RCRA Administrative Action Tracking System  
TRIS ..... Toxic Chemical Release Inventory System  
TSCA ..... Toxic Substances Control Act  
FTTS FIFRA/ TSCA Tracking System – FIFRA (Federal Insecticide, Fungicide,  
and Rodenticide Act)/TSCA (Toxic Substances Control Act)

**STATE OR LOCAL ASTM SUPPLEMENTAL**

AST ..... Aboveground Storage Tanks List

***Unmapped (orphan) sites are not considered in the foregoing analysis.***

**6.4 DATABASES SEARCHED WITH MAPPED SITES FOUND**

Seven mapped sites were found in EDR's search of available government records within the ASTM E 1527-00 search radius around the subject property, for the following databases:

LUST ..... Leaking Underground Storage Tank Priorization Database  
UST ..... Listing of Underground Storage Tanks  
STATE OIL/GAS WELL INFORMATION ..... Listing of Oil and Gas Wells

There are 109 oil and gas production wells within a one-mile radius of the subject property. The EDR report indicates shallow oil and gas production from 510 feet to 3,100 feet below surface grade (BSG).

## **6.5 ORPHAN SITES**

RESPEC reviewed the list of orphan sites, which are sites that have not been geocoded because of a lack of sufficient data regarding their exact location within the general area. The review of the list of orphan sites did not identify any properties that might create a potential Recognized Environmental Condition on the subject property.

## **7.0 PHASE II INVESTIGATION**

### **7.1 HORIZONTAL AND VERTICAL EXTENT OF SOIL CONTAMINATION**

Elevated chloride, relative to site background levels (estimated to be between 20 and 275 milligrams per kilogram (mg/kg), based on multiple sample points on the subject property), was discovered in soil samples collected during trenching and soil-boring activities at the subject property. The soil samples collected for laboratory analysis from Excavation #3 and Excavation #4 and from Soil Boring SB/MW-1 (5,790 mg/kg, 1,800 mg/kg, and 1,610 mg/kg, respectively) had chloride concentrations greater than background levels (see Figure 2 for trench and soil boring locations). There was evidence of hydrocarbon contamination in some surface-stained soils between the tank batteries; however, there was no evidence of vertical migration from any of the soil samples collected from the trenches or soil borings.

The horizontal and vertical extent of hydrocarbon contamination of soil in the vadose zone was delineated on site by correlation of head space analysis with a portable photoionization detector (PID) unit and laboratory analysis by Environmental Protection Agency (EPA) Method 418.1 for gasoline range organics (GRO) and diesel range organics (DRO). The laboratory results and chain of custody for all soil samples can be found in Appendix G.

The vertical extent of elevated chloride concentrations in the vadose zone was delineated by laboratory analysis (EPA Method 300E). Soil samples collected from SB-1, SB-2, SB-3, and SB-4 at approximately 30 feet BSG had chloride levels of

107 mg/kg, 121 mg/kg, 90.1 mg/kg, and 275 mg/kg, respectively. These concentrations fall within the background levels for the subject property.

Attached are the boring/lithology logs for the four groundwater monitoring wells, which were advanced into the subsurface during the Phase II Investigation (see Appendix H). The subsurface lithology is fairly consistent throughout the investigation area and is basically as follows:

- 0-5 feet BSG: Tan, sandy loam (dry to moist)
- 5-27 feet BSG: Hard caliche with minor sand and gravels (dry)
- 27-40 feet BSG: Light brown unconsolidated poorly sorted sands interbedded with clayey silt (moist to saturated)

## **7.2 EXTENT OF GROUNDWATER CONTAMINATION**

The Phase II Investigation conducted at the subject property included the installation of four groundwater monitoring wells. The four newly installed wells (MW-1, MW-2, MW-3, and MW-4) were purged and sampled for laboratory analysis during the course of the investigation.

The wells were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX); methyl tertiary butyl ether (MTBE); and ethylene dichloride (EDC) by EPA Method 8021B; for polynuclear aromatic hydrocarbons by EPA Method 8270C; for Resource Conservation and Recovery Act (RCRA) metals by EPA Method 6010B; for major cations and anions; for cation/anion balance; and for general chemistry—total dissolved solids (TDS) and total nitrate/sulfate. A quick-look sheet of aqueous laboratory results is located in Appendix G along with the original laboratory reports and chains of custody.

There was no evidence of hydrocarbon contamination in any of the groundwater monitoring wells. However, there was evidence of slightly elevated inorganic compounds of TDS, chloride, and fluoride in all wells (see Figure 4 for anion, cation, and TDS concentrations in groundwater). It is unknown if these levels are related to any past activity on the subject property or may be present regionally in the aquifer.

MW-1, MW-2, MW-3, and MW-4 were all completed to a total depth of approximately 40 feet, with a 15-foot screened interval from 40 feet to 25 feet BSG.

(These completion depths and screen intervals are approximations. Please see soil boring logs with well completion diagrams in Appendix H for exact specifications).

### **7.3 HYDROLOGY/GROUNDWATER CHARACTERISTICS**

The Phase II Investigation revealed the groundwater aquifer at approximately 28 feet BGS. The four monitoring wells (MW-1, MW-2, MW-3, and MW-4) were completed for groundwater observation, including static water level measurements, the potentiometric surface from the survey, and water quality analysis.

Water level measurements and survey results are included in Appendix I. Monitoring well measurements were established by placing a permanent mark on the north rim of each well casing, and measurements were taken with an electronic water level instrument. Water level measurements from below the top of the well casing were as follows:

- MW-1: 29.55 feet
- MW-2: 29.78 feet
- MW-3: 24.70 feet
- MW-4: 26.91 feet.

A survey was performed by a registered land surveyor, for determination of x, y, and z coordinates at the top of the well casings for MW-1, MW-2, MW-3, and MW-4. The Groundwater Gradient Map (Figure 3) indicates that the groundwater has an average gradient of 0.02 foot/foot in a southeasterly direction (S42°E).

## **8.0 SITE RESTORATION ACTIVITIES**

### **8.1 AST AND UST DECOMMISSIONING, DECONTAMINATION AND RECYCLING**

The decommissioning, decontamination, and recycling of the eleven ASTs and one UST were initiated after the development of the scope of work, design criteria, subcontractor team formation, construction/remedial action timeline, and project cost. The scope of work included the following:



- A work plan was prepared, which included the design criteria, reconnaissance of the site, cost estimates, formation of a subcontracting team, and a prejob conference with the OCD project manager.
- A site-specific health and safety plan (HASP) was completed before the start-up of fieldwork. The HASP included the following: a site information summary; a list of key personnel on site and their responsibilities; a list of site hazards; emergency information; a job hazard assessment; and procedures for decontamination and disposal, employee training, and emergencies. On-site safety meetings included weekly "tailgate" meetings, with all workers in attendance.
- Before the start-up of on-site field activities, RESPEC called the New Mexico One Call System to locate, mark, and map all buried pipelines and utilities at the subject property. A New Mexico One Call log was kept and updated throughout the duration of the project.
- Crain Hot Oil Service (Crain) personnel mobilized to the subject property on a daily basis for the duration of the project. All fluids and solids were removed from eleven ASTs and one UST located throughout the subject property (Figure 2). The tanks ranged in size from 210-barrel capacity to 500-barrel capacity. Crain provided a hot oil unit, trans-vac units, and all appurtenances for removal and disposal of tank contents. All fluids and solids were removed to Sundance Services Inc. (Sundance), an OCD-permitted disposal facility for exempt non-hazardous oilfield waste. Crain then triple-rinsed all the tanks to inert them for removal from the subject property and recycling. All triple-rinse fluids were removed to Sundance. The RESPEC project manager oversaw all operations and tracked all transport disposal manifests and disposal certifications.
- Crain performed a naturally occurring radioactive materials (NORM) survey of all pipes, tanks, and miscellaneous equipment before disposal or recycling. This task was ongoing throughout the demolition and disposal activities at the subject property. All empty tanks were inspected and surveyed internally before demolition and surveyed externally before disposal or recycling. A registered NORM surveyor performed the survey in accordance with 19.15.9.714 New Mexico Administrative Code (NMAC) and 20.3.14 NMAC.
- All twelve tanks (including the UST) were removed from the site and recycled. Crain provided a shear for on-site crushing and provided all necessary transportation of material to Hobbs Iron Works in Hobbs, New Mexico, for recycling. In addition, Crain removed and recycled other iron and metal objects

from the site. The RESPEC project manager oversaw these operations, including tank testing, to ensure that tanks were inerted, and provided tank death certificates.

- A total of 4,500 barrels of exempt non-hazardous oil field waste (solids and fluids) was removed from the subject property for disposal at Sundance.

## **8.2 OTHER SITE RESTORATION ACTIVITIES**

All trash and debris piles were removed and properly disposed of or recycled. Approximately 5,000 pounds of refuse was hauled to Lea County Landfill in Eunice, New Mexico.

## **9.0 CONCLUSIONS**

RESPEC conducted a Phase I and Phase II ESA and Site Restoration in conformance with the scope and limitations of ASTM Practice E 1527-00. The subject property (approximately 1.82 acres) is located in the SW/4 of Section 20, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, at the intersection of Utah Street and NM State Highway 18. The purpose of this assessment was to evaluate the potential for a Recognized Environmental Condition to exist on the subject property from on-site or off-site activities. RESPEC's conclusions are presented below.

### **9.1 ON-SITE RECOGNIZED ENVIRONMENTAL CONDITIONS**

Based on RESPEC's review of available information and its site inspection, on-site sources that have created, or have the potential to create, a Recognized Environmental Condition on the subject property, were identified. The term *Recognized Environmental Condition* refers to the effects of hazardous substances or petroleum products even under conditions in compliance with state laws.

Elevated chloride, relative to site background levels (estimated to be between 20 mg/kg and 275 mg/kg, based on multiple sample points on the subject property), were discovered in soil samples collected during trenching and soil boring activities at the subject property. The soil samples collected for laboratory analysis from Excavation #3 and Excavation #4 and SB/MW-1 (5,790 mg/kg, 1,800 mg/kg, and 1,610 mg/kg, respectively) had chloride concentrations greater than background levels (see Figure 2

for trench and soil boring locations). There was evidence of hydrocarbon contamination in some surface-stained soils between the tank batteries; however, there was no evidence of hydrocarbon contamination in any of the soil samples collected from the trenches or soil borings.

Eleven ASTs were observed on the subject property. There were six steel-bolted 500-barrel tanks, four steel-bolted 250-barrel tanks, and one 4 ft. x 16 ft. mixing tank. One underground mixing tank with an estimated capacity of 25 barrels was located approximately 50 feet south of the warehouse building. All the ASTs were observed to be full of exempt non-hazardous oil field waste with an estimated volume of 4,500 barrels. The 25-barrel UST was empty and dry.

Four large piles of scrap metal (an estimated 5,000 to 6,000 pounds), wind-blown trash and numerous discarded items, and other solid waste, such as discarded pallets, concrete rubble, and piping, were observed on the subject property. The waste material was removed from the subject property for off-site disposal.

ACM was identified in the warehouse building during an ACM investigation of the subject property on August 17, 2004. The sheet vinyl flooring in the southwest office area was the only identified ACM. Abatement for the flooring will be necessary if the building is renovated or demolished. The complete report of the ACM investigation, complete with all laboratory results as well as conclusions and recommendations, is included in Appendix D of this report.

The restoration activities at the subject property included the removal and disposal of approximately 4,629 barrels of exempt non-hazardous oil field waste (solids and fluids) for off-site disposal. All the ASTs and the UST (12 tanks) were decontaminated, dismantled, and taken off site for recycling.

## **9.2 OFF-SITE RECOGNIZED ENVIRONMENTAL CONDITIONS**

Based on RESPEC's review of available information, no off-site Recognized Environmental Conditions were identified.

## **10.0 RECOMMENDATIONS**

A Recognized Environmental Condition was identified at the subject property; however, based on the results of RESPEC's Phase I and Phase II Environmental Site Assessment, RESPEC recommends that no further action (NFA) status be granted for the following reasons:

- All the exempt non-hazardous oil field waste (4,629 barrels) was removed from the subject property.
- All the ASTs and the UST (12 tanks) were decontaminated, dismantled, and taken off site for recycling.
- If the warehouse building is renovated or demolished, abatement for the flooring containing ACM will be required.
- There was no evidence of significant hydrocarbon contamination in soil or groundwater at the subject property.
- Although elevated chloride levels in soil, compared to background levels on the subject property, were determined by laboratory analysis, the contamination is not believed to be significant enough to have impacted the groundwater (relatively low chloride levels were observed at 30 feet BSG in all soil borings).
- Elevated inorganic compounds such as chloride, fluoride, and TDS were observed in the groundwater; however, the levels are consistent with the shallow-perched aquifer in this area. Within one mile of the subject property there are 109 oil production wells, which may have potentially contributed to the elevated anions and TDS observed in the regional shallow groundwater. This finding would be consistent with shallow groundwater impacts throughout the Permian Basin of southeastern New Mexico.

## **11.0 LIMITATIONS**

### **11.1 LIMITING CONDITIONS**

RESPEC's site inspection was a walking inspection of areas that were accessible by foot, and a drive-by inspection of surrounding and adjacent properties, including those properties identified in the environmental database search. No conditions that would

limit RESPEC's ability to complete the scope of work were encountered during the performance of the Phase I and Phase II ESA.

## **11.2 LIMITATIONS OF THE ASSESSMENT**

The Phase I and Phase II ESA was prepared in accordance with the scope of services described in Section 2.2. The work conducted by RESPEC is limited to the services upon which RESPEC and the OCD agreed, and no other services beyond those explicitly stated should be inferred or are implied.

The conclusions presented in this report are professional opinions based solely upon RESPEC's visual observations of the site and the immediate site vicinity, and upon RESPEC's interpretations of the readily available historical information, conversations with personnel knowledgeable about the site, and other readily available information, as referenced in the report. These conclusions are intended exclusively for the purpose stated herein, at the site indicated, and for the project indicated.

The environmental database information is reported as RESPEC received it from EDR, which in turn reports information as it is provided in various government databases. It is not possible for either RESPEC or EDR to verify the accuracy or completeness of information contained in these databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence.

It is agreed that the information provided by RESPEC is for the exclusive use of the OCD. The scope of services performed during this investigation may not be appropriate for other users, and any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

This study was not intended to be a definitive investigation of contamination at the subject property. The purpose and scope of this investigation was to determine if there is reason to suspect the possibility of contamination at the site. Other than as discussed in this report, no additional exploratory borings, soil or groundwater sampling, or laboratory analyses were performed at the property; therefore, the conclusions set forth herein are made without the benefit of such additional investigation.

This report is intended for use in its entirety. No excerpts may be taken to be representative of the findings of this assessment.

Opinions and recommendations presented in this report apply to site conditions and features as they existed at the time of RESPEC's site visit and to those reasonably foreseeable. They cannot necessarily apply to conditions and features of which RESPEC is unaware and which RESPEC has not had the opportunity to evaluate.

## 12.0 REFERENCES

**American Society for Testing and Materials (ASTM).** Standard E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, May 2000.

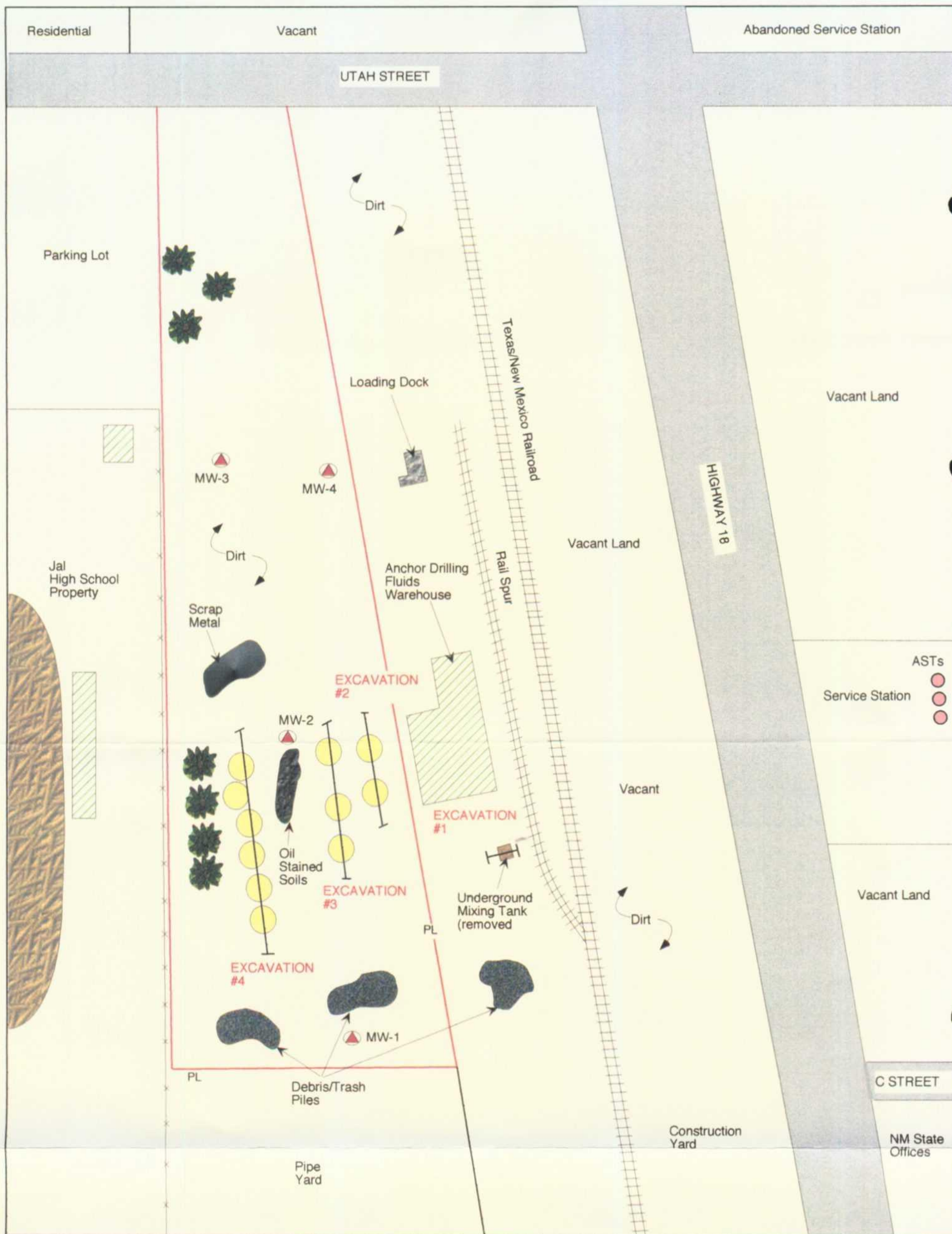
**DeLorme Topo USA® 3.0, Southwest Region © 2001.** 1:24,000 scale topographic map for Eunice, New Mexico.

**Environmental Data Resources, Inc.** October 22, EDR-Radius Map with Geocheck, CR 33 & Hwy 8, Eunice, New Mexico, Inquiry Number 0825932.1r.



FIGURE 1: VICINITY MAP





#### EXPLANATION:

Monitor Well Location

Building

Asphalt

Concrete

Above Ground Storage Tank

PL Property Boundary

Fence

0 60 ft

Scale 1"=60'



#### SITE MAP RUNCO, INC. Jal, New Mexico

Drawn by: JB 10/04

Drafted by: ABL 10/04

Approved by: JB 10/04

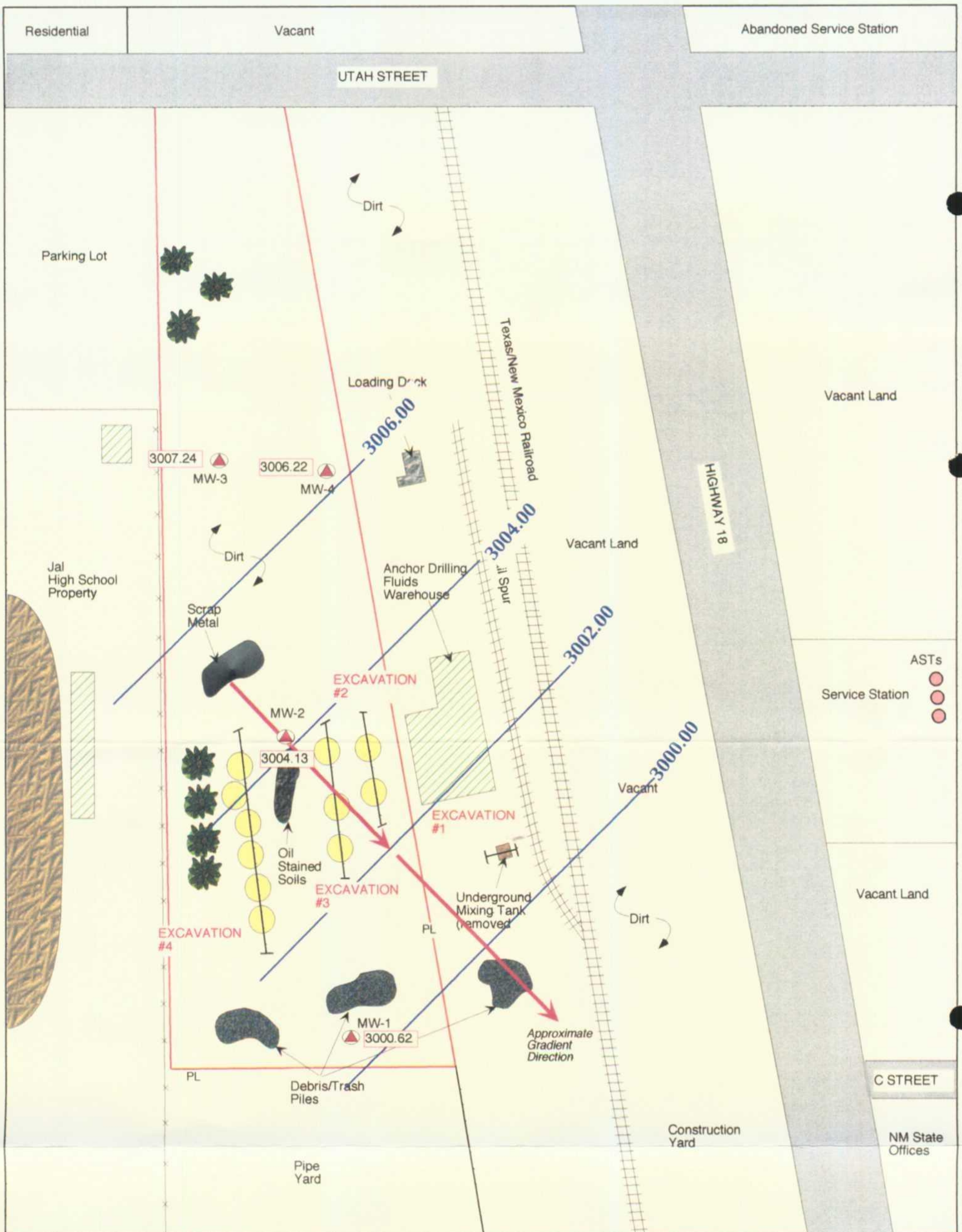


**RESPEC**  
An Integrated  
Consulting  
and Services  
Company

Job #1507/1.0

Figure 2





# EXPLANATION:

Monitor Well Location

Building

Asphalt

Concrete

Above Ground Storage Tank

PL Property Boundary

Fence



0 60 ft  
Scale 1"=60'

Groundwater Surface Contours  
MW-1  
Groundwater Elevation  
3000.62  
Gradient Direction  
Gradient S 42 E  
 $\Delta = 0.02 \text{ ft/ft}$

## GROUNDWATER GRADIENT MAP

RUNCO, INC.  
Jal, New Mexico

Drawn by: JB 10/04  
Drafted by: ABL 10/04  
Approved by: JB 10/04



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Company

Job #1507/1.0

Figure 3





#### EXPLANATION:

Monitor Well Location

Building

Asphalt

Concrete

Above Ground Storage Tank

PL Property Boundary

Fence

0 60 ft

Scale 1"=60'



#### ANION AND TDS CONCENTRATIONS IN GROUNDWATER MAP (mg/L)

RUNCO, INC.  
Jal, New Mexico

Drawn by: JB 10/04

Drafted by: ABL 10/04

Approved by: JB 10/04



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Consulting  
and Services  
Company

Job #1507/1.0

Figure 4

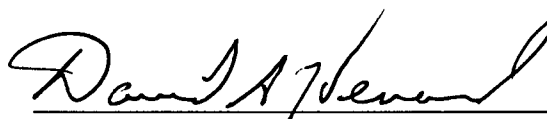
**APPENDIX A**

**SIGNATURES OF RESPEC PERSONNEL**

Signatures of RESPEC environmental professionals involved in the preparation of this report:

A handwritten signature in black ink, appearing to read "John R. Bunch", written over a horizontal line.

John R. Bunch, PG  
Project Geologist

A handwritten signature in black ink, appearing to read "David A. Henard", written over a horizontal line.

David A. Henard  
Manager, Environmental Department

**APPENDIX B**

**LIST OF OWNERS  
OF  
ADJACENT PROPERTIES**

## APPENDIX B

### Adjacent Property Owners List

- 1) (West) Anchor Drilling Fluids USA, Inc.

Warehouse:

320 S. Highway 18

PO Box 1061

Jal, NM 88252

Phone 505-395-2849

Permian Basin Division, Regional Office:

12701 W. Country Road #133

PO Box 60878

Midland, TX 79711-0878

Phone 432-561-5661

Fax 432-561-5661

Email [adfmidland@anchorusa.com](mailto:adfmidland@anchorusa.com)

Web [www.anchorusa.com](http://www.anchorusa.com)

- 2) (East) Jal Public Schools  
105 East Utah Avenue  
P.O. Box 1386  
Jal, NM 88252  
Phone 505-395-2101  
Fax 505-295-2146
- 3) (South) Merrryman Construction Co  
Highway 18 S  
Jal, NM  
Phone 505-395-3110
- 4) (North) Unknown  
Gilbert Martinez  
City of Jal  
Environmental Officer  
505-395-3340

**APPENDIX C**  
**SITE PHOTOGRAPHS**



*Site Before Tank/Debris Removal*



*Former Anchor Office at Site*



*Gang Truck and Backhoe/Loader*



*Safety Trailer*





*Hot-Oil Truck*



*Temporary Muck Pile*



*Temporarily placing tank muck on concrete pad (Tank #4)*



*Tank #4 after mucking out bottom*





*Tank #3 after mucking out*



*Tank #5 footprint (after removal of tank)*



*Tank footprint adjacent to Tank #5 (former tank location)*



*Tank #2 – removing side panels*





*Tank # 2 – after mucking with backhoe*



*Tank #3 after cleaning*



*Scrapped tanks to be removed to Sundance*



*Using torch to cut off top portion of tank*





*Tank #8 after removing top portion of tank*



*Muck pile remaining on site*



*Scrap metal needing to be cut up and hauled off site*



*Excavation exposing underground mixing tank*





*Excavating underground mixing tank*



*Underground mixing tank*



*Tank removed from ground*



*Tank pit - no soil staining observed*





*View toward Jal High School after restoration*



*View toward Utah Avenue after restoration*



**APPENDIX D**

**ASBESTOS INVESTIGATION REPORT**

**ASBESTOS INVESTIGATION  
OF  
STRUCTURES AND PIPING  
ON  
THE OCD RUNCO PROJECT SITE**

**NEW MEXICO HIGHWAY 18  
AND  
EAST UTAH STREET  
JAL  
LEA COUNTY, NEW MEXICO**

**PREPARED FOR:  
NEW MEXICO OIL CONSERVATION DIVISION**

**PREPARED BY:  
RESPEC**

**SEPTEMBER 17, 2004  
PROJECT NO. 1507-1.0**

**ASBESTOS INVESTIGATION  
OF  
STRUCTURES AND PIPING  
ON  
THE OCD RUNCO PROJECT SITE**

**NEW MEXICO HIGHWAY 18  
AND  
EAST UTAH AVENUE  
JAL  
LEA COUNTY, NEW MEXICO**

**SUBMITTED TO:**

**NEW MEXICO OIL CONSERVATION DIVISION  
1220 SOUTH SAINT FRANCIS DRIVE  
SANTA FE, NEW MEXICO 87505**

**SUBMITTED BY:**

**RESPEC  
4775 INDIAN SCHOOL ROAD, NE  
SUITE 300  
ALBUQUERQUE, NM 87110**

**SEPTEMBER 17, 2004**

---

**L. E. Archambault, RHSP  
Certified Asbestos Inspector  
Certification # 031904-07  
(certificate expiration date 03/21/05)**



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3.0 LIMITATIONS .....	2
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4.2 Sampling Procedures.....	4
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6.0 RECOMMENDATIONS.....	7
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## **ATTACHMENTS**

<b>Attachment 1</b>	Site Plan and Asbestos Sampling Locations
<b>Attachment 2</b>	Asbestos NESHAP Inspection, Sampling, and Analysis Plan
<b>Attachment 3</b>	Asbestos Field Notes and Sampling Logs
<b>Attachment 4</b>	Asbestos Sampling Site Photographs
<b>Attachment 5</b>	Asbestos Chain-of-Custody Forms and Laboratory Reports

## 1.0 INTRODUCTION

RESPEC Environmental (RESPEC) was retained by the New Mexico Oil Conservation Division (OCD) to conduct an asbestos inspection with sampling of the structures and piping located on an acidizing and refracturing site that is to be remediated. With the exception of the warehouse building and the loading dock structure, the remaining tanks, structures, and piping on the site are to be demolished and removed. The site, known as the RUNCO Project site, is located on the west side of New Mexico State Highway 18 (NM 18) at the intersection of NM 18 and East Utah Avenue in Jal in Lea County, New Mexico.

The asbestos inspection and sampling were conducted to satisfy the pre-demolition/renovation requirements of the asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP). The project manager for RESPEC was Ms. Lucy Archambault, certified asbestos inspector/management planner (Inspection Certification Number 031904-07 and Management Planner Certification Number 031904-16).

## 2.0 SCOPE OF WORK

The purpose of the asbestos inspection and sampling was to establish the presence or absence of asbestos in suspect materials and to identify the quantity, class, and condition of those materials. Knowledge of the presence and condition of the asbestos-containing materials (ACMs) and the overall condition of the materials and the structures they are in or on will allow the development of an abatement plan for the ACMs, the completion of a pre-renovation/demolition notification, and the development of a demolition plan with appropriate personal and public protection measures if the ACMs cannot be abated prior to demolition.

The following steps were to be used to complete the project:

- Develop a site asbestos inspection, sampling, and analysis plan based on information provided by OCD and site visits by RESPEC personnel prior to the project bid.
- Conduct a site inspection to establish the actual number of asbestos samples to be taken and the asbestos sampling locations.
- Sample the suspect materials in accordance with the inspection, sampling, and analysis plan.
- Evaluate the results of the laboratory analyses.
- Prepare a report of the findings and recommendations.

An estimated 20 bulk samples were to be taken and analyzed for asbestos by polarized light microscopy (PLM) in accordance with 40CFR763 Subpart F, Appendix A. Laboratory analysis was to be done with an extended turn-around time, guaranteed 15 working days from laboratory receipt of the samples.

The inspection and sampling were conducted and completed on Tuesday, August 17, 2004, by Ms. Archambault. A total of 26 samples were taken.

The asbestos results were to be verbally reported to Mr. Dave Henard of RESPEC on August 24, 2004. The only material that may require abatement is the sheet vinyl flooring in the southwest office area. Abatement is required only when the area is to be renovated or if the building is to be demolished. No arrangements for the abatement of the flooring. This asbestos investigation report will be included in the RESPEC project report to OCD.

### 3.0 LIMITATIONS

This report has been prepared for the exclusive use of RESPEC on behalf of OCD to support proposed renovation/demolition activities at the subject property. Any other use of the report may be inappropriate. All work has been performed in accordance with generally accepted environmental assessment practices. No warranty is expressed or implied.

The asbestos investigations were conducted based on observations of the investigator at the time of the site visits, on information from individuals familiar with asbestos regulations, and on information from individuals familiar with the site. The investigation was conducted in accordance with the Asbestos Hazard Emergency Response Act (AHERA) guidelines. Unless contradicted by conflicting data obtained independently during the conduct of the work, all information obtained has been accepted at face value. Information from interviews or from the independent laboratory may be inaccurate and/or incomplete. The information and conclusions in this report are subject to the accuracy, completeness, and availability of such data.

A not-to-scale site plan was developed from the zoning plat and legal description provided to RESPEC by OCD. The site plan is provided in Attachment 1. The square and linear footage of materials were calculated from measurements taken on site. An estimate was made of the square footage of tank surfaces that were coated with bituminous material. Because of the tank locations within debris piles, accurate measurements could not be made. Two of the materials sampled were in chunks or were powder. An estimate of cubic feet of these materials was made. A linear or square foot designation was not appropriate for these materials.

The number of suspect materials sampled and analyzed for asbestos was based on the AHERA sampling guidelines as described in the Inspection, Sampling, and Analysis Plan developed for this project (Attachment 2). The NESHAP pre-renovation/demolition inspection regulations require, but do not define, thorough inspection and sampling. RESPEC believes that the

AHERA guidelines provide a reliable definition of thorough inspection and sampling that is suitable for NESHAP work. Those guidelines were followed for this project.

Implementation of any recommendations contained in this report does not ensure that all environmental risks will be eliminated or that all legal obligations will be met.

#### **4.0 ASBESTOS INVESTIGATION**

##### **4.1 Introduction and Background**

The exact construction dates of the various structures in not known. The structures on the site include:

- Three debris piles containing tanks, piping, and concrete.
- A 50-foot by 98.6-foot warehouse building with an approximately 48-foot by 57-foot covered parking area. The building had two office spaces in the north and southwest corners of the building. The southwest space was divided into an office, a restroom, a storage room, and a hallway connecting the three rooms.
- A 19-foot by 20-foot by 6-foot high loading dock with a ramp.

The building and loading dock were adjacent to the railroad tracks the parallel the eastern boundary of the site. Debris Pile 1 was near the southwest corner of the site. Debris Pile 2 was off the southwest corner of the building. Debris Pile three was near the western property boundary off the northwest corner of the building.

The current project at this site consists of the removal of the debris piles and general clean up of the site. At the time of the asbestos investigation, there were no immediate plans to remove or renovate the warehouse building.

Asbestos materials were banned from use in building materials in 1978. However, the existing supplies of building materials containing asbestos could still be sold and were widely used in building construction until the early 1980s. For some applications such as boiler gaskets and brake shoes asbestos was used as late as the mid-1990s. Today, there is still limited use in roofing and in items such as brake shoes and boiler door gaskets. Because the construction dates for the tanks and the building are unknown, there is a potential that asbestos might be present in the building materials on the site.

The inspection of the site found the following materials that could potentially contain asbestos:

- Asphalt caulk near the southwest corner of Pile 1.
- Roof coatings on some of the tanks in Piles 1 and 3.

- Bituminous coatings on tank and pipe exteriors and some tank interiors.
- Sheetrock that had been textured and painted in the office areas.
- The textured ceiling in the northwest office area.
- Vinyl tile and sheet vinyl flooring and associated mastics.
- Composite ceiling panels in the southwest office area.
- Wall insulation in the office areas.
- Gray cellulose-like material on the warehouse floor.
- White gypsum-like material on the floor in the warehouse and in debris piles 1 and 2.

Asphalt roofing materials and the other asphalt or bituminous coatings are considered a Class I Non-Friable materials. The flooring is considered Class II Non-Friable. However, all of the asphalt and bituminous coatings were in poor condition and were friable. The flooring could potentially become friable when it is removed. The remaining sampled materials are considered friable.

The quantities, classes, and conditions of the suspect materials are summarized in Table 1.

**TABLE 1: SUSPECT ASBESTOS MATERIALS - TYPE AND QUANTITY**

SUSPECT MATERIALS	MATERIAL CLASS	CONDITION	ESTIMATED TOTAL QUANTITY
Sheetrock Walls	Friable	Fair to Poor	1,616 sq. ft.
Textured Sheetrock Ceiling	Friable	Good	154 sq. ft.
Composite Ceiling Tile	Friable	Fair to Poor	154 sq. ft.
12" vinyl tile	Class II Non-Friable	Good	154 sq. ft.
Sheet Vinyl Flooring-Irregular Brick Pattern	Class II Non-Friable	Fair	98 sq. ft.
Sheet Vinyl Flooring-White Pattern	Class II Non-Friable	Fair to Poor	56 sq. ft.
White Gypsum-like Material	Friable	NA	1,337 cu. Ft.
Gray Insulation	Friable	NA	0.669 cu. Ft.
Bituminous Coating	Friable	Poor	700 sq. ft.
Asphalt caulk	Class I Non-Friable	Poor	3 linear ft.
Asphaltic Coating Tank Tops	Class I Non-Friable	Poor	255 sq. ft.

#### 4.2 Sampling Procedures

Once the types, conditions, and quantities of suspect materials had been identified, the number of each type of sample and the sampling locations were established in accordance with the Asbestos Inspection, Sampling, and Analysis Plan (the Plan) provided as Attachment 2.

Sixteen (16) samples of suspect materials were collected and analyzed in accordance with the Plan.

Field notes and sampling logs are provided as Attachment 3.

Photographs of the asbestos sample sites are provided as Attachment 4.

The numbers in each photograph correspond to the sample numbers found on the sample log in Attachment 3. Sampling locations are shown on the site plan (Attachment 1).

The samples were shipped to TraceAnalysis, Inc., in Lubbock, Texas, by United Parcel Service on Thursday, August 19, 2004. TraceAnalysis, Inc., forwarded the samples to Kevco Laboratory and Consulting Services, a certified asbestos laboratory in Butler, Pennsylvania, on Friday, August 20, 2004. A faxed report of the analytical results was received by RESPEC on Monday, August 23, 2004. The written detailed report was received by RESPEC on Thursday, August 26, 2004. Ms. Archambault gave a verbal report on the asbestos to Mr. David Henard of RESPEC on Tuesday, August, 24, 2004. A copy of the final laboratory asbestos report and the chain-of-custody forms are provided as Attachment 5. The analytical results are summarized in Table 2.

**TABLE 2: ASBESTOS ANALYTICAL RESULTS**

<b>SAMPLE NUMBER</b>	<b>SAMPLE LOCATION</b>	<b>SAMPLE DESCRIPTION</b>	<b>PERCENT ASBESTOS</b>	<b>ASSESSED CONDITION</b>
1	SW Corner Pile I	Asphalt Caulk	<1	Friable – fair to poor condition
2	NE Corner Pile I Tank Roof	Shiny Bituminous Coating,	NAD	Friable – poor condition
3	Southside Pile 1	White Gypsum-like Material	NAD	Friable – powdery
4	NW Office by Exterior Door	12" Vinyl Tile with a Beige Stone Chip Pattern and Mastic	NAD	Potentially friable during removal – good condition
5	SW Office Area in Hallway	Sheet Vinyl with Irregular Brick Pattern and Mastic (Primary Flooring in SW Office Area)	25-30	Potentially friable during removal – fair to poor condition
6	SW Office Area near Exterior Door	White Sheet Vinyl Flooring with Pattern and Mastic	NAD	Potentially friable during removal – poor condition
7	Ceiling SW Office Area Hallway	White Composite Ceiling Panel	NAD	Friable – fair to poor condition
8	Ceiling SW Office Area Hallway	Asphalt Coated Composite Ceiling Panel	NAD	Friable –fair to poor condition

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	PERCENT ASBESTOS	ASSESSED CONDITION
9	Warehouse Floor near Center	Gray Cellulose-like Material or Insulation	NAD	Friable – poor condition
10	Warehouse Floor near East Wall, North Bay Door	White Gypsum-like Powder	NAD	Friable – poor condition
11	NW Office Ceiling	Texture	NAD	Friable - good condition
12	NW Corner Pile 1	White Gypsum-like Material	NAD	Friable – poor condition
13	N End Pile 3	Asphalt Tank Roof Coating	NAD	Friable – poor condition
14	NW Office Area Wall	Insulation	NAD	Friable – fair condition
15	NW Office Area Wall	Sheetrock and Tape Joint Compound	NAD	Friable – fair to poor condition
16	N End Pile 3	Bituminous Tank Interior Coating	NAD	Friable – fair to poor condition

\* NAD means no asbestos Detected

#### 4.3 Analytical Results

Laboratory results indicate that asbestos was present in the sheet vinyl flooring with an irregular brick pattern that is located in the southwest office area. One asbestos fiber bundle was identified on the asphalt caulk sample taken from chunks of the material located near the southwest corner of Pile 1. No other asbestos was detected during the sample analysis.

#### 4.4 Discussion

The total square and/or linear footage of each identified, homogeneous, ACM that contains one percent or more asbestos and that has been identified as friable or is considered friable, is sufficient to require NESHAP demolition/renovation reporting. Therefore, all ACM materials must be reported. The sheet vinyl flooring in the southwest office area is the only identified ACM. That flooring is in fair to poor condition and may become friable upon removal. No other ACMs were identified during the investigation. The asphalt caulk with one bundle of asbestos fibers was overall less than one percent and is not considered to be an ACM.

Abatement will be necessary for the flooring if the warehouse building is to be renovated or demolished. The removed materials will need to be disposed at a facility permitted to accept ACMs.

## **5.0 CONCLUSIONS**

Based on the NESHAP requirements for renovation/demolition, the identified, friable or potentially friable ACMs that may be or will be disturbed by the renovation/demolition activities will require abatement before renovation can proceed. If abatement is not feasible for a structure, then all debris from the demolition/renovation must be considered asbestos-contaminated and must be disposed as ACMs. Also, if the ACMs are not abated, appropriate renovation procedures must be followed to confine and contain the asbestos fibers in the renovation debris. At least 10 days prior to the start of abatement or renovation, appropriate pre-demolition forms must be completed and submitted to the New Mexico Environment Department. The information required to complete the notifications is contained in Tables 1 and 2.

## **6.0 RECOMMENDATIONS**

Based on observations made during the site visit and based on the analytical results, RESPEC makes the following recommendations:

- Where feasible, abate the ACMs and take them to a landfill permitted to accept ACMs. The material to be abated is the sheet vinyl flooring in the southwest office area.
- Use contractors certified to abate the asbestos.
- Use certified waste haulers for the asbestos waste.
- Use a disposal facility permitted to accept asbestos waste.

## **7.0 CONTACTS**

Mr. Jimmy Bice, Project Manager Todd Crain, Hobbs, New Mexico, (505) 631-9827.

Mr. David Henard, RESPEC, Albuquerque, New Mexico, (505) 268-2661.

Mr. Gilbert Martinez, City of Jal Environmental Officer, Jal, New Mexico (505) 395-3340.



Asbestos Investigation of  
Structures and Pipes  
OCD RUNCO Project Site  
RESPEC Project No. 1507-1.0

## **ATTACHMENT 1**

### **Site Plan and Asbestos Sampling Locations**

**East Utah Avenue**

**Railroad**

**Loading Dock**

**Covered Vehicle Parking**

**Highway 18**

**Pile 3**

**Pile 1**

**Pile 2**



**NOT TO SCALE**

**FOR: New Mexico Oil Conservation Division**

**RTUNCO Project  
Lea County, New Mexico**

PROJECT # 100748

CAD REF # 0880

DRAWN ON BY RESPEC  
01/10/04

**Attachment 1**

**Site Sketch  
with  
Asbestos Sampling Locations**

**RESPEC**

K HERWIG

N →

DICK HERWIG



BOOK 380 PAGE 354

## WARRANTY DEED

HAROLD L. RUNNELS and DOROTHY F. RUNNELS, husband and wife.

for consideration paid, grant to  
**RUNGO ACIDIZING & FRACTURING COMPANY, a New Mexico corporation, whose**  
**address is Post Office Box 937, Lovington, New Mexico 88260**  
 the following described real estate in LEA county New Mexico:

## SURFACE ESTATE ONLY:

A tract of land located in the Southwest Quarter (SW/4)  
 of Section 20, Township 25 South, Range 37 East, N.M.P.M.,  
 Lea County, New Mexico, described as BEGINNING at the  
 Southwest Corner of said Section 20, thence North 89°56'  
 East 1320 feet and North 0°03' West 811.6 feet to the point  
 of beginning, thence North 0°03' West 812.4 feet, North  
 89°56' East along the South line of East Utah Avenue  
 81.4 feet, South 0°38' East along West R/W line of  
 T-2M RR 620 feet, South 89°56' West 178 feet to the beginning.

with warranty covenants.

WITNESS OUR

November

and seal of this 3rd

A. D. 1979

HAROLD L. RUNNELS  
DOROTHY F. RUNNELS

(Seal)

(Seal)

## INDIVIDUAL ACKNOWLEDGMENT

STATE OF NEW MEXICO

COUNTY OF LEA

ss.

The foregoing instrument was acknowledged before me this 3rd day of November, A. D. 1979  
 by **HAROLD L. RUNNELS and DOROTHY F. RUNNELS, husband and wife.**

My Commission Expires:

My Commission Expires JULY 23, 1983

Kim Holden  
Notary Public

## CORPORATE ACKNOWLEDGMENT

STATE OF

COUNTY OF

ss.

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, A. D. 19\_\_\_\_.

by \_\_\_\_\_, President of \_\_\_\_\_

a corporation, on behalf of said corporation.

My Commission Expires:

Notary Public

STATE OF NEW MEXICO

County of

ss.

I hereby certify that this instrument was filed for  
 record on the 15th day of  
 April, A. D. 1980  
 at 1:15 clock P. M. and duly recorded in  
 Book \_\_\_\_\_ Page \_\_\_\_\_ of

Records of Records of said County

Doreen F. Smith  
County ClerkDoreen F. Smith  
Deputy

Rec. No. \_\_\_\_\_ Page 2

Return to \_\_\_\_\_

HEAL & HEAL, LAWYERS  
DOWNEY, NEW MEXICO

Asbestos Investigation of  
Structures and Pipes  
OCD RUNCO Project Site  
RESPEC Project No. 1507-1.0

## **ATTACHMENT 2**

### **Asbestos NESHAP Inspection, Sampling, and Analysis Plan**

**ASBESTOS INSPECTION, SAMPLING, AND ANALYSIS PLAN  
OCD PROJECT  
JAL, NEW MEXICO**

**1.0 INTRODUCTION**

This plan has been prepared for the asbestos inspection, with sampling, of the remaining infrastructure of an abandoned acidizing and fracturing company being remediated for the New Mexico Oil Conservation Division (OCD). The primary concern is the identification of asbestos containing materials on the property.

The general inspection procedure shall be:

- Prepare a site sketch.
- Inspect structures on the site to identify asbestos-suspect materials. Log the location, quantity, type, condition, and friability of each asbestos-suspect material.
- Group asbestos-suspect materials into homogeneous areas.
- Select random sampling locations and collect samples in accordance with Section 2.0 of this procedure. All sample locations will be logged and described in detail to allow the sample points to be identified in the future. Where possible, sample points will be marked with the sample number on a post-it note pad. Photographs will be taken of the sampling locations.

For NESHAP purposes, each asbestos-suspect material shall be classified as follows during the inspection:

- Category I Non-Friable (packings, gaskets, resilient floor coverings, and asphalt roofing products).
- Category II Non-Friable (any other asbestos-containing material that is not friable).
- Friable.

A copy of this plan shall be present at the sampling site.

**2.0 SAMPLE REQUIREMENTS**

Sufficient samples have to be collected to demonstrate that suspect materials either contain or are free of asbestos. To accomplish this, Asbestos Hazard Emergency Response Act (AHERA) sample requirements will be met. AHERA does not include materials that are not building materials. The

inspection being conducted under this plan covers AHERA identified asbestos-suspect materials in the facilities.

For each homogenous area, the minimum sample requirements are:

Surfacing Materials

Homogeneous area < 1000 square feet - three samples  
Homogeneous area 1000-5000 square feet - five samples  
Homogeneous area > 5000 square feet - seven samples

Thermal System Insulation

Each homogeneous area - three samples  
Each patched section - one sample  
Cemented fittings - one sample

Miscellaneous Material

Each Material - one sample

Normal (five-to-ten days) laboratory turn-around time is required.

For budgetary purposes, the required number of samples is estimated to be 20.

### **3.0 ANALYSIS METHODS AND QUALITY CONTROL**

Each sample shall be analyzed for asbestos content using the Polarized Light Microscopy (PLM) method described in 40CFR763, Subpart F, Appendix A. The asbestos content of samples of friable materials that contain between trace (less than one percent) and one percent asbestos shall be subjected to a point-count analysis. Point counting shall be used on any sample for which doubt exists about the percent asbestos.

Asbestos samples will be analyzed at a laboratory that is accredited for AHERA program bulk analyses by the National Voluntary Laboratory Accreditation Program (NVLAP) under the National Institute of Standards and Technology and the NIOSH Proficiency in Analytical Testing Program (PAT). Unless conditions at the time of sampling dictate otherwise, the samples are to be analyzed at a certified laboratory used by Trace Laboratories in Lubbock, Texas.

Split samples and field-blank protocols are not required for this project.

#### **4.0 PERSONAL SAFETY**

The safety of the inspector is paramount. The inspector is not expected to place himself in danger for the sake of inspecting or collecting samples. The decision to enter a building or collect samples rests with the inspector.

The personnel taking the samples shall use safety glasses, half-face respirators with High Efficiency Particulate Air (HEPA) filters and disposable gloves when collecting the samples of potentially friable materials.

A disposable coverall shall be worn for overhead sampling and for sampling of friable materials.

Disposable personal protective equipment shall be bagged at the conclusion of sampling and managed as asbestos-containing waste.

When friable or potentially friable materials are being sampled, the client or building-owner representative(s) accompanying the sampler will either wear their personal and appropriately fitted protective equipment (half-face respirator with HEPA filters and disposable coveralls) or will be asked to leave the immediate area of sampling.

Because the site is being demolished, hard hats, steel-toed boots, and safety glasses will be required. Hearing protection will be required if the sampling area is in a high noise area.

#### **5.0 SAMPLING PROCEDURES**

Sampling procedures to be used will depend upon the type of materials encountered. When suspect materials may contain more than one layer, core samples shall be collected.

Samples of floor tiles and other materials that may be glued shall include the mastic or glue.

Every effort will be made to avoid unnecessary disturbance of the materials. Because the structures are to be demolished, no attempt will be made to patch sample areas.

The inspector may be required to breach building structures to ascertain whether asbestos-suspect materials are contained within.

When suspect material has to be cut, cored, or broken to obtain a sample, or when sampling loose friable materials, the area will be dampened with water to minimize the release of fibers. After a sample is taken, the immediate area of the sample points should be wet cleaned with a paper towel and the towel placed in the waste-accumulation bag.



When sampling friable materials, or loose overhead materials, disposable plastic sheets will be used under the area to control the spread of debris. Sheets shall be collected and managed as waste materials.

About one ounce of material is required for each sample. The sample will be placed in a plastic ziplock bag. The bag will be sealed with tape and marked with a sample number. Other suitable sample containers may be used as long as they can be sealed to minimize the chance of inadvertent opening and can be marked with a sample number.

Care shall be taken to prevent sample cross-contamination. If a knife or coring tool has been used to cut out material, the knife or coring tool will be cleaned with water and paper towels before being used again. Disposable gloves will be discarded following use on a friable material.

Tools used to obtain samples of petroleum-based material such as roofing tar will be cleaned with paint thinner and paper towels before being used for a succeeding sample.

The inspector shall collect all waste material and shall dispose of the material off-site commensurate with the nature of the waste. When possible, de-minimus debris will be forwarded to the laboratory for disposal.

## **6.0 SAMPLE PRESERVATION AND PREPARATION FOR TRANSPORTATION**

The samples being collected do not require sample-preservation action.

For transportation to the laboratory, the sample containers will be placed in a heavy plastic bag (or double bag) and the bag sealed with tape.

The samples will be placed in a shipping container (sturdy cardboard box) along with a completed analysis-request/chain-of-custody form. The container will be sealed with filament tape.

The sampler shall sign and place a business card across the opening and tape the card and container such that the card will have to be destroyed to open the package. The package shall be forwarded to the laboratory by Federal Express or United Postal Service (UPS) priority service.

## **7.0 RECORDS AND LOGS**

### **7.1 Sampling Log**

A field-activity log and a sampling log covering all sampling operations will be maintained.

## **7.2 Chain-of-Custody and Analysis-Request Form**

A combined chain-of-custody and analysis-request form shall accompany all samples forwarded to a laboratory for analysis.

## **7.3 Laboratory Reports**

The laboratory report shall include the following information:

- sample number,
- laboratory identification number,
- analysis parameter,
- analysis results,
- units of measurement,
- analysis detection level,
- analysis method used, and
- signature of analyzer or supervisor.

## **8.0 SUBCONTRACTORS**

No subcontractors are required to accomplish the sampling specified in this plan.

## **9.0 SAMPLING EQUIPMENT AND SUPPLIES**

The following equipment and supplies are required to conduct the sampling described in this plan:

- disposable gloves
- half-face respirator with HEPA filters
- sample shipping container
- indelible marking pen
- clear filament tape and duct tape
- heavy-duty, one-quart, zip-lock plastic bags
- knife, corer, and related hand tools
- paper towels
- supply of water and plastic wash bottle
- supply of paint thinner
- non-asbestos roof patch
- spackling plaster or similar patch for sheetrock
- plastic, 30-gallon trash bag
- measuring tape
- clip board and any necessary forms.

Asbestos Investigation of  
Structures and Pipes  
OCD RUNCO Project Site  
RESPEC Project No. 1507-1.0

### **ATTACHMENT 3**

#### **Asbestos Field Notes and Sampling Logs**



LEA ENVIRONMENTAL

FIELD ACTIVITY  
DAILY REPORT

PROJECT NAME: RESPEC-JAL

OCD-RUNCO

DATE 8 17 04

PROJECT NUMBER: 1502-1.0

PAGE 1 of 3

LOCATION: Jal NM

## DESCRIPTION OF DAILY ACTIVITIES AND EVENTS (PROVIDE NECESSARY SKETCHES):

Travel 6:45-7:45.

395-3390 Gilbert Martinez  
City Jal Env. officer

7:45-11:45 on site

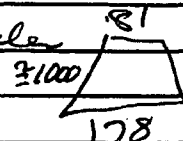
Bldg 50 wide by ~~120~~ 98.6 longNW corner 14 x 11 Office Vitrified  
spray on acoustical ceiling,  
insulation exposedSheetrock walls  
Painted & paneledSW corner offices & restrooms 3 types vinyl flooring 14 x 11  
paneled on sheet rock interior wallsexterior walls - one painted one not - unpainted - no joint  
compound

gray material on floor - ? cellulose insulation

White powder by N rail side bay door.

White chunks of NW corner of Pile #1

Down to fox legal &amp; zone map - property roughly triangular



## WEATHER CONDITIONS:

## LAST NIGHT

## VISITORS ON SITE:

TEMPERATURE RANGE: 10 °F

°F

Jimmy BICE PM - CRANE

GILBERT MARTINEZ - CITY OF JAL ENV. OFFICER

4 APS Employees - removing scrap metal.

PRECIPITATION: inches of

inches

WIND: to M.P.H.

## TELEPHONE CALLS (PROVIDE RECORD OF CONVERSATIONS):

## ATTACHMENTS:

1. 4.
2. 5.
3. 6.

Proj. Mgr  
"PUSHER"  
ON SITEJimmy BICE 631-9827 cell  
TOD CRANE 631-9494 phone

RESPEC-LEA PERSONNEL ON SITE: DAVE HENARD, Lucy Archambault

PREPARED BY: Lucy Archambault

DATE: 8/17/04

RECEIVED BY: Lucy Archambault

DATE: 8/17/04



LEA ENVIRONMENTAL

FIELD ACTIVITY  
DAILY REPORT

PROJECT NAME: OCD/RESPEC RUNDO 1507-1.0 DATE 8 17 04  
PROJECT NUMBER: 1507-1.0 PAGE 8 of 3  
LOCATION: JAL, NM

## DESCRIPTION OF DAILY ACTIVITIES AND EVENTS (PROVIDE NECESSARY SKETCHES):

GPS Pts. (NW corner 1350670895 355414 NAD 27  
SITE NE corner ~~1250670999~~ 3554145 1350670949  
SW corner 1350670895 3553958  
SE corner 1350670895 3553956  
(N 1350670921 3553997 E 1350670925 3553996  
Junk { S 1350670915 3553968 W } PILE 1350670924 3553991  
Pile 1 { E 1350670922 3553969  
W 1350670914 3553973

SE DOCK 1350670957 3554058  
(N 1350670927 3554081 CENTER DOCK 1350670949 3554145  
Junk Pile 3 { E 1350670926 3554054 CENTER DOCK ramp 1350670942 3554054  
S 1350670918 3554038 NW DOCK 1350670956 3554056  
W 1350670918 3554055 NE DOCK 1350670959 3554056  
SW DOCK 1350670952 3554056

Buildings NW 1350670952 3554043 NW 1350670957 3554056  
Corner NE 1350670959 3554040 NW 1350670951 3554054  
SW 1350670963 3554011 E FENCE END A.D. to S. 1350670956 3553983  
SE 1350670946 3554005 W. FENCE END A.D. to S. 1350670905 3553949

WEATHER CONDITIONS:

LAST NIGHT

VISITORS ON SITE:

TEMPERATURE RANGE: to °F °F

PRECIPITATION: inches of inches

WIND: to M.P.H.

TELEPHONE CALLS (PROVIDE RECORD OF CONVERSATIONS):

ATTACHMENTS:

1. 4.
2. 5.
3. 6.

LEA PERSONNEL ON SITE:

PREPARED BY:

DATE:

RECEIVED BY:

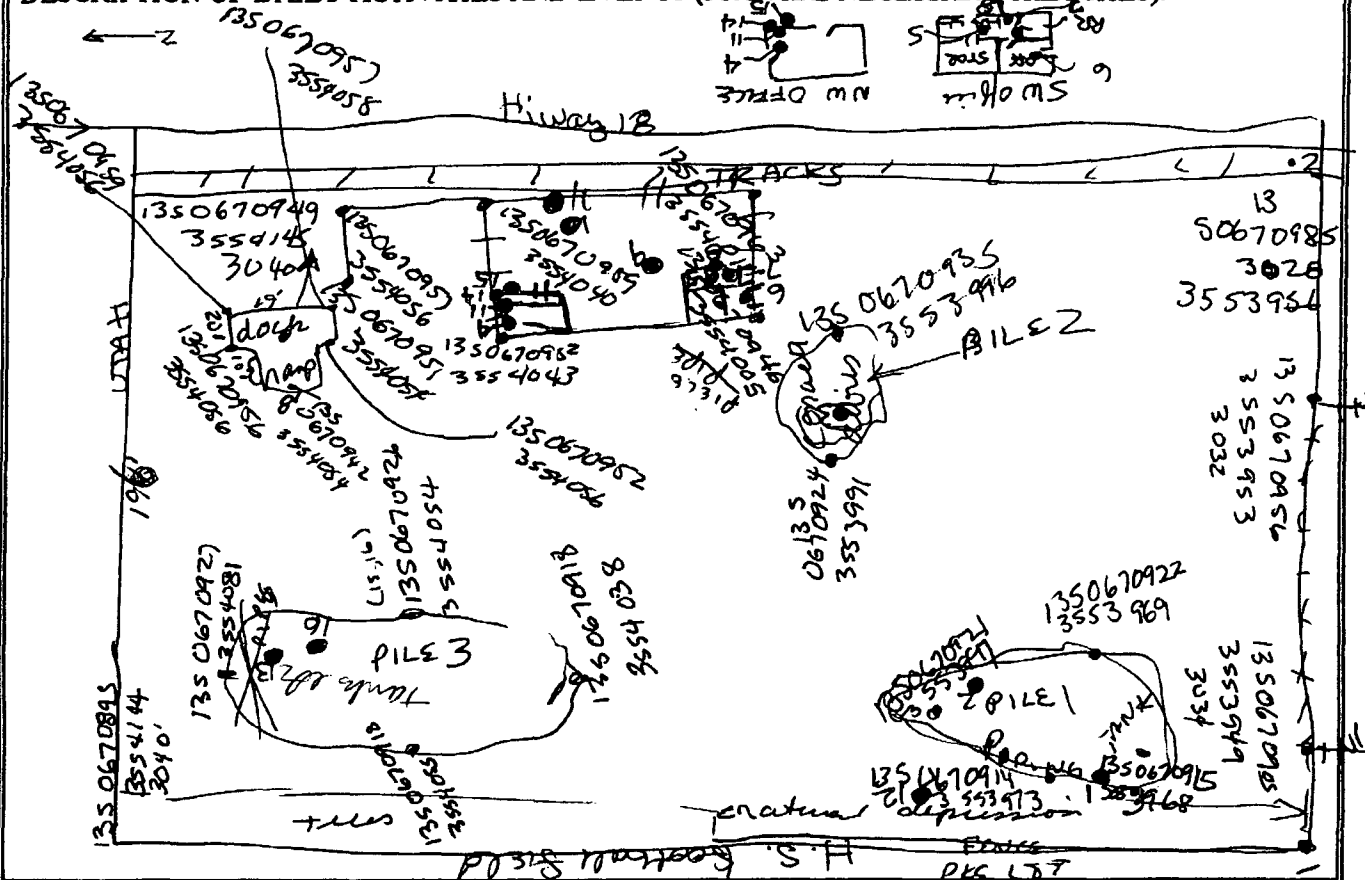
DATE:



LEA ENVIRONMENTAL

FIELD ACTIVITY  
DAILY REPORTPROJECT NAME: OC/RESPEO RUNCODATE 8 17 04PROJECT NUMBER: 1307-1.0PAGE 2 of 3LOCATION: JAL, NM

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS (PROVIDE NECESSARY SKETCHES):



WEATHER CONDITIONS:

Clear &amp; warm

LAST NIGHT

TEMPERATURE RANGE: 10 °F

°F

PRECIPITATION: 0 inches of

inches

WIND: 10 M.P.H.

ATTACHMENTS:

1. 4.
2. 5.
3. 6.

VISITORS ON SITE:

Jimmy RICE 631-9827  
Gilbert MARTINEZ  
(505) 375-3840

TELEPHONE CALLS (PROVIDE RECORD OF CONVERSATIONS):

Dave Henard

Aps crew J4 - cutting pipe to move

PERSONNEL ON SITE: Lucy E. ARCHAMBOULT, DAVE HENARD

PREPARED BY:

DATE:

RECEIVED BY:

DATE:

## Sample Log

393.2

Client: OCD/RESPEC RUNCO JAL, NM 1507-10 Date: 8/17/04Purpose of Sampling: ASBESTOS FOR NESHAPS

Sample Number	Type of Sample	Sample Volume	Sample Location	Remarks
1	Bulk	✓	aspartic material on ground SW corner of Pile #1	
2	Bulk	✓	shiny black - bituminous? coating Pile 1 off NE corner on metal roof	
3	Bulk	✓	white gyp material on S. side pile 2 suggested double or triple bag. fresh barrel in bag - carefully place material in bag. <del>seal</del> seal after all sack is found	
<del>4</del>	<del>Bulk</del>	<del>✓</del>	<del>NW office tile By office window</del>	
4	Bulk	✓	big brown stone chip pattern SW primary pattern broken 6 squares	
5-6	Bulk	✓	Being pattern SW office	
6-7	Bulk	✓		
7-8	Bulk	✓	painted ceiling board	
8-9	Bulk	✓	hanging ceiling board - asphaltic	
9-10	Bulk	✓	gray material } in bldg	
			white material }	
10-11	Bulk	✓	NW office ceiling - texture only	
11-12	Bulk			
12-13	Bulk			white material by debris pile 1

Sample LogClient: OCD/RESPC RUNCO JAL, NMDate: 08/17/04Purpose of Sampling: ASBESTOS FOR NESHAPS

Sample Number	Type of Sample	Sample Volume	Sample Location	Remarks
14 13	Bulk		for roof material Pile 3 coating near S end of pile	
14	Bulk	✓	insulation	
15	Bulk	✓	Sheet rock - top of compend	
16	Bulk	✓	? bituminous coating inside bulk - Pile 3 near NS end	



Asbestos Investigation of  
Structures and Pipes  
OCD RUNCO Project Site  
RESPEC Project No. 1507-1.0

## **ATTACHMENT 4**

### **Asbestos Sampling Site Photographs**



**Sample 1: Asphalt caulk near southwest corner  
of Pile 1.**



**Sample 2: Bituminous tank roof coating Pile 1.**



**Sample 3: White gypsum-like material from  
Pile 2.**



**Sample 4: 12" vinyl tile and mastic.**



**Sample 5: Southwest office hallway sheet vinyl flooring with irregular brick pattern.**



**Sample 6: Southwest office sheet vinyl flooring near exterior door.**



**Sample 7: Painted composite ceiling tile in the southwest office hallway.**



**Sample 8: Asphaltic composite ceiling tile in the southwest office hallway.**





**Sample 9:** Gray cellulose type material near center of warehouse floor.



**Sample 10:** White gypsum-like powder on warehouse floor near north bay door on east wall.



**Sample 11:** Northwest office ceiling texture.



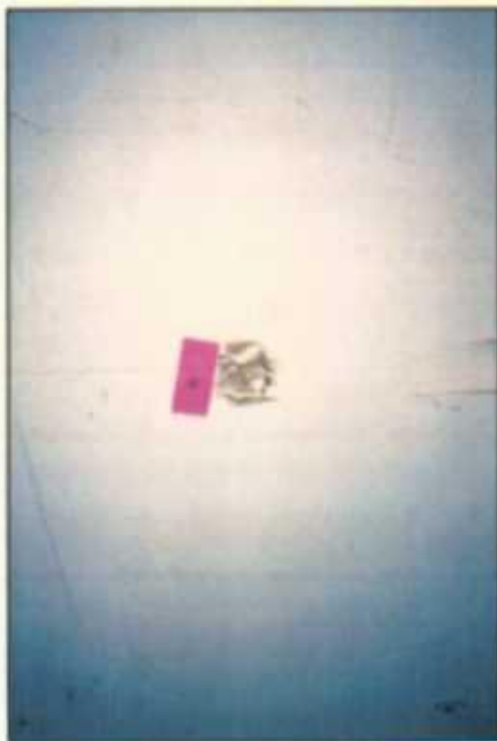
**Sample 12:** White gypsum-like material near Pile 1.



Sample 13: Tank roof coating from north end of  
Pile 3.



Sample 14: Northwest wall insulation.



Sample 15: Northwest office sheetrock wall  
with tape joint compound.



Sample 16: Interior bituminous tank coating  
from Pile 3.

Asbestos Investigation of  
Structures and Pipes  
OCD RUNCO Project Site  
RESPEC Project No. 1507-1.0

## **ATTACHMENT 5**

### **Asbestos Chain-of-Custody Forms and Laboratory Reports**

# Kevco

LABORATORY & CONSULTING SERVICES

## BULK ASBESTOS SAMPLE ANALYSIS REPORT

REPORT DATE: 8/23/04

TEST METHOD: 40 CFR CH. I (1-1-87 EDITION) PT 763,  
SUBPT. F APP. A. PAGES 293-299.REPORT TO: TRACEANALYSIS, INC.  
6701 ABERDEEN AVENUE  
LUBBOCK  
ATTENTION: MELL GREEN

TX 79424

ANALYST SIGNATURE:

GARY LANDINI

KEVCO JOB NUMBER:	18855	18855	18855
DATE RECEIVED:	8/23/04	8/23/04	8/23/04
DATE ANALYZED:	8/23/04	8/23/04	8/23/04
CLIENT SAMPLE ID:	41980	41981	41982
PROJECT ID:			
SAMPLE LOCATION:	**ONE ASBESTOS FIBER BUNDLE FOUND ON SAMPLE SURFACE		
IS THE SAMPLE HOMOGENEOUS?	NO	NO	YES
DOES IT CONTAIN LAYERS?	YES	YES	NO
IS THE SAMPLE FIBROUS?	NO	NO	NO
SAMPLE COLOR:	BLACK	BROWN/BLACK	WHITE
SAMPLE CONTAIN ASBESTOS FIBERS?	YES	NO	NO
ASBESTOS TYPE AND PERCENT:	CHRYSTOTILE < 1%		
TOTAL PERCENT ASBESTOS:	LESS THAN 1 PERCENT	0 PERCENT	0 PERCENT
FIBROUS MATERIALS AND PERCENT:	CELLULOSE 35 - 45 SYNTHETIC 01 - 02 HAIR (WOOL) < 1%	CELLULOSE < 1% SYNTHETIC < 1%	CELLULOSE < 1%
NONFIBROUS CONSTITUENTS:	MATRIX/FILLER	MATRIX/FILLER	BINDER/FILLER
DEVIATION FROM TEST METHOD:	*1	*1	

- THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND MUST NOT BE REPRODUCED EXCEPT WITH THE APPROVAL OF THE LABORATORY.
  - ALL SAMPLES WILL BE DISPOSED OF 90 DAYS FOLLOWING SAMPLE RECEIPT UNLESS OTHERWISE INSTRUCTED BY THE CLIENT.
  - UNDER CURRENT EPA REGULATIONS, AN "ASBESTOS CONTAINING MATERIAL" CONTAINS MORE THAN ONE PERCENT ASBESTOS.
  - UNLESS OTHERWISE STATED, TEST METHOD DOES NOT UTILIZE POINT COUNTING. QUANTITATION OF COMPONENTS BY VISUAL ESTIMATION DURING MACROSCOPIC AND/OR PLM EXAMINATIONS.
  - UNDER CURRENT NESHAP REGULATIONS, 40 CFR PART 61, ASBESTOS CONTENT IN SAMPLES WITH LESS THAN 10 PERCENT ASBESTOS MUST BE REVERIFIED BY PLM POINT COUNTING.
- THIS TEST REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

\*1 MATRIX OF SAMPLE DISSOLVED IN TETRAHYDROFURAN, HEATED, EVAPORATED, THEN ANALYSIS CONTINUES ACCORDING TO TEST METHOD.

**Kevco SERVICES INC.** • 890 PITTSBURGH ROAD • BUTLER, PA 16002  
TEL 724-586-6343 FAX 724-586-2172  
E-mail: kevco@penn.com

# Kevco

LABORATORY & CONSULTING SERVICES

## BULK ASBESTOS SAMPLE ANALYSIS REPORT

REPORT DATE: 8/23/04

TEST METHOD: 40 CFR CH. I (1-1-87 EDITION) PT 763,  
SUBPT. F APP. A. PAGES 293-299.REPORT TO: TRACEANALYSIS, INC.  
6701 ABERDEEN AVENUE  
LUBBOCK  
ATTENTION: WELL GREEN

TX 79424

ANALYST SIGNATURE:

GARY LARBINI

KEVCO JOB NUMBER:	18855	18855	18855
DATE RECEIVED:	8/23/04	8/23/04	8/23/04
DATE ANALYZED:	8/23/04	8/23/04	8/23/04
CLIENT SAMPLE ID:	41983	41983A	41984
PROJECT ID:			
SAMPLE LOCATION:		GLUE (ADHESIVE) FROM SAMPLE 41983	
IS THE SAMPLE HOMOGENEOUS?	NO	YES	NO
DOES IT CONTAIN LAYERS?	YES	NO	YES
IS THE SAMPLE FIBROUS?	NO	NO	NO
SAMPLE COLOR:	WHITE/TAN/BROWN	TAN	TAN/GRAY
SAMPLE CONTAIN ASBESTOS FIBERS?	NO	NO	YES
ASBESTOS TYPE AND PERCENT:			CHRYSTOLE 25 - 30
TOTAL PERCENT ASBESTOS:	0 PERCENT	0 PERCENT	TOTAL: 25 - 30
FIBROUS MATERIALS AND PERCENT:	CELLULOSE < 1% SYNTHETIC < 1%	CELLULOSE < 1% SYNTHETIC < 1% HAIR (WOOL) < 1%	CELLULOSE 01 - 02 SYNTHETIC < 1%
NONFIBROUS CONSTITUENTS:	MATRIX	MATRIX	MATRIX/BINDER
DEVIATION FROM TEST METHOD:	*1	*1	*1

- THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND MUST NOT BE REPRODUCED EXCEPT WITH THE APPROVAL OF THE LABORATORY.
  - ALL SAMPLES WILL BE DISPOSED OF 90 DAYS FOLLOWING SAMPLE RECEIPT UNLESS OTHERWISE INSTRUCTED BY THE CLIENT.
  - UNDER CURRENT EPA REGULATIONS, AN "ASBESTOS CONTAINING MATERIAL" CONTAINS MORE THAN ONE PERCENT ASBESTOS.
  - UNLESS OTHERWISE STATED, TEST METHOD DOES NOT UTILIZE POINT COUNTING. QUANTITATION OF COMPONENTS BY VISUAL ESTIMATION DURING MACROSCOPIC AND/OR PLM EXAMINATIONS.
  - UNDER CURRENT NESHAP REGULATIONS, 40 CFR PART 61, ASBESTOS CONTENT IN SAMPLES WITH LESS THAN 10 PERCENT ASBESTOS MUST BE REVERIFIED BY PLM POINT COUNTING.
- THIS TEST REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

\*1 MATRIX OF SAMPLE DISSOLVED IN TETRAHYDROFURAN, HEATED, EVAPORATED, THEN ANALYSIS CONTINUES ACCORDING TO TEST METHOD.

**Kevco SERVICES INC.** • 890 PITTSBURGH ROAD • BUTLER, PA 16002  
TEL 724-686-6943 FAX 724-686-2172  
E-mail: kevco@penn.com



# Kevco

LABORATORY & CONSULTING SERVICES

## BULK ASBESTOS SAMPLE ANALYSIS REPORT

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SUBPT. F APP. A. PAGES 293-299.REPORT TO: TRACEANALYSIS, INC.  
6701 ABERDEEN AVENUE  
LUBBOCK  
ATTENTION: NELL GREEN

TX 79424

ANALYST SIGNATURE:

GARY LANDINI

KEVCO JOB NUMBER: DATE RECEIVED: DATE ANALYZED:	18855 8/23/04 8/23/04	18855 8/23/04 8/23/04	18855 8/23/04 8/23/04
CLIENT SAMPLE ID: PROJECT ID:	41985	41985A	41986
SAMPLE LOCATION:		FLOORING UNDERLAY	
IS THE SAMPLE HOMOGENEOUS?	NO	YES	NO
DOES IT CONTAIN LAYERS?	YES	NO	YES
IS THE SAMPLE FIBROUS?	NO	NO	YES
SAMPLE COLOR:	WHITE/TAN/GRAY	WHITE	WHITE/TAN
SAMPLE CONTAIN ASBESTOS FIBERS?	NO	NO	NO
ASBESTOS TYPE AND PERCENT:			
TOTAL PERCENT ASBESTOS:	0 PERCENT	0 PERCENT	0 PERCENT
FIBROUS MATERIALS AND PERCENT:	FIBROUS GLASS 01 - 02 CELLULOSE 25 - 35 SYNTHETIC 01 - 02	CELLULOSE < 1%	CELLULOSE 90 - 95
NONFIBROUS CONSTITUENTS:	MATRIX/BINDER	BINDER	BINDER
DEVIATION FROM TEST METHOD:	*1		

- THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND MUST NOT BE REPRODUCED EXCEPT WITH THE APPROVAL OF THE LABORATORY.
  - ALL SAMPLES WILL BE DISPOSED OF 90 DAYS FOLLOWING SAMPLE RECEIPT UNLESS OTHERWISE INSTRUCTED BY THE CLIENT.
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  - UNDER CURRENT NESHAP REGULATIONS, 40 CFR PART 61, ASBESTOS CONTENT IN SAMPLES WITH LESS THAN 10 PERCENT ASBESTOS MUST BE REVERIFIED BY PLM POINT COUNTING.
- THIS TEST REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY MVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

\*1 MATRIX OF SAMPLE DISSOLVED IN TETRAHYDROFURAN, HEATED, EVAPORATED, THEN ANALYSIS CONTINUES ACCORDING TO TEST METHOD.

**Kevco SERVICES INC.** • 690 PITTSBURGH ROAD • BUTLER, PA 16002  
TEL 724-586-6343 FAX 724-586-2172  
E-mail: kevcopenn.com

# Kevco

LABORATORY & CONSULTING SERVICES

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TEST METHOD: 40 CFR CH. I (1-1-87 EDITION) PT 763,  
SUBPT. F APP. A. PAGES 293-299.

REPORT TO: TRACEANALYSIS, INC.  
6701 ABERDEEN AVENUE  
LUBBOCK  
ATTENTION: NELL GREEN

TX 79424

ANALYST SIGNATURE:

GARY LANDINI

KEVCO JOB NUMBER:	18855	18855	18855
DATE RECEIVED:	8/23/04	8/23/04	8/23/04
DATE ANALYZED:	8/23/04	8/23/04	8/23/04
CLIENT SAMPLE ID:	41987	41988	41989
PROJECT ID:			
SAMPLE LOCATION:			
IS THE SAMPLE HOMOGENEOUS?	NO	YES	NO
DOES IT CONTAIN LAYERS?	YES	NO	NO
IS THE SAMPLE FIBROUS?	YES	YES	NO
SAMPLE COLOR:	BLACK/GRAY	GRAY	WHITE
SAMPLE CONTAIN ASBESTOS FIBERS?	NO	NO	NO
ASBESTOS TYPE AND PERCENT:			
TOTAL PERCENT ASBESTOS:	0 PERCENT	0 PERCENT	0 PERCENT
FIBROUS MATERIALS AND PERCENT:	CELLULOSE 85 - 90 SYNTHETIC < 1% HAIR (WOOL) < 1%	CELLULOSE 90 - 95 SYNTHETIC < 1% HAIR (WOOL) < 1%	FIBROUS GLASS < 1% CELLULOSE 01 - 05 SYNTHETIC < 1% HAIR (WOOL) < 1%
NONFIBROUS CONSTITUENTS:	BINDER/FILLER	BINDER	BINDER/FILLER/MATRIX
DEVIATION FROM TEST METHOD:			*1

- THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND MUST NOT BE REPRODUCED EXCEPT WITH THE APPROVAL OF THE LABORATORY.
  - ALL SAMPLES WILL BE DISPOSED OF 90 DAYS FOLLOWING SAMPLE RECEIPT UNLESS OTHERWISE INSTRUCTED BY THE CLIENT.
  - UNDER CURRENT EPA REGULATIONS, AN "ASBESTOS CONTAINING MATERIAL" CONTAINS MORE THAN ONE PERCENT ASBESTOS.
  - UNLESS OTHERWISE STATED, TEST METHOD DOES NOT UTILIZE POINT COUNTING. QUANTITATION OF COMPONENTS BY VISUAL ESTIMATION DURING MACROSCOPIC AND/OR PLM EXAMINATIONS.
  - UNDER CURRENT MESHAP REGULATIONS, 40 CFR PART 61, ASBESTOS CONTENT IN SAMPLES WITH LESS THAN 10 PERCENT ASBESTOS MUST BE REVERIFIED BY PLM POINT COUNTING.
- THIS TEST REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NYLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

\*1 MATRIX OF SAMPLE DISSOLVED IN TETRAHYDROFURAN, HEATED, EVAPORATED, THEN ANALYSIS CONTINUES ACCORDING TO TEST METHOD.

**Kevco SERVICES INC.** • 890 PITTSBURGH ROAD • BUTLER, PA 16002  
TEL 724-586-6343 FAX 724-586-2172  
E-mail: kevco@penn.com

# Kevco

LABORATORY & CONSULTING SERVICES

## BULK ASBESTOS SAMPLE ANALYSIS REPORT

REPORT DATE: 8/23/04

TEST METHOD: 40 CFR CH. I (1-1-87 EDITION) PT 763,  
SUBPT. F APP. A. PAGES 293-299.REPORT TO: TRACEANALYSIS, INC.  
6701 ABERDEEN AVENUE  
LUBBOCK  
ATTENTION: NELL GREEN

TX 79424

ANALYST SIGNATURE:

GARY LANDINI

KEVCO JOB NUMBER:	18855	18855	18855
DATE RECEIVED:	8/23/04	8/23/04	8/23/04
DATE ANALYZED:	8/23/04	8/23/04	8/23/04
CLIENT SAMPLE ID:	41990	41991	41992
PROJECT ID:			
SAMPLE LOCATION:			
IS THE SAMPLE HOMOGENEOUS?	NO	YES	NO
DOES IT CONTAIN LAYERS?	NO	NO	YES
IS THE SAMPLE FIBROUS?	NO	NO	NO
SAMPLE COLOR:	LT. GRAY/TAN	WHITE	BLACK
SAMPLE CONTAIN ASBESTOS FIBERS?	NO	NO	NO
ASBESTOS TYPE AND PERCENT:			
TOTAL PERCENT ASBESTOS:	0 PERCENT	0 PERCENT	0 PERCENT
FIBROUS MATERIALS AND PERCENT:	CELLULOSE < 1% SYNTHETIC < 1%	CELLULOSE < 1%	CELLULOSE 15 - 20
NONFIBROUS CONSTITUENTS:	BINDER/VERMICULITE FILLER	BINDER/FILLER	MATRIX/FILLER
DEVIATION FROM TEST METHOD:	*2		*1

- THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND MUST NOT BE REPRODUCED EXCEPT WITH THE APPROVAL OF THE LABORATORY.
  - ALL SAMPLES WILL BE DISPOSED OF 90 DAYS FOLLOWING SAMPLE RECEIPT UNLESS OTHERWISE INSTRUCTED BY THE CLIENT.
  - UNDER CURRENT EPA REGULATIONS, AN "ASBESTOS CONTAINING MATERIAL" CONTAINS MORE THAN ONE PERCENT ASBESTOS.
  - UNLESS OTHERWISE STATED, TEST METHOD DOES NOT UTILIZE POINT COUNTING. QUANTITATION OF COMPONENTS BY VISUAL ESTIMATION DURING MACROSCOPIC AND/OR PLM EXAMINATIONS.
  - UNDER CURRENT NESHAP REGULATIONS, 40 CFR PART 61, ASBESTOS CONTENT IN SAMPLES WITH LESS THAN 10 PERCENT ASBESTOS MUST BE REVERIFIED BY PLM POINT COUNTING.
- THIS TEST REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

\*2 SAMPLE RECEIVED WET; SAMPLE DRIED PRIOR TO ANALYSIS

\*1 MATRIX OF SAMPLE DISSOLVED IN TETRAHYDROFURAN, HEATED, EVAPORATED, THEN ANALYSIS CONTINUES ACCORDING TO TEST METHOD.

**Kevco SERVICES INC.** • 890 PITTSBURGH ROAD • BUTLER, PA 16002  
TEL 724-686-6343 FAX 724-686-2172  
E-mail: kevco@penn.com

# Kevco

LABORATORY & CONSULTING SERVICES

## BULK ASBESTOS SAMPLE ANALYSIS REPORT

REPORT DATE: 8/23/04

TEST METHOD: 40 CFR CH. I (1-1-87 EDITION) PT. 763,  
SUBPT. F APP. A. PAGES 293-299.

REPORT TO: TRACEANALYSIS, INC.  
6701 ABERDEEN AVENUE  
LUBBOCK TX 79424  
ATTENTION: NELL GREEN

ANALYST SIGNATURE:

GARY LANDINI

KEVCO JOB NUMBER:	18855	18855	18855
DATE RECEIVED:	8/23/04	8/23/04	8/23/04
DATE ANALYZED:	8/23/04	8/23/04	8/23/04
CLIENT SAMPLE ID:	41993	41994	41995
PROJECT ID:			
SAMPLE LOCATION:			
IS THE SAMPLE HOMOGENEOUS?	YES	NO	NO
DOES IT CONTAIN LAYERS?	NO	YES	YES
IS THE SAMPLE FIBROUS?	YES	NO	NO
SAMPLE COLOR:	YELLOW/GRAY	WHITE/TAN	BLACK
SAMPLE CONTAIN ASBESTOS FIBERS?	NO	NO	NO
ASBESTOS TYPE AND PERCENT:			
TOTAL PERCENT ASBESTOS:	0 PERCENT	0 PERCENT	0 PERCENT
FIBROUS MATERIALS AND PERCENT:	FIBROUS GLASS 85 - 90 CELLULOSE < 1%	CELLULOSE 25 - 30	CELLULOSE < 1% SYNTHETIC < 1%
NONFIBROUS CONSTITUENTS:	BINDER/GLASS BEADS	BINDER/FILLER	MATRIX
DEVIATION FROM TEST METHOD:			*1

- THIS TEST REPORT RELATES ONLY TO THE ITEMS TESTED AND MUST NOT BE REPRODUCED EXCEPT WITH THE APPROVAL OF THE LABORATORY.
  - ALL SAMPLES WILL BE DISPOSED OF 90 DAYS FOLLOWING SAMPLE RECEIPT UNLESS OTHERWISE INSTRUCTED BY THE CLIENT.
  - UNDER CURRENT EPA REGULATIONS, AN "ASBESTOS CONTAINING MATERIAL" CONTAINS MORE THAN ONE PERCENT ASBESTOS.
  - UNLESS OTHERWISE STATED, TEST METHOD DOES NOT UTILIZE POINT COUNTING. QUANTITATION OF COMPONENTS BY VISUAL ESTIMATION DURING MACROSCOPIC AND/OR PLM EXAMINATIONS.
  - UNDER CURRENT MESHAP REGULATIONS, 40 CFR PART 61, ASBESTOS CONTENT IN SAMPLES WITH LESS THAN 10 PERCENT ASBESTOS MUST BE REVERIFIED BY PLM POINT COUNTING.
- THIS TEST REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY MVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

\*1 MATRIX OF SAMPLE DISSOLVED IN TETRAHYDROFURAN, HEATED, EVAPORATED, THEN ANALYSIS CONTINUES ACCORDING TO TEST METHOD.

**Kevco SERVICES INC.** • 890 PITTSBURGH ROAD • BUTLER, PA 16002  
TEL 724-586-6343 FAX 724-586-2172  
E-mail: kevco@penn.com

41980-95

Page 1 of 2

08/31/2004 16:38 FAX 5052860040

RESPEC Inc.

0007

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 T (800) 378-1298		155 McCutchen, Suite 11 El Paso, Texas 79902 Tel (915) 995-0845 Fax (915) 995-0844 T (800) 588-3443					
<b>TraceAnalysis, Inc.</b>							
Company Name: <b>RESPEC</b> Address: (Street, City, Zip) <b>4775 Federal School Road, NE, Suite 300 (SOS) 890-2881</b> <b>ALBUQUERQUE, NM 87110</b> Contact Person: <b>Lucy E. Archambault</b> Phone #: <b>(505) 890-7815</b> Fax #: <b>(505) 890-2881</b>		Project Name: <b>RUNCO</b> Project Location: <b>JAL, NM</b> Signature: <i>Lucy E. Archambault</i>					
LAB #	FIELD CODE	VOLUME/AMOUNT	MATRIX	PRESERVATIVE	METHOD	DATE	TIME
41980	8-17-1	100 mL	SLUDGE	NONE	ICP	8/17/04	11:00 AM
81	8-17-2						
82	8-17-3						
83	8-17-4						
84	8-17-5						
85	8-17-6						
86	8-17-7						
87	8-17-8						
88	8-17-9						
89	8-17-10						
90	8-17-11						
Relinquished by: _____ Date: _____ Time: _____ Lucy E. Archambault 8/19/04 10:20 AM		Received by: _____ Date: _____ Time: _____ (SOS) 890-2881					
Relinquished by: _____ Date: _____ Time: _____ Lucy E. Archambault 8/19/04 10:20 AM		Received by: _____ Date: _____ Time: _____ (SOS) 890-2881					

<b>CHAIN-OF-CUSTODY AND ANALYSIS REQUEST</b> LAB Order ID # <b>4082017</b>	
<b>ANALYSIS REQUEST</b> (Circle or Specify Method No.)	
Total Metals: Ag As Ba Cd Cr Pb Se Hg TCLP Metals: Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semivolatiles TCLP Pesticides TOC GC/MS Vol. R50B/S24 GC/MS Sem. Vol. R270C/B28 PCBs 9062/608 PCBs 9062/608 300 TSS, pH	Turn Around Time if different from standard ASBESTOS - PLM
LAB USE ONLY Intact <input checked="" type="checkbox"/> N Headspace <input type="checkbox"/> Y <input type="checkbox"/> N Temp. <input type="checkbox"/> 23°C Log in Review <input type="checkbox"/> 14	REMARKS: please mail reported signed change custody, to Lucy Archambault 10224 Sandhurst Dr. NW ALBUQUERQUE, NM 87114 <input type="checkbox"/> Check if 180 days Limiting Agent Attached Final 8/23/04
Carrier # <b>1051Z66E432 22 1001130-5</b>	

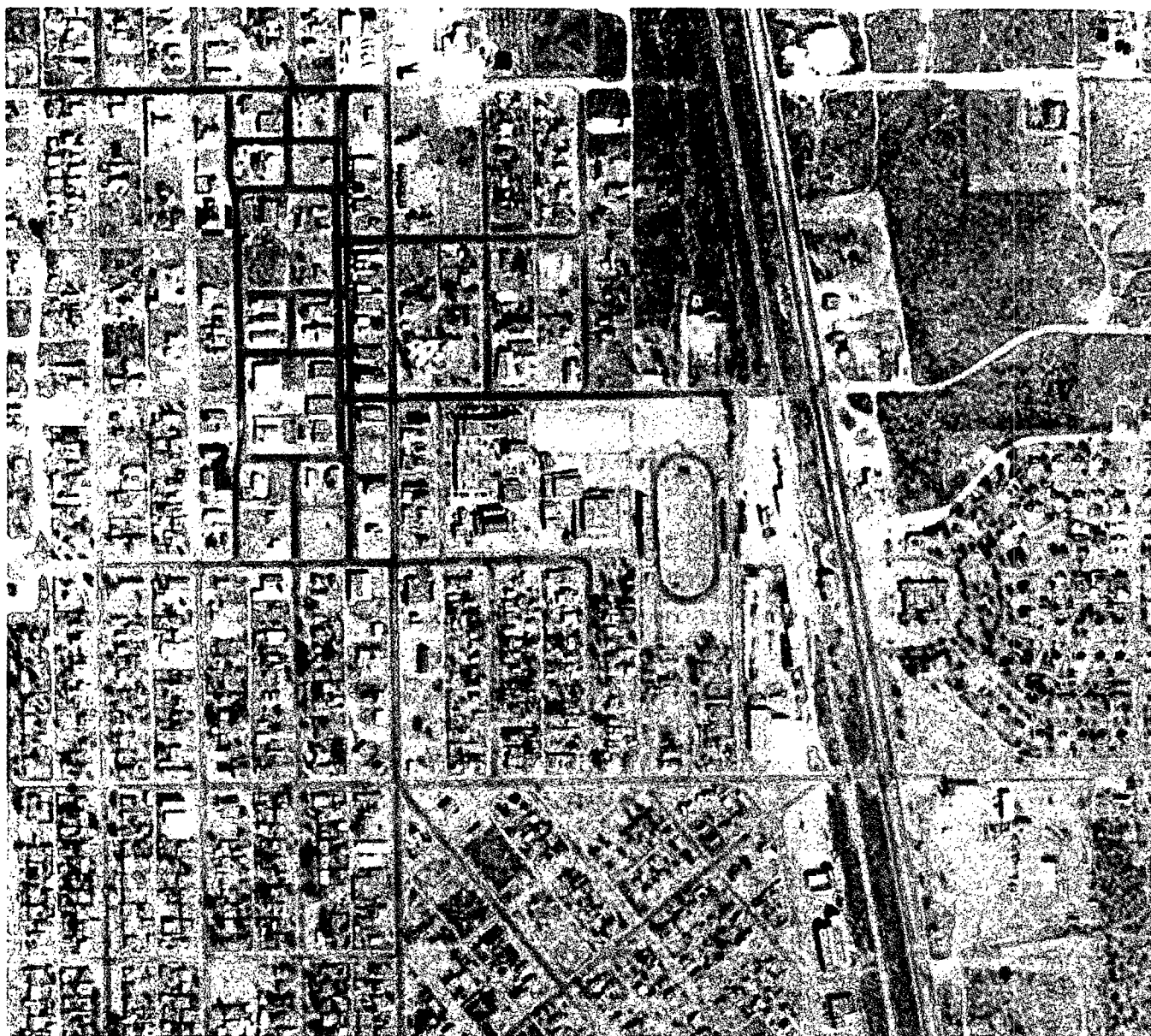
 Submitted of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.  
 ORIGINAL COPY

<b>TraceAnalysis, Inc.</b> 6701 Ardmore Avenue, Ste. 9 Lubbock, Texas 79602 Tel (800) 794-1296 Fax (800) 794-1293 Tel (800) 278-1296		186 McCollum, Suite H El Paso, Texas 79832 Tel (915) 585-3443 Fax (915) 585-0044 Tel (915) 585-3443	
Company Name: <b>RESPEC</b> Address: (Street, City, Zip) <b>4775 INDIAN SCHOOL ROAD, NE, SUITE 300, ALBUQUERQUE, NM 87110</b> Contact Person: <b>LUCY E. ARCHAMBOULT</b> Invoice to: (If different from above) <b>LUCY E. ARCHAMBOULT</b> Project #: <b>1501-1.0</b> Project Location: <b>JAL, NM</b>		Phone: <b>(505) 890-7815</b> Fax #: <b>(505) 890-2831</b> Project Name: <b>RUNCO</b> Sampler Signature: <i>[Signature]</i>	
<b>CHAIN-OF-CUSTODY AND ANALYSIS REQUEST</b> CAB Order ID #: <b>4082017</b>		<b>ANALYSIS REQUEST</b> (Circle or Specify Method No.)	
LAB # (LAB USE ONLY) <b>91991</b> <b>92</b> <b>93</b> <b>94</b> <b>95</b>		FIELD CODE <b>8-17-12</b> <b>8-17-13</b> <b>8-17-14</b> <b>8-17-15</b> <b>8-17-16</b>	
# CONTAINERS <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>		VOLUME/AMOUNT <b>1.0</b> <b>1.0</b> <b>1.0</b> <b>1.0</b> <b>1.0</b>	
MATRIX <b>SLUDGE</b> <b>AIR</b> <b>SOIL</b> <b>WATER</b>		PRESERVATIVE METHOD <b>NONE</b> <b>ICE</b> <b>NaOH</b> <b>H<sub>2</sub>SO<sub>4</sub></b> <b>HNO<sub>3</sub></b> <b>H<sub>2</sub>O</b>	
DATE <b>8/17/04</b> <b>8/17/04</b> <b>8/17/04</b> <b>8/17/04</b> <b>8/17/04</b>		TIME <b>9:45 AM</b> <b>11:00 AM</b> <b>11:00 AM</b> <b>11:00 AM</b> <b>11:00 AM</b>	
LAB USE ONLY <b>91991</b> <b>92</b> <b>93</b> <b>94</b> <b>95</b>		HOLD <b>NO</b> <b>NO</b> <b>NO</b> <b>NO</b> <b>NO</b>	
REMARKS: Please mail report to Signed chain of custody to Lucy Archambault 10224 Sandhurst Dr, NW Albuquerque, NM 87114 <input type="checkbox"/> Check if Special Packaging Limits are Needed		LAB USE ONLY Incent: Y/N Headspace: Y/N Temp: Y/N Log-In Review: Y/N	
Carrier: <b>UPS 1Z 606E 435 22 1001 130.5</b>		ORIGINAL COPY	

Submit all samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

**APPENDIX E**  
**AERIAL PHOTOGRAPHS**

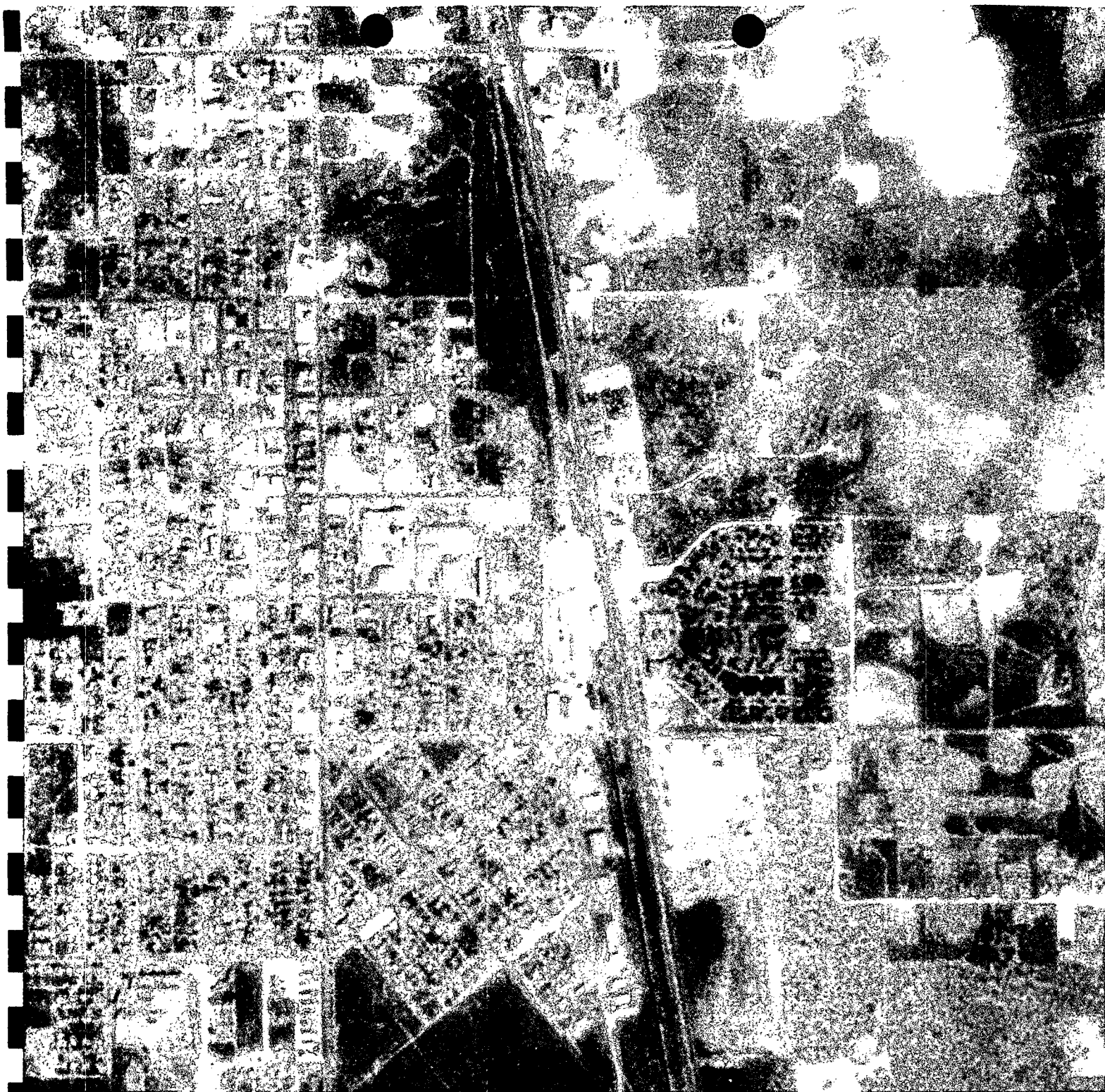




1996



1986

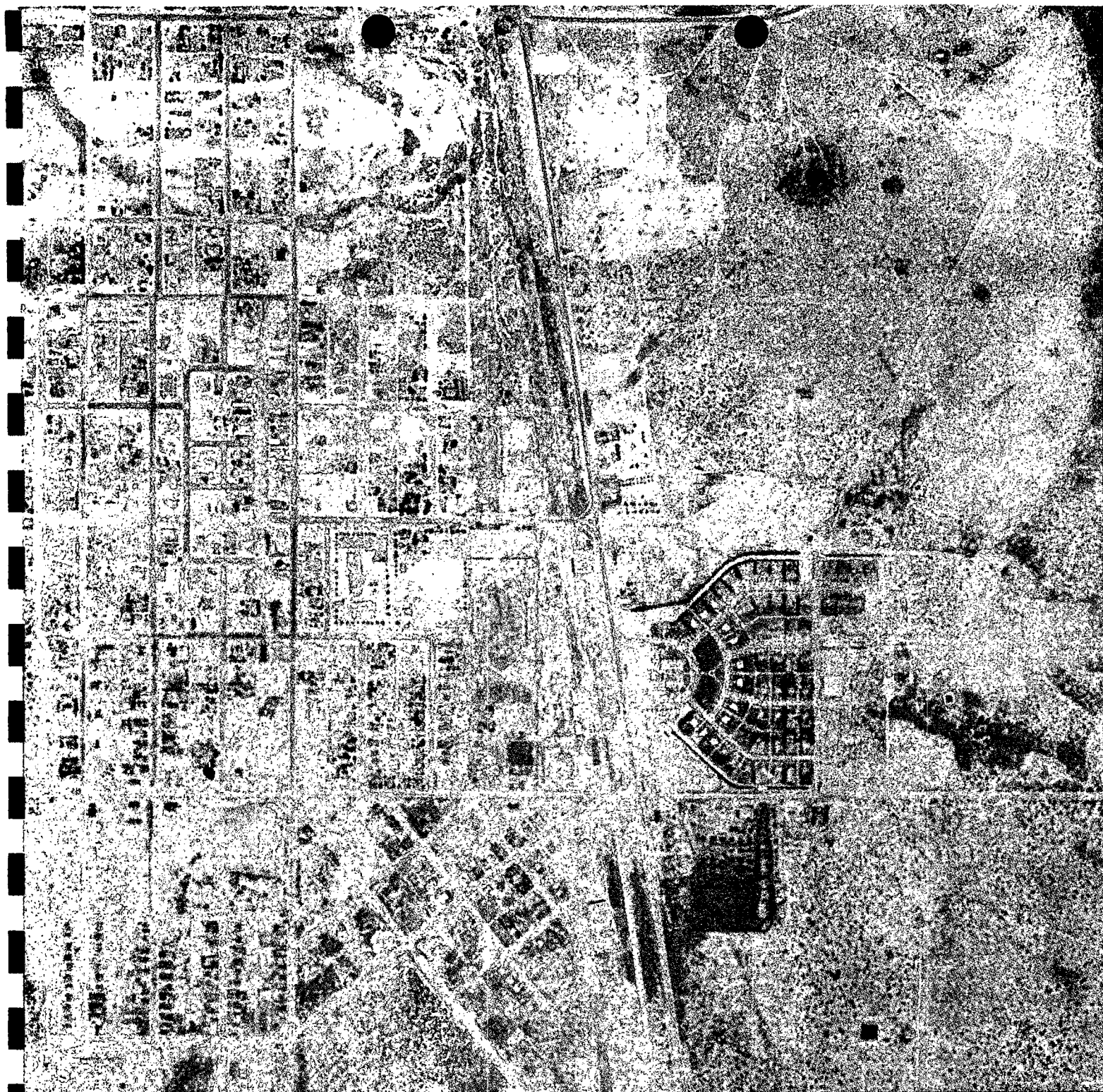


1977





1968



1955





1949

**APPENDIX F**  
**EDR ENVIRONMENTAL DATABASE**  
**REPORT**





**EDR™** Environmental  
Data Resources Inc

## **The EDR Radius Map with GeoCheck®**

**Runco Inc.  
Property Street/East Utah Ave.  
Jal, NM 88252**

**Inquiry Number: 01286300.1r**

**October 12, 2004**

## **The Standard in Environmental Risk Management Information**

**440 Wheelers Farms Road  
Milford, Connecticut 06460**

### **Nationwide Customer Service**

**Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)**

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### GEOCHECK ADDENDUM

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

### TARGET PROPERTY INFORMATION

#### ADDRESS

PROPERTY STREET/EAST UTAH AVE.  
JAL, NM 88252

#### COORDINATES

Latitude (North):	32.112457 - 32° 6' 44.8"
Longitude (West):	103.189332 - 103° 11' 21.6"
Universal Transverse Mercator:	Zone 13
UTM X (Meters):	670834.3
UTM Y (Meters):	3554148.0
Elevation:	3038 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	32103-A2 JAL, NM TX
Source:	USGS 7.5 min quad index

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ( "reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

### FEDERAL ASTM STANDARD

NPL.....	National Priority List
Proposed NPL.....	Proposed National Priority List Sites
CERCLIS.....	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP.....	CERCLIS No Further Remedial Action Planned
CORRACTS.....	Corrective Action Report
RCRIS-TSD.....	Resource Conservation and Recovery Information System
RCRIS-LQG.....	Resource Conservation and Recovery Information System
RCRIS-SQG.....	Resource Conservation and Recovery Information System
ERNS.....	Emergency Response Notification System

### STATE ASTM STANDARD

SHWS.....	This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.
-----------	--

## EXECUTIVE SUMMARY

SWF/LF..... Solid Waste Facilities  
INDIAN UST..... Underground Storage Tanks on Indian Land  
VCP..... Voluntary Remediation Program Sites  
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees  
ROD..... Records Of Decision  
Delisted NPL..... National Priority List Deletions  
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report  
HMIRS..... Hazardous Materials Information Reporting System  
MLTS..... Material Licensing Tracking System  
MINES..... Mines Master Index File  
NPL Liens..... Federal Superfund Liens  
PADS..... PCB Activity Database System  
DOD..... Department of Defense Sites  
FUDS..... Formerly Used Defense Sites  
ODI..... Open Dump Inventory  
UMTRA..... Uranium Mill Tailings Sites  
INDIAN RESERV..... Indian Reservations  
RAATS..... RCRA Administrative Action Tracking System  
TRIS..... Toxic Chemical Release Inventory System  
TSCA..... Toxic Substances Control Act  
SSTS..... Section 7 Tracking Systems  
FTTS INSP..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

### STATE OR LOCAL ASTM SUPPLEMENTAL

AST..... Aboveground Storage Tanks List  
LAST..... Leaking Aboveground Storage Tank Sites  
SPILLS..... Spill Data

### BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites  
VCP..... Voluntary Remediation Program Sites

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## EXECUTIVE SUMMARY

### STATE ASTM STANDARD

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the New Mexico Environmental Department's List of Past & Current Leak Sites by Location.

A review of the LUST list, as provided by EDR, and dated 08/03/2004 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>JAL GASCARD</b>	<b>100 E PANTHER</b>	<b>1/4 - 1/2 WSW</b>	<b>2</b>	<b>6</b>
<b>TIVO'S GAS STATION</b>	<b>319 MAIN</b>	<b>1/4 - 1/2 W</b>	<b>3</b>	<b>7</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>ALLSUPS 1104</b>	<b>445 S 3RD</b>	<b>1/4 - 1/2 SW</b>	<b>4</b>	<b>8</b>

**UST:** The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the New Mexico Environmental Department's Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 08/02/2004 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>JAL PUBLIC SCHOOLS</b>	<b>200 E PANTHER</b>	<b>1/8 - 1/4 SW</b>	<b>1</b>	<b>6</b>

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

### Site Name

YUCCA QUICK STOP 0002346  
EL PASO NAT GAS  
NMSHTD-JAL  
CHAPARRAL SERVICE CO  
JAL LABORATORY  
CLARKE OIL WELL SERVICING INC A  
TEXACO INC  
NMSHD JAL PATROL  
JAL CHEVERON STATION  
EL PASO NAT GAS JAL LABORATORY  
EL PASO NAT GAS JAL NO 3 FIELD PLANT  
EL PASO NAT GAS CO JAL #4 FIELD PLT  
EL PASO NAT GAS JAL NO 1 PLANT

### Database(s)

LUST, UST  
LUST  
LUST  
UST  
UST  
UST  
UST  
UST, AST  
UST  
RCRIS-SQG, FINDS  
RCRIS-SQG, FINDS  
RCRIS-SQG, FINDS  
RCRIS-SQG, FINDS

# OVERVIEW MAP - 01286300.1r - RE/SPEC, Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- ▨ National Priority List Sites
- ▨ Landfill Sites
- ▨ Dept. Defense Sites

Indian Reservations BIA  
Oil & Gas pipelines

0 1/4 1/2 1 Miles

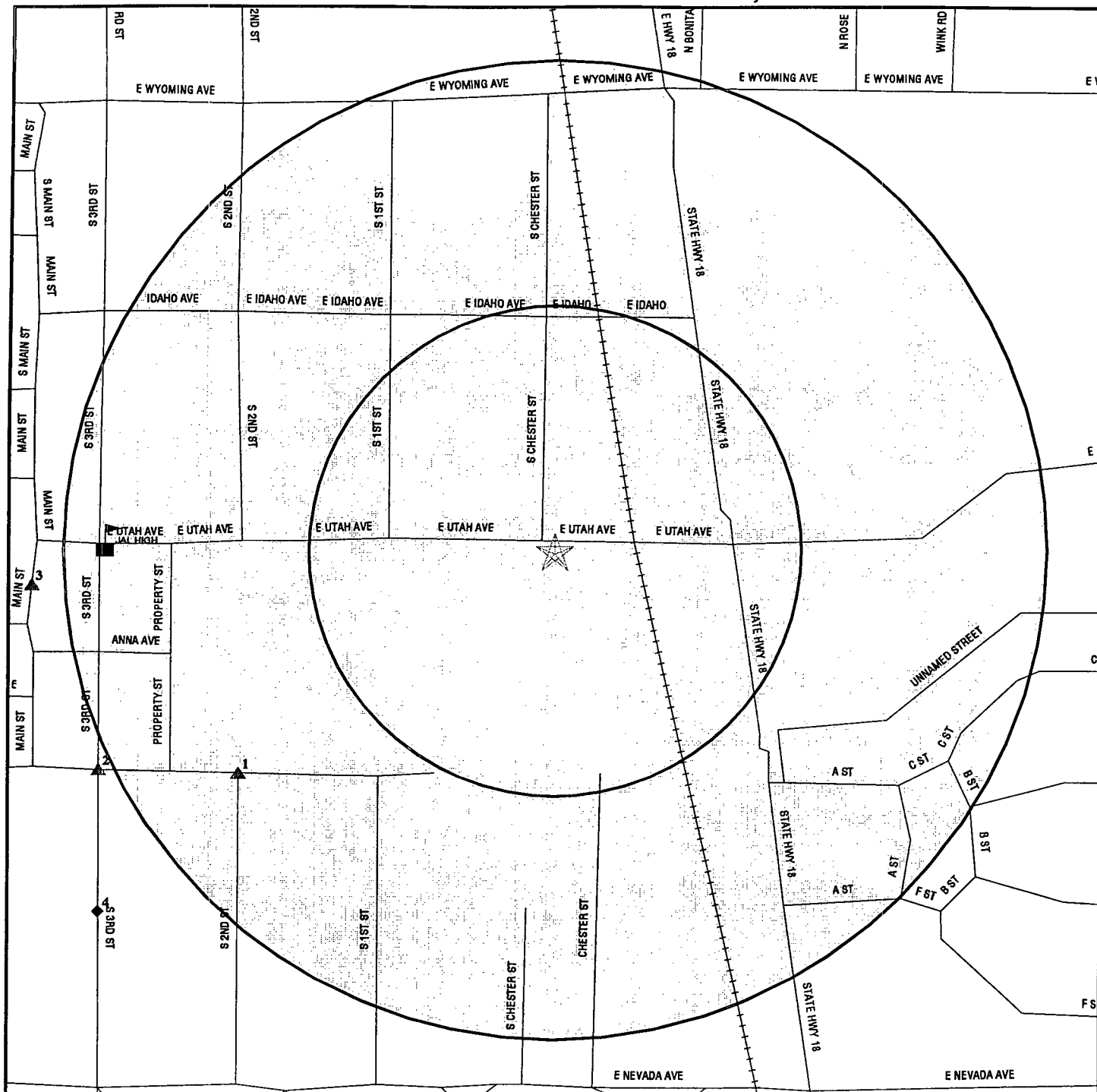


TARGET PROPERTY: Runco Inc.  
ADDRESS: Property Street/East Utah Ave.  
CITY/STATE/ZIP: Jal NM 88252  
LAT/LONG: 32.1125 / 103.1893

CUSTOMER: RE/SPEC, Inc.  
CONTACT: John Bunch  
INQUIRY #: 01286300.1r  
DATE: October 12, 2004 2:12 pm



# DETAIL MAP - 01286300.1r - RE/SPEC, Inc.



☆ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Coal Gasification Sites

▲ Sensitive Receptors

■ National Priority List Sites

■ Landfill Sites

■ Dept. Defense Sites

Indian Reservations BIA

Oil & Gas pipelines

0 1/16 1/8 1/4 Miles



TARGET PROPERTY: Runco Inc.  
ADDRESS: Property Street/East Utah Ave.  
CITY/STATE/ZIP: Jal NM 88252  
LAT/LONG: 32.1125 / 103.1893

CUSTOMER: RE/SPEC, Inc.  
CONTACT: John Bunch  
INQUIRY #: 01286300.1r  
DATE: October 12, 2004 2:12 pm

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>FEDERAL ASTM STANDARD</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
<b><u>STATE ASTM STANDARD</u></b>								
State Haz. Waste		N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	3	NR	NR	3
UST		0.250	0	1	NR	NR	NR	1
INDIAN UST		0.250	0	0	NR	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
<b><u>FEDERAL ASTM SUPPLEMENTAL</u></b>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
ODI		0.500	0	0	0	NR	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
<b><u>STATE OR LOCAL ASTM SUPPLEMENTAL</u></b>								
AST		TP	NR	NR	NR	NR	NR	0
LAST		TP	NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS		TP	NR	NR	NR	NR	NR	0
<b><u>BROWNFIELDS DATABASES</u></b>								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0

### NOTES:

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

Coal Gas Site Search: EDR does not presently have coal gas site information available in this state.

1 JAL PUBLIC SCHOOLS  
SW 200 E PANTHER  
1/8-1/4 JAL, NM 88252  
1037 ft.

UST 1000637537  
N/A

Relative:  
Higher

UST:

Facility ID: 28713  
Tank ID: 26200  
Total Tanks: 1  
Tank Status: REMOVED  
Owner ID: 6592  
Owner: JAL PUBLIC SCHOOLS  
Owner Address: 200 EAST PANTHER  
JAL, NM 88252

Actual:  
3041 ft.

2 JAL GASCARD  
WSW 100 E PANTHER  
1/4-1/2 JAL, NM 88252  
1358 ft.

LUST U003191740  
UST N/A

Relative:  
Higher

LUST:

Form Number: 1227  
Priority Rank: 0  
Facility ID: 1431  
Status: NO FURTHER ACTION REQUIRED  
Mitigating Factor Score: 0  
Project Manager: TC (THOMAS) SHAPARD  
Property Damage Impacts: No  
Date Release Reported: 05/01/92  
Contaminant Saturated Soil Attrib: 0  
Actual/ Imminent Explosive Vapor Impct Attrib: 0  
Actual/ Imminent Contam Water Supply Attrib: 0  
Actual/ Imminent Toxic Vapor Impct Attrib: 0  
Non-aqueous Phase Liquid Attrib: 0  
Status Date: 08/31/92  
Land and Water use Attributes: 0  
Soil Contamination Attributes: 0  
Ground Water Plume Attributes: 0  
Score For Priority 1 Criteria: 0  
Score For Priority 2 Criteria: 0  
Score For Priority 3 Criteria: 0  
Total Score To Assign Relative Rank: 0  
Ecological: 0

UST:

Facility ID: 1431  
Tank ID: 18308  
Total Tanks: 4  
Tank Status: REMOVED  
Owner ID: 344  
Owner: JACK WALSTAD OIL CO INC  
Owner Address: 317 NORTH LEECH  
HOBBS, NM 88240

Actual:  
3047 ft.

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

JAL GASCARD (Continued)

EDR ID Number  
EPA ID Number

Database(s)

U003191740

Facility ID: 1431  
Tank ID: 18309  
Total Tanks: 4  
Tank Status: REMOVED  
Owner ID: 344  
Owner: JACK WALSTAD OIL CO INC  
Owner Address: 317 NORTH LEECH  
HOBBS, NM 88240

Facility ID: 1431  
Tank ID: 18310  
Total Tanks: 4  
Tank Status: REMOVED  
Owner ID: 344  
Owner: JACK WALSTAD OIL CO INC  
Owner Address: 317 NORTH LEECH  
HOBBS, NM 88240

Facility ID: 1431  
Tank ID: 18311  
Total Tanks: 4  
Tank Status: REMOVED  
Owner ID: 344  
Owner: JACK WALSTAD OIL CO INC  
Owner Address: 317 NORTH LEECH  
HOBBS, NM 88240

3  
West  
1/4-1/2  
1407 ft.  
TIVO'S GAS STATION  
319 MAIN  
JAL., NM 88252

LUST S101647325  
N/A

Relative:  
Higher

Actual:  
3065 ft.

LUST:

Form Number: 2454  
Priority Rank: 0  
Facility ID: 31135  
Status: INVESTIGATION, RESPONSIBLE PARTY  
Mitigating Factor Score: 0  
Project Manager: TC (THOMAS) SHAPARD  
Property Damage Impacts: No  
Date Release Reported: 10/25/94  
Contaminant Saturated Soil Attrib: 0  
Actual/ Imminent Explosive Vapor Impct Attrib: 0  
Actual/ Imminent Contam Water Supply Attrib: 0  
Actual/ Imminent Toxic Vapor Impct Attrib: 0  
Non-aqueous Phase Liquid Attrib: 0  
Status Date: 12/14/95  
Land and Water use Attributes: 0  
Soil Contamination Attributes: 0  
Ground Water Plume Attributes: 0  
Score For Priority 1 Criteria: 0  
Score For Priority 2 Criteria: 0  
Score For Priority 3 Criteria: 0  
Total Score To Assign Relative Rank: 0  
Ecological: 0

# MAP FINDINGS

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

Site

Database(s) EDR ID Number  
EPA ID Number

4 ALLSUPS 1104  
SW 445 S 3RD  
1/4-1/2 JAL., NM 88252  
1564 ft.

LUST S105959708  
N/A

Relative:  
Lower

LUST:

Form Number: 1596  
Priority Rank: 0  
Facility ID: 847  
Status: NO FURTHER ACTION REQUIRED  
Mitigating Factor Score: 0  
Project Manager: TC (THOMAS) SHAPARD  
Property Damage Impacts: No  
Date Release Reported: / /  
Contaminant Saturated Soil Attrib: 0  
Actual/ Imminent Explosive Vapor Impct Attrib: 0  
Actual/ Imminent Contam Water Supply Attrib: 0  
Actual/ Imminent Toxic Vapor Impct Attrib: 0  
Non-aqueous Phase Liquid Attrib: 0  
Status Date: 12/01/92  
Land and Water use Attributes: 0  
Soil Contamination Attributes: 0  
Ground Water Plume Attributes: 0  
Score For Priority 1 Criteria: 0  
Score For Priority 2 Criteria: 0  
Score For Priority 3 Criteria: 0  
Total Score To Assign Relative Rank: 0  
Ecological: 0

## ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
JAL	U003191731	CHAPARRAL SERVICE CO	HWY 128	88252	UST
JAL	1000345400	EL PASO NAT GAS JAL LABORATORY	HWY 18 1 BLK S OF UTAH ST	88252	RCRIS-SQG, FINDS
JAL	U003191741	JAL LABORATORY	HWY 18	88252	UST
JAL	U003191732	CLARKE OIL WELL SERVICING INC A	ANDREWS HWY	88252	UST
JAL	U003191752	TEXACO INC	CARLSBAD HWY	88252	UST
JAL	1000345393	EL PASO NAT GAS JAL NO 3 FIELD PLANT	2 MI EAST OF HWY 18 5 MI N OF	88252	RCRIS-SQG, FINDS
JAL	1000345383	EL PASO NAT GAS CO JAL #4 FIELD PLT	11MI ON HWY #18	88252	RCRIS-SQG, FINDS
JAL	U003191758	YUCCA QUICK STOP 0002346	INTERSECTION OF ST HWY	88252	LUST, UST
JAL	U003191747	NMSHD JAL PATROL	3 MILES S OF JAL ON SR 18 MP 6 0	88252	UST, AST
JAL	U003191738	JAL CHEVERON STATION	STATE HWY 18	88252	UST
JAL	1000345394	EL PASO NAT GAS JAL NO 1 PLANT	2 MI W OF HWY #18 4 MI S OF	88252	RCRIS-SQG, FINDS
JAL,	S106426143	EL PASO NAT GAS	HWY 18	88252	LUST
JAL,	S101647324	NMSHTD-JAL	3 MILES S OF JAL ON SR 18 MP 6 0	88252	LUST



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Elapsed ASTM days:** Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

### FEDERAL ASTM STANDARD RECORDS

#### **NPL: National Priority List**

Source: EPA

Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/30/04

Date Made Active at EDR: 09/09/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/03/04

Elapsed ASTM days: 37

Date of Last EDR Contact: 08/03/04

#### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 3  
Telephone 215-814-5418

EPA Region 4  
Telephone 404-562-8033

EPA Region 6  
Telephone: 214-655-6659

EPA Region 8  
Telephone: 303-312-6774

#### **Proposed NPL: Proposed National Priority List Sites**

Source: EPA

Telephone: N/A

Date of Government Version: 07/22/04

Date Made Active at EDR: 09/09/04

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/03/04

Elapsed ASTM days: 37

Date of Last EDR Contact: 08/03/04

#### **CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System**

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 05/17/04

Date Made Active at EDR: 08/10/04

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 06/23/04

Elapsed ASTM days: 48

Date of Last EDR Contact: 09/21/04

#### **CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned**

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/17/04  
Date Made Active at EDR: 08/10/04  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 06/23/04  
Elapsed ASTM days: 48  
Date of Last EDR Contact: 09/21/04

### **CORRACTS:** Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/15/04  
Date Made Active at EDR: 08/10/04  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 06/25/04  
Elapsed ASTM days: 46  
Date of Last EDR Contact: 09/07/04

### **RCRIS:** Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 08/10/04  
Date Made Active at EDR: 10/11/04  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 08/24/04  
Elapsed ASTM days: 48  
Date of Last EDR Contact: 08/24/04

### **ERNS:** Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/03  
Date Made Active at EDR: 03/12/04  
Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/26/04  
Elapsed ASTM days: 46  
Date of Last EDR Contact: 07/26/04

### **FEDERAL ASTM SUPPLEMENTAL RECORDS**

#### **BRS:** Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/01  
Database Release Frequency: Biennially

Date of Last EDR Contact: 09/20/04  
Date of Next Scheduled EDR Contact: 12/13/04

#### **CONSENT:** Superfund (CERCLA) Consent Decrees

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/05/04  
Database Release Frequency: Varies

Date of Last EDR Contact: 07/30/04  
Date of Next Scheduled EDR Contact: 10/25/04

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **ROD: Records Of Decision**

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 06/07/04

Database Release Frequency: Annually

Date of Last EDR Contact: 07/07/04

Date of Next Scheduled EDR Contact: 10/04/04

### **DELISTED NPL: National Priority List Deletions**

Source: EPA

Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/30/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/03/04

Date of Next Scheduled EDR Contact: 11/01/04

### **FINDS: Facility Index System/Facility Identification Initiative Program Summary Report**

Source: EPA

Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/08/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/04

Date of Next Scheduled EDR Contact: 10/04/04

### **HMIRS: Hazardous Materials Information Reporting System**

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/17/04

Database Release Frequency: Annually

Date of Last EDR Contact: 04/20/04

Date of Next Scheduled EDR Contact: 07/19/04

### **MLTS: Material Licensing Tracking System**

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/15/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/04

Date of Next Scheduled EDR Contact: 10/04/04

### **MINES: Mines Master Index File**

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 06/04/04

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/28/04

Date of Next Scheduled EDR Contact: 12/27/04

### **NPL LIENS: Federal Superfund Liens**

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/23/04  
Date of Next Scheduled EDR Contact: 11/22/04

**PADS:** PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/29/04  
Database Release Frequency: Annually

Date of Last EDR Contact: 08/10/04  
Date of Next Scheduled EDR Contact: 11/08/04

**DOD:** Department of Defense Sites

Source: USGS

Telephone: 703-692-8801

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 10/01/03  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/12/04  
Date of Next Scheduled EDR Contact: 11/08/04

**INDIAN RESERV:** Indian Reservations

Source: USGS

Telephone: 202-208-3710

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 10/01/03  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/12/04  
Date of Next Scheduled EDR Contact: 11/08/04

**FUDS:** Formerly Used Defense Sites

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/03  
Database Release Frequency: Varies

Date of Last EDR Contact: 07/06/04  
Date of Next Scheduled EDR Contact: 10/04/04

**STORMWATER:** Storm Water General Permits

Source: Environmental Protection Agency

Telephone: 202-564-0746

A listing of all facilities with Storm Water General Permits.

Date of Government Version: 02/04/04  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/06/04  
Date of Next Scheduled EDR Contact: 10/04/04

**RMP:** Risk Management Plans

Source: Environmental Protection Agency

Telephone: 202-564-8600

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/27/04  
Database Release Frequency: Varies

Date of Last EDR Contact: 08/23/04  
Date of Next Scheduled EDR Contact: 11/22/04

### **UMTRA: Uranium Mill Tailings Sites**

Source: Department of Energy  
Telephone: 505-845-0011

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized. In 1978, 24 inactive uranium mill tailings sites in Oregon, Idaho, Wyoming, Utah, Colorado, New Mexico, Texas, North Dakota, South Dakota, Pennsylvania, and on Navajo and Hopi tribal lands, were targeted for cleanup by the Department of Energy.

Date of Government Version: 04/22/04  
Database Release Frequency: Varies

Date of Last EDR Contact: 09/20/04  
Date of Next Scheduled EDR Contact: 12/20/04

### **ODI: Open Dump Inventory**

Source: Environmental Protection Agency  
Telephone: 800-424-9346

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/85  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 05/23/95  
Date of Next Scheduled EDR Contact: N/A

### **RAATS: RCRA Administrative Action Tracking System**

Source: EPA  
Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 09/07/04  
Date of Next Scheduled EDR Contact: 12/06/04

### **TRIS: Toxic Chemical Release Inventory System**

Source: EPA  
Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/02  
Database Release Frequency: Annually

Date of Last EDR Contact: 09/20/04  
Date of Next Scheduled EDR Contact: 12/20/04

### **TSCA: Toxic Substances Control Act**

Source: EPA  
Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/02  
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 09/07/04  
Date of Next Scheduled EDR Contact: 12/06/04

### **FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**

Source: EPA  
Telephone: 202-564-2501

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/13/04  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/07/04  
Date of Next Scheduled EDR Contact: 12/20/04

### **SSTS: Section 7 Tracking Systems**

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/01  
Database Release Frequency: Annually

Date of Last EDR Contact: 07/20/04  
Date of Next Scheduled EDR Contact: 10/18/04

### **FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/13/04  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/07/04  
Date of Next Scheduled EDR Contact: 12/20/04

### **STATE OF NEW MEXICO ASTM STANDARD RECORDS**

**SHWS:** This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Source: EPA

Telephone: 703-413-0223

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A  
Date Made Active at EDR: N/A  
Database Release Frequency: N/A

Date of Data Arrival at EDR: N/A  
Elapsed ASTM days: N/A  
Date of Last EDR Contact: 07/26/04

### **SWF/LF: Solid Waste Facilities**

Source: New Mexico Environment Department

Telephone: 505-827-0347

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/23/03  
Date Made Active at EDR: 01/20/04  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 12/23/03  
Elapsed ASTM days: 28  
Date of Last EDR Contact: 09/07/04

### **LUST: Leaking Underground Storage Tank Priorization Database**

Source: New Mexico Environment Department

Telephone: 505-984-1741

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 08/03/04  
Date Made Active at EDR: 09/23/04  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 08/03/04  
Elapsed ASTM days: 51  
Date of Last EDR Contact: 08/02/04

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### UST: Listing of Underground Storage Tanks

Source: New Mexico Environment Department

Telephone: 505-984-1741

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 08/02/04

Date Made Active at EDR: 09/02/04

Database Release Frequency: Varies

Date of Data Arrival at EDR: 08/03/04

Elapsed ASTM days: 30

Date of Last EDR Contact: 08/02/04

### INDIAN UST: Underground Storage Tanks on Indian Land

Source: EPA Region 9

Telephone: 415-972-3368

Date of Government Version: 06/21/04

Date Made Active at EDR: 07/27/04

Database Release Frequency: Varies

Date of Data Arrival at EDR: 06/21/04

Elapsed ASTM days: 36

Date of Last EDR Contact: 08/23/04

### INDIAN LUST: Leaking Underground Storage Tanks on Indian Land

Source: Environmental Protection Agency

Telephone: 415-972-3372

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 06/18/04

Date Made Active at EDR: 07/27/04

Database Release Frequency: Varies

Date of Data Arrival at EDR: 06/21/04

Elapsed ASTM days: 36

Date of Last EDR Contact: 08/23/04

### INDIAN UST: USTs on Indian Land

Source: Environmental Protection Agency, Region 6

Telephone: 214-665-7591

Date of Government Version: 08/09/04

Date Made Active at EDR: 09/23/04

Database Release Frequency: Varies

Date of Data Arrival at EDR: 08/09/04

Elapsed ASTM days: 45

Date of Last EDR Contact: 08/09/04

### VCP: Voluntary Remediation Program Sites

Source: Environment Department

Telephone: 505-827-2754

Sites involved in the Voluntary Remediation Program.

Date of Government Version: 03/31/04

Date Made Active at EDR: 07/27/04

Database Release Frequency: Varies

Date of Data Arrival at EDR: 06/10/04

Elapsed ASTM days: 47

Date of Last EDR Contact: 07/27/04

### INDIAN LUST: Leaking Underground Storage Tanks on Indian Land

Source: EPA Region 6

Telephone: 214-665-6597

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 02/26/04

Date Made Active at EDR: 03/17/04

Database Release Frequency: Varies

Date of Data Arrival at EDR: 02/26/04

Elapsed ASTM days: 20

Date of Last EDR Contact: 08/09/04

### STATE OF NEW MEXICO ASTM SUPPLEMENTAL RECORDS

#### AST: Aboveground Storage Tanks List

Source: Environment Department

Telephone: 505-984-1926

Aboveground tanks that have been inspected by the State Fire Marshal.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/02/04  
Database Release Frequency: Varies

Date of Last EDR Contact: 09/27/04  
Date of Next Scheduled EDR Contact: 12/27/04

**LAST: Leaking Aboveground Storage Tank Sites**  
Source: Environment Department  
Telephone: 505-984-1926  
A listing of leaking aboveground storage tank sites.

Date of Government Version: 09/13/04  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/03/04  
Date of Next Scheduled EDR Contact: 11/01/04

**SPILLS: Spill Data**  
Source: Environment Department  
Telephone: 505-827-0166  
Hazardous materials spills data.

Date of Government Version: 04/06/04  
Database Release Frequency: Varies

Date of Last EDR Contact: 07/26/04  
Date of Next Scheduled EDR Contact: 10/25/04

### EDR PROPRIETARY HISTORICAL DATABASES

**Former Manufactured Gas (Coal Gas) Sites:** The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

#### **Disclaimer Provided by Real Property Scan, Inc.**

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

### BROWNFIELDS DATABASES

**US BROWNFIELDS:** A Listing of Brownfields Sites  
Source: Environmental Protection Agency  
Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: N/A  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: N/A  
Date of Next Scheduled EDR Contact: N/A

**VCP: Voluntary Remediation Program Sites**  
Source: Environment Department  
Telephone: 505-827-2754  
Sites involved in the Voluntary Remediation Program.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/31/04  
Database Release Frequency: Varies

Date of Last EDR Contact: 07/27/04  
Date of Next Scheduled EDR Contact: 10/25/04

### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

#### **Electric Power Transmission Line Data**

Source: PennWell Corporation  
Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### **AHA Hospitals:**

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

#### **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

#### **Nursing Homes**

Source: National Institutes of Health  
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

#### **Public Schools**

Source: National Center for Education Statistics  
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

#### **Private Schools**

Source: National Center for Education Statistics  
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

#### **Daycare Centers: Licensed Child Day Care Providers**

Source: Office of Child Development  
Telephone: 505-827-7946

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### STREET AND ADDRESS INFORMATION

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## GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

RUNCO INC.  
PROPERTY STREET/EAST UTAH AVE.  
JAL, NM 88252

### TARGET PROPERTY COORDINATES

Latitude (North):	32.112457 - 32° 6' 44.8"
Longitude (West):	103.189331 - 103° 11' 21.6"
Universal Transverse Mercator:	Zone 13
UTM X (Meters):	670834.3
UTM Y (Meters):	3554148.0
Elevation:	3038 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

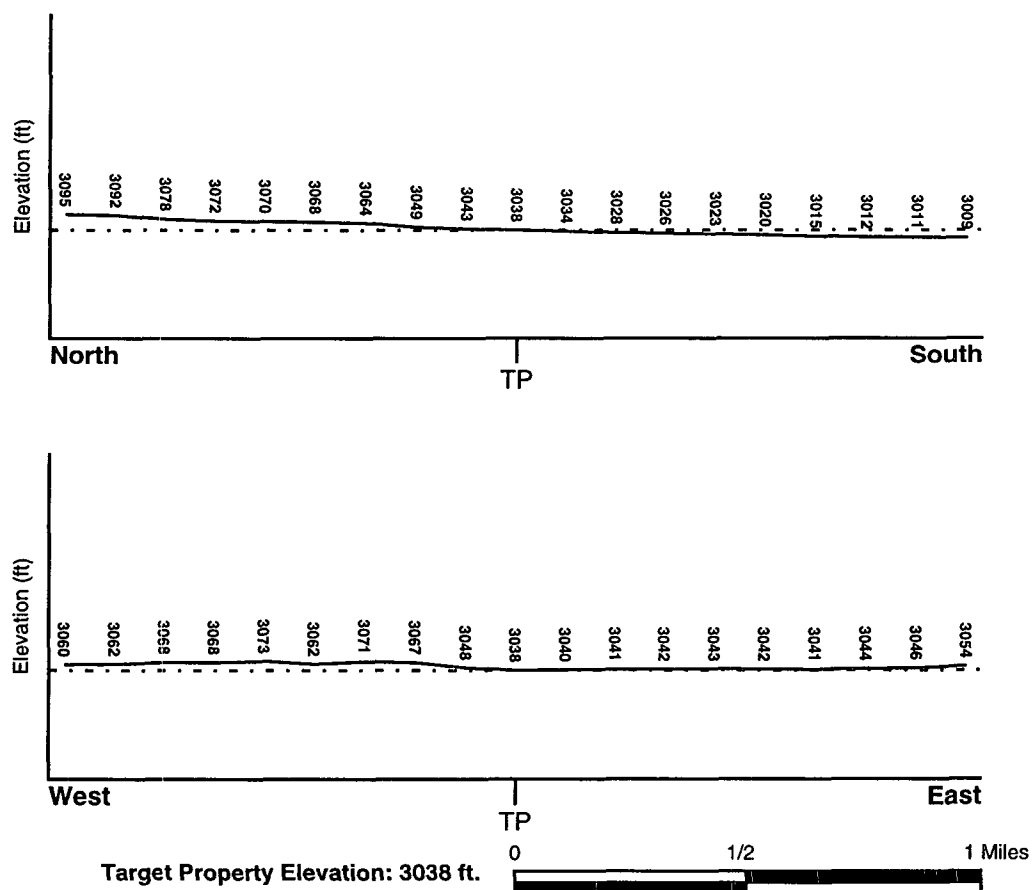
### TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 32103-A2 JAL, NM TX  
General Topographic Gradient: General SE  
Source: USGS 7.5 min quad index

### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### FEMA FLOOD ZONE

<u>Target Property County</u>	FEMA Flood
LEA, NM	<u>Electronic Data</u>
	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

### NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	NWI Electronic
JAL	<u>Data Coverage</u>
	Not Available

### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### *Site-Specific Hydrogeological Data\*:*

Search Radius:	1.25 miles
Status:	Not found

### AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u>	<u>GENERAL DIRECTION</u>
Not Reported	<u>FROM TP</u>	<u>GROUNDWATER FLOW</u>

## **GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (decoded above as Era, System & Series)

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	PYOTE
Soil Surface Texture:	fine sand
Hydrologic Group:	Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.
Hydric Status:	Soil does not meet the requirements for a hydric soil.
Corrosion Potential - Uncoated Steel:	MODERATE
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	36 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 7.80 Min: 6.60
2	36 inches	74 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 8.40 Min: 6.60
3	74 inches	80 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 8.40 Min: 6.60

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinate soil types may appear within the general area of target property.

Soil Surface Textures: fine sandy loam  
loamy fine sand  
sandy loam

Surficial Soil Types: fine sandy loam  
loamy fine sand  
sandy loam

Shallow Soil Types: sandy clay loam

Deeper Soil Types: indurated  
fine sand  
gravelly - loamy fine sand  
sandy loam  
clay loam  
loamy sand  
loam

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS0747099	1/4 - 1/2 Mile ENE
2	USGS0747104	1/2 - 1 Mile NNW

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

### STATE OIL/GAS WELL INFORMATION

<u>DISTANCE FROM TP (Miles)</u>	<u>DISTANCE FROM TP (Miles)</u>
1/2 - 1 Mile NNE	1/2 - 1 Mile NNE
1/2 - 1 Mile NNE	1/2 - 1 Mile NNE
1/2 - 1 Mile NNW	1/2 - 1 Mile NNW
1/2 - 1 Mile NNW	1/2 - 1 Mile NNW
1/2 - 1 Mile North	1/2 - 1 Mile NW
1/2 - 1 Mile NNW	1/2 - 1 Mile NNW
1/2 - 1 Mile NNW	1/2 - 1 Mile NE
1/2 - 1 Mile NNW	1/2 - 1 Mile NW
1/2 - 1 Mile NE	1/2 - 1 Mile ENE
1/2 - 1 Mile NNW	1/4 - 1/2 Mile NNW
1/2 - 1 Mile NW	1/4 - 1/2 Mile NNW
1/4 - 1/2 Mile NNE	1/2 - 1 Mile NW
1/2 - 1 Mile NW	1/2 - 1 Mile NW
1/2 - 1 Mile NW	1/4 - 1/2 Mile NNW
1/4 - 1/2 Mile NE	1/2 - 1 Mile NE
1/2 - 1 Mile ENE	1/2 - 1 Mile ENE
1/2 - 1 Mile ENE	1/2 - 1 Mile ENE
1/4 - 1/2 Mile NNW	1/2 - 1 Mile ENE

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### STATE OIL/GAS WELL INFORMATION

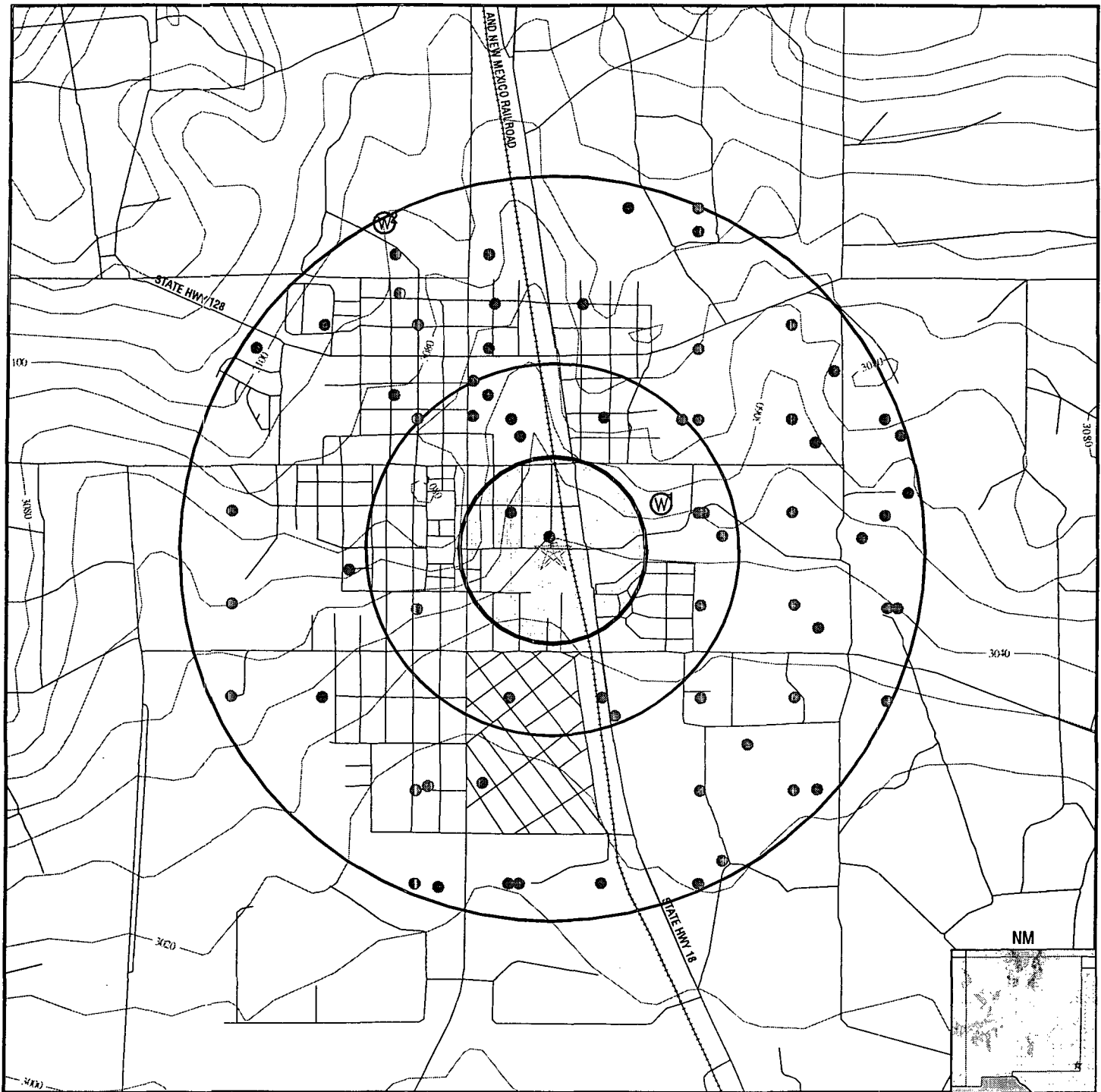
#### DISTANCE FROM TP (Miles)

1/2 - 1 Mile East  
1/2 - 1 Mile West  
1/4 - 1/2 Mile ENE  
1/4 - 1/2 Mile ENE  
1/4 - 1/2 Mile ENE  
1/4 - 1/2 Mile ENE  
1/2 - 1 Mile East  
1/2 - 1 Mile East  
0 - 1/8 Mile NNW  
1/2 - 1 Mile West  
1/4 - 1/2 Mile ESE  
1/4 - 1/2 Mile ESE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile East  
1/2 - 1 Mile East  
1/2 - 1 Mile ESE  
1/2 - 1 Mile WSW  
1/4 - 1/2 Mile SSE  
1/4 - 1/2 Mile SSE  
1/4 - 1/2 Mile SSE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile SE  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSE  
1/2 - 1 Mile SE  
1/2 - 1 Mile SSE  
1/2 - 1 Mile South  
1/2 - 1 Mile South  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSW

#### DISTANCE FROM TP (Miles)

1/2 - 1 Mile West  
1/8 - 1/4 Mile NW  
1/4 - 1/2 Mile ENE  
1/4 - 1/2 Mile ENE  
1/4 - 1/2 Mile ENE  
1/2 - 1 Mile East  
1/2 - 1 Mile East  
1/4 - 1/2 Mile East  
1/2 - 1 Mile East  
1/2 - 1 Mile West  
1/4 - 1/2 Mile ESE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile East  
1/2 - 1 Mile East  
1/4 - 1/2 Mile WSW  
1/2 - 1 Mile WSW  
1/4 - 1/2 Mile SSW  
1/4 - 1/2 Mile SSE  
1/4 - 1/2 Mile SSE  
1/2 - 1 Mile SE  
1/2 - 1 Mile ESE  
1/2 - 1 Mile ESE  
1/4 - 1/2 Mile SSE  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SE  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSE  
1/2 - 1 Mile SE  
1/2 - 1 Mile SE  
1/2 - 1 Mile South  
1/2 - 1 Mile SSE  
1/2 - 1 Mile South  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSW  
1/2 - 1 Mile SSW

# PHYSICAL SETTING SOURCE MAP - 01286300.1r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

0 1/4 1/2 1 Miles

**TARGET PROPERTY:** Runco Inc.  
**ADDRESS:** Property Street/East Utah Ave.  
**CITY/STATE/ZIP:** Jal NM 88252  
**LAT/LONG:** 32.1125 / 103.1893

**CUSTOMER:** RE/SPEC, Inc.  
**CONTACT:** John Bunch  
**INQUIRY #:** 01286300.1r  
**DATE:** October 12, 2004 2:12 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

1

ENE  
1/4 - 1/2 Mile  
Higher

FED USGS USGS0747099

Agency:	USGS	Site ID:	320651103110202
Site Name:	25S.37E.20.231342A		
Dec. Latitude:	32.11429		
Dec. Longitude:	-103.18435		
Coord Sys:	NAD83		
State:	NM		
County:	Lea County		
Altitude:	3071.70		
Hydrologic code:	13070007		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	110AVMB		
Aquifer type:	Not Reported		
Well depth:	510		
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 5

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1996-02-14	36.62		1991-06-05	38.41	
1986-03-13	39.50		1976-01-08	43.08	
1970-12-16	42.05				

2

NNW  
1/2 - 1 Mile  
Higher

FED USGS USGS0747104

Agency:	USGS	Site ID:	320730103114801
Site Name:	25S.37E.18.421110		
Dec. Latitude:	32.12513		
Dec. Longitude:	-103.19712		
Coord Sys:	NAD83		
State:	NM		
County:	Lea County		
Altitude:	3107.20		
Hydrologic code:	13070007		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	110AVMB		
Aquifer type:	Not Reported		
Well depth:	100		
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 9

Date	Feet below Surface	Feet to Sealevel
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2001-03-07	51.06	
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1991-06-11	52.94	
------------	-------	--

1981-03-30	58.25	
------------	-------	--

1976-01-06	60.31	
------------	-------	--

Note: A nearby site that taps the same aquifer was being pumped.

1970-12-16	61.42	
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Note: A nearby site that taps the same aquifer was being pumped.

1968-02-29	62.85	
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Date	Feet below Surface	Feet to Sealevel
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1996-02-14	51.69	
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1986-03-13	54.41	
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1965-10-29	63.82	
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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NNE  
1/2 - 1 Mile

OIL\_GAS NMOG054989

Api ID:	3002511641	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRs (OW)	Well ID:	027
Well Name:	SOUTH LANGLEIE JAL UNIT	County ID:	25
County Name:	Lea	Operator ID:	4115
Op. Name:	CHAPARRAL ENERGY INC		
Latitude:	32.12561		
Longitude:	-103.1855	Section:	17
Township:	25.0S	Range:	37E
Unit ID:	N	Ft. N/S Dist:	990
Ft. N/S dir:	S	Ft. E/W Dist:	2310
Ft. E/W Dir:	W	Elevation:	3101 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNE  
1/2 - 1 Mile

OIL\_GAS NMOG055060

Api ID:	3002511635	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRs-Q-GRABURG	Well ID:	094
Well Name:	LANGLIE JAL UNIT	County ID:	25
County Name:	Lea	Operator ID:	185433
Op. Name:	KENSON OPERATING COMPANY INC		
Latitude:	32.12561		
Longitude:	-103.18226	Section:	17
Township:	25.0S	Range:	37E
Unit ID:	O	Ft. N/S Dist:	990
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNE  
1/2 - 1 Mile

OIL\_GAS NMOG071559

Api ID:	3002534620	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRs (PAGIBS)	Well ID:	002
Well Name:	LANGLIE A FEDERAL	County ID:	25
County Name:	Lea	Operator ID:	192143
Op. Name:	HERMAN L LOEB		
Latitude:	32.1247		
Longitude:	-103.18225	Section:	17
Township:	25.0S	Range:	37E
Unit ID:	O	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	3091 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NNE  
1/2 - 1 Mile

OIL\_GAS NMOG006188

Api ID:	3052510381	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	094
Well Name:	LANGLIE JAL UNIT	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.1247		
Longitude:	-103.18225	Section:	17
Township:	25.0S	Range:	37E
Unit ID:	O	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG054976

Api ID:	3002511645	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	026
Well Name:	SOUTH LANGLIE JAL UNIT	County ID:	25
County Name:	Lea	Operator ID:	4115
Op. Name:	CHAPARRAL ENERGY INC		
Latitude:	32.1238		
Longitude:	-103.19188	Section:	17
Township:	25.0S	Range:	37E
Unit ID:	M	Ft. N/S Dist:	330
Ft. N/S dir:	S	Ft. E/W Dist:	330
Ft. E/W Dir:	W	Elevation:	3084 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG055023

Api ID:	3002511616	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	025
Well Name:	SOUTH LANGLIE JAL UNIT	County ID:	25
County Name:	Lea	Operator ID:	4115
Op. Name:	CHAPARRAL ENERGY INC		
Latitude:	32.12379		
Longitude:	-103.19614	Section:	18
Township:	25.0S	Range:	37E
Unit ID:	P	Ft. N/S Dist:	330
Ft. N/S dir:	S	Ft. E/W Dist:	990
Ft. E/W Dir:	E	Elevation:	3084 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG054837

Api ID:	3002511622	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	004
Well Name:	B M JUSTIS B	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.12227		
Longitude:	-103.19593	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	225
Ft. N/S dir:	N	Ft. E/W Dist:	925
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG055036

Api ID:	3002511666	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	V H JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.12188		
Longitude:	-103.19159	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	D	Ft. N/S Dist:	370
Ft. N/S dir:	N	Ft. E/W Dist:	420
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

North  
1/2 - 1 Mile

OIL\_GAS NMOG055085

Api ID:	3002511663	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	005
Well Name:	B M JUSTIS C	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.12187		
Longitude:	-103.18755	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	C	Ft. N/S Dist:	370
Ft. N/S dir:	N	Ft. E/W Dist:	1670
Ft. E/W Dir:	W	Elevation:	3095 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NW  
1/2 - 1 Mile

OIL\_GAS NMOG054951

Api ID:	3002511625	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	003
Well Name:	SHOLES B 19	County ID:	25
County Name:	Lea	Operator ID:	5073
Op. Name:	CONOCO INC		
Latitude:	32.12107		
Longitude:	-103.19934	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	B	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG005886

Api ID:	3052510401	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	012
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.12107		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG005887

Api ID:	3052510403	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.12107		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG006229

Api ID:	3052510402	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRs (OW)	Well ID:	003
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.12107		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

NE  
1/2 - 1 Mile

OIL\_GAS NMOG054945

Api ID:	3002511661	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRs (OW)	Well ID:	001
Well Name:	JOHNS FEDERAL	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.12107		
Longitude:	-103.17797	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	3067 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNW  
1/2 - 1 Mile

OIL\_GAS NMOG054839

Api ID:	3002511662	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRs (OW)	Well ID:	001
Well Name:	JUSTIS A FEDERAL	County ID:	25
County Name:	Lea	Operator ID:	22260
Op. Name:	TENNECO OIL CO		
Latitude:	32.12017		
Longitude:	-103.19188	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	D	Ft. N/S Dist:	990
Ft. N/S dir:	N	Ft. E/W Dist:	330
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NW  
1/2 - 1 Mile

OIL\_GAS NMOG054940

Api ID:	3002511624	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	SHOLES B 19	County ID:	25
County Name:	Lea	Operator ID:	5073
Op. Name:	CONOCO INC		
Latitude:	32.12016		
Longitude:	-103.20248	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	C	Ft. N/S Dist:	990
Ft. N/S dir:	N	Ft. E/W Dist:	2310
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

NE  
1/2 - 1 Mile

OIL\_GAS NMOG055014

Api ID:	3002511665	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	003
Well Name:	B M JUSTIS A	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.12016		
Longitude:	-103.18223	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	B	Ft. N/S Dist:	990
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	3081 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

ENE  
1/2 - 1 Mile

OIL\_GAS NMOG069159

Api ID:	3002532394	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	002
Well Name:	SALADO	County ID:	25
County Name:	Lea	Operator ID:	191170
Op. Name:	SALADO BRINE SALES		
Latitude:	32.11929		
Longitude:	-103.17602	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	1305
Ft. N/S dir:	N	Ft. E/W Dist:	60
Ft. E/W Dir:	E	Elevation:	3073 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database      EDR ID Number

NNW  
1/2 - 1 Mile

OIL\_GAS      NMOG065370

Api ID:	3002528805	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	012
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	6473
Op. Name:	DOYLE HARTMAN		
Latitude:	32.11891		
Longitude:	-103.19257	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	1450
Ft. N/S dir:	N	Ft. E/W Dist:	120
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNW  
1/4 - 1/2 Mile

OIL\_GAS      NMOG054944

Api ID:	3002511660	Pool ID:	96132
Pool Name:	SWD;SEVEN RIVERS-QUEEN	Well ID:	001
Well Name:	CHRISTMAS	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.11836		
Longitude:	-103.19189	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	1650
Ft. N/S dir:	N	Ft. E/W Dist:	330
Ft. E/W Dir:	W	Elevation:	3076 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NW  
1/2 - 1 Mile

OIL\_GAS      NMOG057613

Api ID:	3002521279	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	009
Well Name:	B M JUSTIS B	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.11835		
Longitude:	-103.19615	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1650
Ft. N/S dir:	N	Ft. E/W Dist:	990
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NNW  
1/4 - 1/2 Mile

OIL\_GAS NMOG064155

Api ID:	3002527630	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PR)	Well ID:	010
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	6473
Op. Name:	DOYLE HARTMAN		
Latitude:	32.11756		
Longitude:	-103.19257	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	1940
Ft. N/S dir:	N	Ft. E/W Dist:	120
Ft. E/W Dir:	W	Elevation:	3067 GL
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNE  
1/4 - 1/2 Mile

OIL\_GAS NMOG055048

Api ID:	3002511669	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	007
Well Name:	B M JUSTIS B	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.1175		
Longitude:	-103.18656	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	F	Ft. N/S Dist:	1960
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	3076 GL
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NW  
1/2 - 1 Mile

OIL\_GAS NMOG006220

Api ID:	3052510406	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	009
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11745		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NW  
1/2 - 1 Mile

OIL\_GAS NMOG005945

Api ID:	3052510405	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIGAS)		001
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11745		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

NW  
1/2 - 1 Mile

OIL\_GAS NMOG056023

Api ID:	3002512577	Pool ID:	96838
Pool Name:	DRY & ABND	Well ID:	001
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	22260
Op. Name:	TENNECO OIL CO		
Latitude:	32.11745		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	365	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

NW  
1/2 - 1 Mile

OIL\_GAS NMOG054943

Api ID:	3002511657	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIGAS)		001
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	6473
Op. Name:	DOYLE HARTMAN		
Latitude:	32.11745		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard



# GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database FDR ID Number

NNW  
1/4 - 1/2 Mile

OIL\_GAS NMOG055086

Api ID:	3002511668	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRs (OW)	Well ID:	002
Well Name:	B M JUSTIS A	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.11745		
Longitude:	-103.19082	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	3056 GL
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NE  
1/4 - 1/2 Mile

OIL\_GAS NMOG064335

Api ID:	3002527837	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	011
Well Name:	B M JUSTIS	County ID:	25
County Name:	Lea	Operator ID:	26485
Op. Name:	BURLINGTON RESOURCES OIL & GAS CO		
Latitude:	32.11744		
Longitude:	-103.18295	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	G	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	2210
Ft. E/W Dir:	E	Elevation:	3071 GL
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NE  
1/2 - 1 Mile

OIL\_GAS NMOG056689

Api ID:	3002520581	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRs (OW)	Well ID:	008
Well Name:	B M JUSTIS B	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.11744		
Longitude:	-103.18221	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	G	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	3079 GL
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

ENE  
1/2 - 1 Mile

OIL\_GAS NMOG005888

Api ID:	3052510412	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	B M JUSTIS A	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11744		
Longitude:	-103.17795	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ENE  
1/2 - 1 Mile

OIL\_GAS NMOG005961

Api ID:	3052510423	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	CARLSON	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11744		
Longitude:	-103.17368	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ENE  
1/2 - 1 Mile

OIL\_GAS NMOG055049

Api ID:	3002511683	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	CARLSON	County ID:	25
County Name:	Lea	Operator ID:	23762
Op. Name:	UNION TEXAS PETROLEUM CORP		
Latitude:	32.11744		
Longitude:	-103.17368	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Complate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database FDR ID Number

ENE  
1/2 - 1 Mile

OIL\_GAS NMOG062849

Api ID:	3002526335	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	001
Well Name:	FEDERAL	County ID:	25
County Name:	Lea	Operator ID:	188294
Op. Name:	AMERICAN INLAND RESOURCES COMPANY LLC		
Latitude:	32.11681		
Longitude:	-103.17294	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	2210
Ft. N/S dir:	N	Ft. E/W Dist:	890
Ft. E/W Dir:	W	Elevation:	3064 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

NNW  
1/4 - 1/2 Mile

OIL\_GAS NMOG064267

Api ID:	3002527664	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P)	Well ID:	001
Well Name:	JUSTIS CHRISTMAS	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.11678		
Longitude:	-103.19041	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	2225
Ft. N/S dir:	N	Ft. E/W Dist:	790
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

ENE  
1/2 - 1 Mile

OIL\_GAS NMOG055002

Api ID:	3002511664	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	006
Well Name:	B M JUSTIS A	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.11653		
Longitude:	-103.17687	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	2310
Ft. N/S dir:	N	Ft. E/W Dist:	330
Ft. E/W Dir:	E	Elevation:	3057 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

East  
1/2 - 1 Mile

OIL\_GAS NMOG054980

Api ID:	3002511684	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIBS)	Well ID:	003
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	188294
Op. Name:	AMERICAN INLAND RESOURCES COMPANY LLC		
Latitude:	32.11459		
Longitude:	-103.1726	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	L	Ft. N/S Dist:	2310
Ft. N/S dir:	S	Ft. E/W Dist:	990
Ft. E/W Dir:	W	Elevation:	3054 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

West  
1/2 - 1 Mile

OIL\_GAS NMOG005931

Api ID:	3052510407	Pool ID:	92603
Pool Name:	LEA UNDESIGNATED;STRAWN (WASD)	Well ID:	004
Well Name:	SHOLES B 19 COM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11386		
Longitude:	-103.20354	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	K	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

West  
1/2 - 1 Mile

OIL\_GAS NMOG063592

Api ID:	3002527143	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIBS)	Well ID:	004
Well Name:	SHOLES B 19	County ID:	25
County Name:	Lea	Operator ID:	188294
Op. Name:	AMERICAN INLAND RESOURCES COMPANY LLC		
Latitude:	32.11386		
Longitude:	-103.20354	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	K	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	3070 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

NW  
1/8 - 1/4 Mile

OIL\_GAS NMOG055074

Api ID:	3002511667	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	001
Well Name:	BATES	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.11382		
Longitude:	-103.19083	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	L	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	1992-10-06	Datasource:	Ongard

ENE  
1/4 - 1/2 Mile

OIL\_GAS NMOG006222

Api ID:	3052510414	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRWBLURG	Well ID:	002
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11382		
Longitude:	-103.18219	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ENE  
1/4 - 1/2 Mile

OIL\_GAS NMOG005920

Api ID:	3052510416	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P) (OIL GAS)	Well ID:	002
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11382		
Longitude:	-103.18219	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

ENE  
1/4 - 1/2 Mile

OIL\_GAS NMOG005975

Api ID:	3052510415	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P)	Well ID:	002
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11382		
Longitude:	-103.18219	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ENE  
1/4 - 1/2 Mile

OIL\_GAS NMOG005977

Api ID:	3052510418	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P)	Well ID:	001
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11382		
Longitude:	-103.18219	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ENE  
1/4 - 1/2 Mile

OIL\_GAS NMOG005976

Api ID:	3052510417	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P)	Well ID:	003
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11382		
Longitude:	-103.18219	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

ENE  
1/4 - 1/2 Mile

OIL\_GAS NMOG055073

Api ID:	3002511659	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	22659
Op. Name:	TEXAS PACIFIC OIL CO INC		
Latitude:	32.11382		
Longitude:	-103.18195	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1905
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

ENE  
1/4 - 1/2 Mile

OIL\_GAS NMOG054953

Api ID:	3002511659	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	22659
Op. Name:	TEXAS PACIFIC OIL CO INC		
Latitude:	32.11382		
Longitude:	-103.18195	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1905
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

East  
1/2 - 1 Mile

OIL\_GAS NMOG055037

Api ID:	3002511671	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	002
Well Name:	LEONARD	County ID:	25
County Name:	Lea	Operator ID:	141402
Op. Name:	FULFER OIL & CATTLE LLC		
Latitude:	32.11382		
Longitude:	-103.17793	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	3050 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

East  
1/2 - 1 Mile

OIL\_GAS NMOG005919

Api ID:	3052510413	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRW	Well ID:	002
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11382		
Longitude:	-103.17793	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

East  
1/2 - 1 Mile

OIL\_GAS NMOG005933

Api ID:	3052510431	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRW	Well ID:	004
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11369		
Longitude:	-103.17366	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	L	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

East  
1/2 - 1 Mile

OIL\_GAS NMOG006055

Api ID:	3052510430	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	001
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11369		
Longitude:	-103.17366	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	L	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

East  
1/4 - 1/2 Mile

OIL\_GAS NMOG062833

Api ID:	3002526319	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIBS)		003
Well Name:	HORNER	County ID:	25
County Name:	Lea	Operator ID:	13300
Op. Name:	LEWIS B BURLESON INC		
Latitude:	32.11291		
Longitude:	-103.18111	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1650
Ft. N/S dir:	S	Ft. E/W Dist:	1650
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

NNW  
0 - 1/8 Mile

OIL\_GAS NMOG064134

Api ID:	3002527542	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIBS)		003
Well Name:	BATES	County ID:	25
County Name:	Lea	Operator ID:	26485
Op. Name:	BURLINGTON RESOURCES OIL & GAS CO		
Latitude:	32.11287		
Longitude:	-103.18906	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	K	Ft. N/S Dist:	1635
Ft. N/S dir:	S	Ft. E/W Dist:	1210
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

East  
1/2 - 1 Mile

OIL\_GAS NMOG062525

Api ID:	3002526155	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)		004
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	13300
Op. Name:	LEWIS B BURLESON INC		
Latitude:	32.11281		
Longitude:	-103.17471	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	L	Ft. N/S Dist:	1650
Ft. N/S dir:	S	Ft. E/W Dist:	330
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	1994-06-08	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

West  
1/2 - 1 Mile

OIL\_GAS NMOG064843

Api ID:	3002528519	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIGAS)	Well ID:	008
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	162683
Op. Name:	GRUY PETROLEUM MANAGEMENT CO.		
Latitude:	32.11158		
Longitude:	-103.19817	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	O	Ft. N/S Dist:	1160
Ft. N/S dir:	S	Ft. E/W Dist:	1610
Ft. E/W Dir:	E	Elevation:	3058 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

West  
1/2 - 1 Mile

OIL\_GAS NMOG054950

Api ID:	3002511623	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIGAS)	Well ID:	001
Well Name:	SHOLES B 19	County ID:	25
County Name:	Lea	Operator ID:	188294
Op. Name:	AMERICAN INLAND RESOURCES COMPANY LLC		
Latitude:	32.11023		
Longitude:	-103.20353	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	N	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	3157 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

ESE  
1/4 - 1/2 Mile

OIL\_GAS NMOG006230

Api ID:	3052510420	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	001
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11019		
Longitude:	-103.18208	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	O	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database      EDR ID Number

ESE  
1/4 - 1/2 Mile

OIL\_GAS      NMOG005902

Api ID:	3052510419	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GROWING	Well ID:	001
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11019		
Longitude:	-103.18208	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	O	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ESE  
1/4 - 1/2 Mile

OIL\_GAS      NMOG0054978

Api ID:	3002511673	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	001
Well Name:	HARNER	County ID:	25
County Name:	Lea	Operator ID:	22659
Op. Name:	TEXAS PACIFIC OIL CO INC		
Latitude:	32.11019		
Longitude:	-103.18208	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	O	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

ESE  
1/2 - 1 Mile

OIL\_GAS      NMOG005873

Api ID:	3052510421	Pool ID:	74800
Pool Name:	CHAVEROO;CANYON, NORTH (CAS)	Well ID:	003
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11019		
Longitude:	-103.17782	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	P	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG054930

Api ID:	3002511670	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P)	Well ID:	001
Well Name:	LEONARD	County ID:	25
County Name:	Lea	Operator ID:	13300
Op. Name:	LEWIS B BURLESON INC		
Latitude:	32.11019		
Longitude:	-103.17782	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	P	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	1994-12-23	Datasource:	Ongard

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG005946

Api ID:	3052510422	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GR	Well ID:	001
Well Name:	LEONARD	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11019		
Longitude:	-103.17782	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	P	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG006172

Api ID:	3052510421	Pool ID:	75480
Pool Name:	CROSBY;DEVONIAN (GAS)	Well ID:	003
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11019		
Longitude:	-103.17782	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	P	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database FDR ID Number

East  
1/2 - 1 Mile

OIL\_GAS NMOG054979

Api ID:	3002511678	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACBAS)	Well ID:	001
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	13300
Op. Name:	LEWIS B BURLESON INC		
Latitude:	32.11006		
Longitude:	-103.17355	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	M	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

East  
1/2 - 1 Mile

OIL\_GAS NMOG005934

Api ID:	3052510433	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACBAS)	Well ID:	001
Well Name:	EVA OWENS D	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11006		
Longitude:	-103.17355	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	M	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

East  
1/2 - 1 Mile

OIL\_GAS NMOG005949

Api ID:	3052510432	Pool ID:	13440
Pool Name:	CROSBY;DEVONIAN (ABANDONED)	Well ID:	001
Well Name:	EVA OWENS D	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.11006		
Longitude:	-103.17355	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	M	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

East  
1/2 - 1 Mile

OIL\_GAS NMOG055075

Api ID:	3002511677	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRAV	Well ID:	001Y
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	188294
Op. Name:	AMERICAN INLAND RESOURCES COMPANY LLC		
Latitude:	32.11006		
Longitude:	-103.17307	Section:	21
Township:	25.0S	Range:	37E
Unit ID:	M	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	810
Ft. E/W Dir:	W	Elevation:	3037 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

WSW  
1/4 - 1/2 Mile

OIL\_GAS NMOG054894

Api ID:	3002511621	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	002
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	26485
Op. Name:	BURLINGTON RESOURCES OIL & GAS CO		
Latitude:	32.11002		
Longitude:	-103.19508	Section:	19
Township:	25.0S	Range:	37E
Unit ID:	P	Ft. N/S Dist:	598
Ft. N/S dir:	S	Ft. E/W Dist:	653
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG054954

Api ID:	3002511672	Pool ID:	75480
Pool Name:	CROSBY;DEVONIAN (GAS)	Well ID:	003
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	21806
Op. Name:	SUN OIL CO		
Latitude:	32.10929		
Longitude:	-103.17672	Section:	20
Township:	25.0S	Range:	37E
Unit ID:	P	Ft. N/S Dist:	330
Ft. N/S dir:	S	Ft. E/W Dist:	330
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

WSW  
1/2 - 1 Mile

OIL\_GAS NMOG055054

Api ID:	3002511842	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	001
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	26485
Op. Name:	BURLINGTON RESOURCES OIL & GAS CO		
Latitude:	32.1066		
Longitude:	-103.20353	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	C	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

WSW  
1/2 - 1 Mile

OIL\_GAS NMOG065120

Api ID:	3002528637	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P) (GAS)	Well ID:	009
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	162683
Op. Name:	GRUY PETROLEUM MANAGEMENT CO.		
Latitude:	32.10658		
Longitude:	-103.19937	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	B	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

SSW  
1/4 - 1/2 Mile

OIL\_GAS NMOG055195

Api ID:	3002511826	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	002
Well Name:	BATES	County ID:	25
County Name:	Lea	Operator ID:	2175
Op. Name:	BETTIS BOYLE & STOVALL		
Latitude:	32.10656		
Longitude:	-103.19085	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	D	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	1992-09-23	Datasource:	Ongard



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SSE  
1/4 - 1/2 Mile

OIL\_GAS NMOG005689

Api ID:	3052510616	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	001
Well Name:	BATES	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10656		
Longitude:	-103.18658	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	C	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SSE  
1/4 - 1/2 Mile

OIL\_GAS NMOG005744

Api ID:	3052510618	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P)	Well ID:	002
Well Name:	BATES	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10656		
Longitude:	-103.18658	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	C	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SSE  
1/4 - 1/2 Mile

OIL\_GAS NMOG005730

Api ID:	3052510619	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P)	Well ID:	001
Well Name:	BATES	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10656		
Longitude:	-103.18658	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	C	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database      FDR ID Number

SSE  
1/4 - 1/2 Mile

OIL\_GAS      NMOG006004

Api ID:	3052510617	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIOS)	Well ID:	001
Well Name:	BATES	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10656	Section:	29
Longitude:	-103.18658	Range:	37E
Township:	25.0S	Ft. N/S Dist:	660
Unit ID:	C	Ft. E/W Dist:	1980
Ft. N/S dir:	N	Elevation:	Not Reported
Ft. E/W Dir:	W	Compdate:	Not Reported
Depth:	0	Datasource:	Preongard
Plugdate:	Not Reported		

SSE  
1/4 - 1/2 Mile

OIL\_GAS      NMOG006026

Api ID:	3052510615	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRVRS	Well ID:	001
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10656	Section:	29
Longitude:	-103.18658	Range:	37E
Township:	25.0S	Ft. N/S Dist:	660
Unit ID:	C	Ft. E/W Dist:	1980
Ft. N/S dir:	N	Elevation:	Not Reported
Ft. E/W Dir:	W	Compdate:	Not Reported
Depth:	0	Datasource:	Preongard
Plugdate:	Not Reported		

SE  
1/2 - 1 Mile

OIL\_GAS      NMOG055270

Api ID:	3002511832	Pool ID:	96838
Pool Name:	DRY & ABND	Well ID:	001
Well Name:	COLL	County ID:	25
County Name:	Lea	Operator ID:	999535
Op. Name:	OLSEN-BLOUNT OIL CO		
Latitude:	32.10656	Section:	29
Longitude:	-103.18204	Range:	37E
Township:	25.0S	Ft. N/S Dist:	660
Unit ID:	B	Ft. E/W Dist:	1980
Ft. N/S dir:	N	Elevation:	Not Reported
Ft. E/W Dir:	E	Compdate:	Not Reported
Depth:	0	Datasource:	Hobbs
Plugdate:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG005940

Api ID:	3052510614	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIFIC)		001
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10656		
Longitude:	-103.17777	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG005958

Api ID:	3052510598	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRW (WUBRG)		001
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10643		
Longitude:	-103.17352	Section:	28
Township:	25.0S	Range:	37E
Unit ID:	D	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG005671

Api ID:	3052510600	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIFIC)		001
Well Name:	SAUNDERS ESTATE	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10643		
Longitude:	-103.17352	Section:	28
Township:	25.0S	Range:	37E
Unit ID:	D	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG005718

Api ID:	3052510599	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRV		003
Well Name:	SAUNDERS ESTATE	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10643		
Longitude:	-103.17352	Section:	28
Township:	25.0S	Range:	37E
Unit ID:	D	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

ESE  
1/2 - 1 Mile

OIL\_GAS NMOG062510

Api ID:	3002526077	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P		003
Well Name:	SAUNDERS ESTATE	County ID:	25
County Name:	Lea	Operator ID:	13300
Op. Name:	LEWIS B BURLESON INC		
Latitude:	32.10643		
Longitude:	-103.17352	Section:	28
Township:	25.0S	Range:	37E
Unit ID:	D	Ft. N/S Dist:	660
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

SSE  
1/4 - 1/2 Mile

OIL\_GAS NMOG055156

Api ID:	3002511825	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (P		001
Well Name:	EXXON C T BATES	County ID:	25
County Name:	Lea	Operator ID:	999715
Op. Name:	XL TRANSPORTATION CO		
Latitude:	32.10585		
Longitude:	-103.18597	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	C	Ft. N/S Dist:	920
Ft. N/S dir:	N	Ft. E/W Dist:	2170
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SE  
1/2 - 1 Mile

OIL\_GAS NMOG055244

Api ID:	3002511837	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIBS)	Well ID:	001
Well Name:	LANEHART	County ID:	25
County Name:	Lea	Operator ID:	22351
Op. Name:	TEXACO EXPLORATION & PRODUCTION INC		
Latitude:	32.10475		
Longitude:	-103.17992	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	A	Ft. N/S Dist:	1320
Ft. N/S dir:	N	Ft. E/W Dist:	1320
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG063066

Api ID:	3002526595	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIBS)	Well ID:	001
Well Name:	BATES B B & S	County ID:	25
County Name:	Lea	Operator ID:	14538
Op. Name:	MERIDIAN OIL INC		
Latitude:	32.10323		
Longitude:	-103.19209	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	E	Ft. N/S Dist:	1870
Ft. N/S dir:	N	Ft. E/W Dist:	280
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG055259

Api ID:	3002511838	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	007
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	26485
Op. Name:	BURLINGTON RESOURCES OIL & GAS CO		
Latitude:	32.1031		
Longitude:	-103.19456	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1922
Ft. N/S dir:	N	Ft. E/W Dist:	488
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SE  
1/2 - 1 Mile

OIL\_GAS NMOG062608

Api ID:	3002526191	Pool ID:	96838
Pool Name:	DRY & ABND	Well ID:	002
Well Name:	COLL A	County ID:	25
County Name:	Lea	Operator ID:	3065
Op. Name:	BURLESON & HUFF		
Latitude:	32.10297	Section:	29
Longitude:	-103.17675	Range:	37E
Township:	25.0S	Ft. N/S Dist:	1980
Unit ID:	H	Ft. E/W Dist:	330
Ft. N/S dir:	N	Elevation:	Not Reported
Ft. E/W Dir:	E	Complate:	Not Reported
Depth:	0	Datasource:	Hobbs
Plugdate:	Not Reported		

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG005705

Api ID:	3052510633	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIGAS)	Well ID:	007
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10294	Section:	30
Longitude:	-103.19511	Range:	37E
Township:	25.0S	Ft. N/S Dist:	1980
Unit ID:	H	Ft. E/W Dist:	660
Ft. N/S dir:	N	Elevation:	Not Reported
Ft. E/W Dir:	E	Complate:	Not Reported
Depth:	0	Datasource:	Preongard
Plugdate:	Not Reported		

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG005721

Api ID:	3052510632	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRWBLURG	Well ID:	007
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10294	Section:	30
Longitude:	-103.19511	Range:	37E
Township:	25.0S	Ft. N/S Dist:	1980
Unit ID:	H	Ft. E/W Dist:	660
Ft. N/S dir:	N	Elevation:	Not Reported
Ft. E/W Dir:	E	Complate:	Not Reported
Depth:	0	Datasource:	Preongard
Plugdate:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SSE

1/2 - 1 Mile

OIL\_GAS

NMOG005719

Api ID:	3052510621	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIFIC)	Well ID:	001
Well Name:	COLL A	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10294		
Longitude:	-103.18208	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	G	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SSE

1/2 - 1 Mile

OIL\_GAS

NMOG054972

Api ID:	3002511828	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIFIC)	Well ID:	001
Well Name:	COLL A	County ID:	25
County Name:	Lea	Operator ID:	13300
Op. Name:	LEWIS B BURLESON INC		
Latitude:	32.10294		
Longitude:	-103.18208	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	G	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

SSE

1/2 - 1 Mile

OIL\_GAS

NMOG005676

Api ID:	3052510620	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRASSBURG	Well ID:	001
Well Name:	COLL A	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10294		
Longitude:	-103.18208	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	G	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SE  
1/2 - 1 Mile

OIL\_GAS NMOG055142

Api ID:	3002511824	Pool ID:	75760
Pool Name:	CROSBY;DEVONIAN (GAS)	Well ID:	001
Well Name:	ARCO SRC	County ID:	25
County Name:	Lea	Operator ID:	999027
Op. Name:	ARCO OIL & GAS CO		
Latitude:	32.10294		
Longitude:	-103.17782	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

SE  
1/2 - 1 Mile

OIL\_GAS NMOG005664

Api ID:	3052510622	Pool ID:	75480
Pool Name:	CROSBY;DEVONIAN (GAS)	Well ID:	001
Well Name:	COLL	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10294		
Longitude:	-103.17782	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SE  
1/2 - 1 Mile

OIL\_GAS NMOG005759

Api ID:	3052510622	Pool ID:	74800
Pool Name:	CHAVEROO;CANYON, NORTH (GAS)	Well ID:	001
Well Name:	COLL	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.10294		
Longitude:	-103.17782	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	H	Ft. N/S Dist:	1980
Ft. N/S dir:	N	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SSE  
1/2 - 1 Mile

OIL\_GAS NMOG055121

Api ID:	3002511830	Pool ID:	96131
Pool Name:	SWD;SEVEN RIVERS	Well ID:	002
Well Name:	GUTMAN SWD	County ID:	25
County Name:	Lea	Operator ID:	188294
Op. Name:	AMERICAN INLAND RESOURCES COMPANY LLC		
Latitude:	32.1002		
Longitude:	-103.18105	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	2310
Ft. N/S dir:	S	Ft. E/W Dist:	1650
Ft. E/W Dir:	E	Elevation:	3028 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

South  
1/2 - 1 Mile

OIL\_GAS NMOG005690

Api ID:	3052510626	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIFIC)	Well ID:	002
Well Name:	JENKINS	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.0993		
Longitude:	-103.1866	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	K	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

South  
1/2 - 1 Mile

OIL\_GAS NMOG055105

Api ID:	3002511833	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIFIC)	Well ID:	002
Well Name:	CARRIE L JENKINS	County ID:	25
County Name:	Lea	Operator ID:	22659
Op. Name:	TEXAS PACIFIC OIL CO INC		
Latitude:	32.0993		
Longitude:	-103.1866	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	K	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database

EDR ID Number

SSE  
1/2 - 1 Mile

OIL\_GAS

NMOG005760

Api ID:	3052510625	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GRW	Well ID:	002
Well Name:	GUTMAN	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.0993		
Longitude:	-103.18212	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	J	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	1980
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

South  
1/2 - 1 Mile

OIL\_GAS

NMOG005691

Api ID:	3052510627	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	004
Well Name:	JENKINS	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.09929		
Longitude:	-103.19086	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	L	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

South  
1/2 - 1 Mile

OIL\_GAS

NMOG055182

Api ID:	3002511835	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	004
Well Name:	JENKINS	County ID:	25
County Name:	Lea	Operator ID:	22659
Op. Name:	TEXAS PACIFIC OIL CO INC		
Latitude:	32.09929		
Longitude:	-103.19038	Section:	29
Township:	25.0S	Range:	37E
Unit ID:	L	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	810
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Hobbs

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction

Distance

Database

EDR ID Number

SSW

1/2 - 1 Mile

OIL\_GAS

NMOG005929

Api ID:	3052510635	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PAGIBAS)	Well ID:	003
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.09928		
Longitude:	-103.19512	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SSW

1/2 - 1 Mile

OIL\_GAS

NMOG006027

Api ID:	3052510637	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OWB)	Well ID:	004
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.09928		
Longitude:	-103.19512	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SSW

1/2 - 1 Mile

OIL\_GAS

NMOG005928

Api ID:	3052510634	Pool ID:	37240
Pool Name:	LANGLIE MATTIX;7 RVRS-Q-GROWBURG	Well ID:	003
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.09928		
Longitude:	-103.19512	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG005706

Api ID:	3052510638	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	006
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.09928		
Longitude:	-103.19512	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG005722

Api ID:	3052510639	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	004
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.09928		
Longitude:	-103.19512	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG005761

Api ID:	3052510636	Pool ID:	33820
Pool Name:	JALMAT;TAN-YATES-7 RVRS (OW)	Well ID:	005
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	32.09928		
Longitude:	-103.19512	Section:	30
Township:	25.0S	Range:	37E
Unit ID:	I	Ft. N/S Dist:	1980
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	E	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG055211

Api ID:	3002511843	Pool ID:	79240
Pool Name:	JALMAT;TAN-YATES-7 RVRS (PACIFIC)		003
Well Name:	WINNINGHAM	County ID:	25
County Name:	Lea	Operator ID:	14538
Op. Name:	MERIDIAN OIL INC		
Latitude:	32.09915	Section:	30
Longitude:	-103.19406	Range:	37E
Township:	25.0S	Ft. N/S Dist:	1930
Unit ID:	I	Ft. E/W Dist:	330
Ft. N/S dir:	S	Elevation:	Not Reported
Ft. E/W Dir:	E	Compdate:	Not Reported
Depth:	0	Datasource:	Hobbs
Plugdate:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: NM Radon

### Radon Test Results

Zip	Total Sites	Pct. < 4 Pci/L	4 < 10 Pci/L	10 < 20 Pci/L	> 20 Pci/L
88252	2	100.0	0.0	0.0	0.0

Federal EPA Radon Zone for LEA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.  
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
: Zone 3 indoor average level < 2 pCi/L.

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Federal Area Radon Information for Zip Code: 88252

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

## ADDITIONAL ENVIRONMENTAL RECORD SOURCES

### **FEDERAL WATER WELLS**

#### **PWS: Public Water Systems**

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF: Public Water Systems Violation and Enforcement Data**

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### **USGS Water Wells: USGS National Water Inventory System (NWIS)**

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STATE RECORDS

#### Oil and Gas Well Locations

Source: New Mexico Institute of Mining and Technology  
Telephone: 505-835-5142

### RADON

#### State Database: NM Radon

Source: Environment Department  
Telephone: 505-827-1093  
Radon Test Results

#### Area Radon Information

Source: USGS  
Telephone: 703-356-4020  
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA  
Telephone: 703-356-4020  
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration



**APPENDIX G**

**LABORATORY REPORTS**  
**WITH**  
**CHAIN-OF-CUSTODY FORMS**

# **RUNCO SOIL SAMPLES - QUICK LOOK SHEET**

Date	Sample ID	Conductivity (µs)	pH Field	pH Lab	PID	TPH ≤500	TPH DRO LAB	TPH GRO (mg/Kg)	TPH GRO (mg/Kg)	Chloride (mg/Kg)
8/24/2004	EXC1@8'	25	7.65	7.50	0		X	<50.0	<1.00	20.0
8/24/2004	EXC2N@1.5'	282	8.86		0					
8/24/2004	EXC2N@3'	252	7.97		0					
8/24/2004	EXC2S@1.5'	81	10.01	9.96	0		X	<50.0	<1.00	339.0
8/24/2004	EXC2S@3'	56	9.77		0					
8/24/2004	EXC3M@1.5'	81	9.3	9.12	0		X	<50.0	<1.00	985.0
8/24/2004	EXC3M@3'	207	7.93		0					
8/24/2004	EXC3N@1.5'	101	8.84	8.81	0		X	<50.0	<1.00	957.0
8/24/2004	EXC3N@3'	40	8.79	8.93	0		X	<50.0	<1.00	323.0
8/24/2004	EXC3S@1.5'	409	9.59		0					
8/24/2004	EXC3S@3'	241	9.67	9.37	0		X	<50.0	<1.00	5790.0
8/24/2004	EXC4M@3'	130	8.67	8.60	0		X	<50.0	<1.00	1800.0
8/24/2004	EXC4N@1.5'	56	8.5		0					
8/24/2004	EXC4N@3'	81	8.1		0					
8/24/2004	EXC4S@1.5'	121	8.32	8.48	0		X	<50.0	<1.00	913.0
8/24/2004	EXC4S@3'	89	8.17		0					
8/25/2004	SB1@5'	130	8.54		0					
8/25/2004	SB1@10'	94	8.44	8.68	0		X	<50.0	<1.00	1610.0
8/25/2004	SB1@20'	94	8.4		0					
8/25/2004	SB1@30'	25	7.97	8.44	0		X	<50.0	<1.00	107.0
8/25/2004	SB2@5'	100	8.07		0					
8/25/2004	SB2@10'	78	8.11	8.14	0		X	<50.0	<1.00	699.0
8/25/2004	SB2@20'	78	8.2		0					
8/25/2004	SB2@30'	38	9.01	8.52	0		X	<50.0	<1.00	121.0
8/26/2004	SB3@5'	130	9.01		0					
8/26/2004	SB3@10'	159	7.95	8.28	0		X	<50.0	<1.00	600.0
8/26/2004	SB3@20'	51	8.36		0					
8/26/2004	SB3@30'	38	8.39	8.73	0		X	<50.0	<1.00	90.1
8/26/2004	SB4@2-5'	51	7.94		0					
8/26/2004	SB4@9-10'	25	8.2	8.59	0		X	<50.0	<1.00	29.6
8/26/2004	SB4@19-20'	59	8.45		0					
8/26/2004	SB4@25-27'	94	8.32		0					
8/26/2004	SB4@30-32'	94	8.19	8.43	0		X	<50.0	<1.00	275.0

# RUNCO WATER SAMPLES - QUICK LOOK SHEET

Date	Sample ID	Conductivity (µs)	pH	Temp (C)	DTW (ft)	B	BTEX (mg/L)	X	Naph (mg/L)	Chloride (mg/L)	TDS (mg/L)	NOTES
8/27/2004	MW-1	3.0	7.51	21.8	29.55	<0.00100	<0.00100	<0.00100	<0.000200	472	2560	
8/27/2004	MW-2	3.7	7.44	22.6	29.78	<0.00100	<0.00100	<0.00100	<0.200	731	3015	
8/27/2004	MW-3	4.3	7.33	22.7	24.70	<0.00100	<0.00100	<0.00100	<0.200	965	3185	
8/27/2004	MW-4	4.9	7.28	22.7	26.91	<0.00100	<0.00100	<0.00100	<0.00100	1200	3630	
NMWQCC Stds.						10	750	750	620	30	250	1000

Report Date: September 15, 2004  
1507-1.0

Work Order: 4083002  
RUNCO

Page Number: 1 of 4  
Jal,NM

## Summary Report

Ginger Gritz  
RESPEC  
4775 Indian School Rd. NE  
Suite 300  
Albuquerque, NM 87110

Report Date: September 15, 2004

Work Order: 4083002

Project Location: Jal,NM  
Project Name: RUNCO  
Project Number: 1507-1.0

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
42479	Exc @ 8'	soil	2004-08-23	15:05	2004-08-28
42480	Exc 25 @ 1.5'	soil	2004-08-23	15:10	2004-08-28
42481	Exc 35 @ 3'	soil	2004-08-23	15:15	2004-08-28
42482	Exc 4M @ 3'	soil	2004-08-23	15:20	2004-08-28
42483	Exc 3M @ 1.5'	soil	2004-08-23	15:25	2004-08-28
42484	Exc 3N @ 3'	soil	2004-08-23	15:30	2004-08-28
42485	Exc 4S @ 1.5'	soil	2004-08-23	15:35	2004-08-28
42486	Exc 3N @ 1.5'	soil	2004-08-23	15:40	2004-08-28
42487	SB1 @ 10	soil	2004-08-25	11:00	2004-08-28
42488	SB1 @ 30	soil	2004-08-25	11:30	2004-08-28
42489	SB2 @ 10	soil	2004-08-25	14:00	2004-08-28
42490	SB2 @ 30	soil	2004-08-25	14:30	2004-08-28
42491	SB3 @ 10	soil	2004-08-26	09:00	2004-08-28
42492	SB3 @ 30	soil	2004-08-26	09:30	2004-08-28
42493	SB4 @ 9-10	soil	2004-08-26	13:00	2004-08-28
42494	SB4 @ 30-32	soil	2004-08-26	13:30	2004-08-28

### Comment(s)

Work Order 4083002: Sample #42496 and #42497 Were stored in plastic containers for PAH.

Sample - Field Code	TPH DRO	TPH GRO
	DRO (mg/Kg)	GRO (mg/Kg)
42479 - Exc @ 8'	<50.0	<1.00
42480 - Exc 25 @ 1.5'	<50.0	<1.00
42481 - Exc 35 @ 3'	<50.0	<1.00
42482 - Exc 4M @ 3'	<50.0	<1.00
42483 - Exc 3M @ 1.5'	<50.0	<1.00
42484 - Exc 3N @ 3'	<50.0	<1.00
42485 - Exc 4S @ 1.5'	<50.0	<1.00
42486 - Exc 3N @ 1.5'	<50.0	<1.00
42487 - SB1 @ 10	<50.0	<1.00
42488 - SB1 @ 30	<50.0	<1.00
42489 - SB2 @ 10	<50.0	<1.00
42490 - SB2 @ 30	<50.0	<1.00

continued ...

... continued

Sample - Field Code	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
42491 - SB3 @ 10	<50.0	<1.00
42492 - SB3 @ 30	<50.0	<1.00
42493 - SB4 @ 9-10	<50.0	<1.00
42494 - SB4 @ 30-32	<50.0	<1.00

**Sample: 42479 - Exc @ 8'**

Param	Flag	Result	Units	RL
Chloride		20.0	mg/Kg	1.00
pH		7.50	s.u.	0.00

**Sample: 42480 - Exc 25 @ 1.5'**

Param	Flag	Result	Units	RL
Chloride		339	mg/Kg	1.00
pH		9.96	s.u.	0.00

**Sample: 42481 - Exc 35 @ 3'**

Param	Flag	Result	Units	RL
Chloride		5790	mg/Kg	1.00
pH		9.37	s.u.	0.00

**Sample: 42482 - Exc 4M @ 3'**

Param	Flag	Result	Units	RL
Chloride		1800	mg/Kg	1.00
pH		8.60	s.u.	0.00

**Sample: 42483 - Exc 3M @ 1.5'**

Param	Flag	Result	Units	RL
Chloride		985	mg/Kg	1.00
pH		9.12	s.u.	0.00

**Sample: 42484 - Exc 3N @ 3'**

Param	Flag	Result	Units	RL
Chloride		323	mg/Kg	1.00
pH		8.93	s.u.	0.00

**Sample: 42485 - Exc 4S @ 1.5'**

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Param	Flag	Result	Units	RL
Chloride		913	mg/Kg	1.00
pH		8.48	s.u.	0.00

Sample: 42486 - Exc 3N @ 1.5'

Param	Flag	Result	Units	RL
Chloride		957	mg/Kg	1.00
pH		8.81	s.u.	0.00

Sample: 42487 - SB1 @ 10

Param	Flag	Result	Units	RL
Chloride		1610	mg/Kg	1.00
pH		8.68	s.u.	0.00

Sample: 42488 - SB1 @ 30

Param	Flag	Result	Units	RL
Chloride		107	mg/Kg	1.00
pH		8.44	s.u.	0.00

Sample: 42489 - SB2 @ 10

Param	Flag	Result	Units	RL
Chloride		699	mg/Kg	1.00
pH		8.14	s.u.	0.00

Sample: 42490 - SB2 @ 30

Param	Flag	Result	Units	RL
Chloride		121	mg/Kg	1.00
pH		8.52	s.u.	0.00

Sample: 42491 - SB3 @ 10

Param	Flag	Result	Units	RL
Chloride		600	mg/Kg	1.00
pH		8.28	s.u.	0.00

Sample: 42492 - SB3 @ 30

Param	Flag	Result	Units	RL
Chloride		90.1	mg/Kg	1.00
pH		8.73	s.u.	0.00

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**Sample: 42493 - SB4 @ 9-10**

Param	Flag	Result	Units	RL
Chloride		29.6	mg/Kg	1.00
pH		8.59	s.u.	0.00

**Sample: 42494 - SB4 @ 30-32**

Param	Flag	Result	Units	RL
Chloride		275	mg/Kg	1.00
pH		8.43	s.u.	0.00



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## Analytical and Quality Control Report

Ginger Gritz  
RESPEC  
4775 Indian School Rd. NE  
Suite 300  
Albuquerque, NM 87110

Report Date: September 15, 2004

Work Order: 4083002

Project Location: Jal, NM  
Project Name: RUNCO  
Project Number: 1507-1.0

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.


Sample	Description	Matrix	Date Taken	Time Taken	Date Received
42479	Exc @ 8'	soil	2004-08-23	15:05	2004-08-28
42480	Exc 25 @ 1.5'	soil	2004-08-23	15:10	2004-08-28
42481	Exc 35 @ 3'	soil	2004-08-23	15:15	2004-08-28
42482	Exc 4M @ 3'	soil	2004-08-23	15:20	2004-08-28
42483	Exc 3M @ 1.5'	soil	2004-08-23	15:25	2004-08-28
42484	Exc 3N @ 3'	soil	2004-08-23	15:30	2004-08-28
42485	Exc 4S @ 1.5'	soil	2004-08-23	15:35	2004-08-28
42486	Exc 3N @ 1.5'	soil	2004-08-23	15:40	2004-08-28
42487	SB1 @ 10	soil	2004-08-25	11:00	2004-08-28
42488	SB1 @ 30	soil	2004-08-25	11:30	2004-08-28
42489	SB2 @ 10	soil	2004-08-25	14:00	2004-08-28
42490	SB2 @ 30	soil	2004-08-25	14:30	2004-08-28
42491	SB3 @ 10	soil	2004-08-26	09:00	2004-08-28
42492	SB3 @ 30	soil	2004-08-26	09:30	2004-08-28
42493	SB4 @ 9-10	soil	2004-08-26	13:00	2004-08-28
42494	SB4 @ 30-32	soil	2004-08-26	13:30	2004-08-28

### Comment(s)

Work Order 4083002: Sample #42496 and #42497 Were stored in plastic containers for PAH.

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 24 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director



## Analytical Report

### Sample: 42479 - Exc @ 8'

Analysis: Chloride (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 12420	Date Analyzed: 2004-08-31	Analyzed By: MW
Prep Batch: 10968	Date Prepared: 2004-08-31	Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		20.0	mg/Kg	10	1.00

### Sample: 42479 - Exc @ 8'

Analysis: pH	Analytical Method: SM 4500-H+	Prep Method: N/A
QC Batch: 12428	Date Analyzed: 2004-08-31	Analyzed By: MW
Prep Batch: 10979	Date Prepared: 2004-08-31	Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		7.50	s.u.	1	0.00

### Sample: 42479 - Exc @ 8'

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 12399	Date Analyzed: 2004-08-31	Analyzed By: BP
Prep Batch: 10948	Date Prepared: 2004-08-30	Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		169	mg/Kg	1	150	112	64.7 - 162

### Sample: 42479 - Exc @ 8'

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 12391	Date Analyzed: 2004-08-30	Analyzed By: MS
Prep Batch: 10942	Date Prepared: 2004-08-30	Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.746	mg/Kg	10	0.100	75	70 - 130
4-Bromofluorobenzene (4-BFB)		0.940	mg/Kg	10	0.100	94	70 - 130

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**Sample: 42480 - Exc 25 @ 1.5'**

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	12420	Date Analyzed:	2004-08-31	Analyzed By:	MW
Prep Batch:	10968	Date Prepared:	2004-08-31	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		339	mg/Kg	50	1.00

**Sample: 42480 - Exc 25 @ 1.5'**

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	12428	Date Analyzed:	2004-08-31	Analyzed By:	MW
Prep Batch:	10979	Date Prepared:	2004-08-31	Prepared By:	MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		9.96	s.u.	1	0.00

**Sample: 42480 - Exc 25 @ 1.5'**

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	12399	Date Analyzed:	2004-08-31	Analyzed By:	BP
Prep Batch:	10948	Date Prepared:	2004-08-30	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		162	mg/Kg	1	150	108	64.7 - 162

**Sample: 42480 - Exc 25 @ 1.5'**

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	12391	Date Analyzed:	2004-08-30	Analyzed By:	MS
Prep Batch:	10942	Date Prepared:	2004-08-30	Prepared By:	MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.701	mg/Kg	10	0.100	70	70 - 130
4-Bromofluorobenzene (4-BFB)		0.914	mg/Kg	10	0.100	91	70 - 130

**Sample: 42481 - Exc 35 @ 3'**

Analysis: Chloride (IC)  
QC Batch: 12420  
Prep Batch: 10968

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5790	mg/Kg	500	1.00

**Sample: 42481 - Exc 35 @ 3'**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		9.37	s.u.	1	0.00

**Sample: 42481 - Exc 35 @ 3'**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		171	mg/Kg	1	150	114	64.7 - 162

**Sample: 42481 - Exc 35 @ 3'**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	1	0.659	mg/Kg	10	0.100	66	70 - 130
4-Bromofluorobenzene (4-BFB)		0.883	mg/Kg	10	0.100	88	70 - 130

**Sample: 42482 - Exc 4M @ 3'**

<sup>1</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

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Analysis: Chloride (IC)  
QC Batch: 12420  
Prep Batch: 10968

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1800	mg/Kg	100	1.00

**Sample: 42482 - Exc 4M @ 3'**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.60	s.u.	1	0.00

**Sample: 42482 - Exc 4M @ 3'**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		167	mg/Kg	1	150	112	64.7 - 162

**Sample: 42482 - Exc 4M @ 3'**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>2</sup>	0.645	mg/Kg	10	0.100	64	70 - 130
4-Bromofluorobenzene (4-BFB)		0.895	mg/Kg	10	0.100	90	70 - 130

**Sample: 42483 - Exc 3M @ 1.5'**

<sup>2</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

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Analysis: Chloride (IC)  
QC Batch: 12420  
Prep Batch: 10968

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		985	mg/Kg	100	1.00

**Sample: 42483 - Exc 3M @ 1.5'**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		9.12	s.u.	1	0.00

**Sample: 42483 - Exc 3M @ 1.5'**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		169	mg/Kg	1	150	113	64.7 - 162

**Sample: 42483 - Exc 3M @ 1.5'**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.726	mg/Kg	10	0.100	73	70 - 130
4-Bromofluorobenzene (4-BFB)		0.906	mg/Kg	10	0.100	91	70 - 130

**Sample: 42484 - Exc 3N @ 3'**

Analysis: Chloride (IC)

Analytical Method: E 300.0

Prep Method: N/A

Report Date: September 15, 2004  
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QC Batch: 12420  
Prep Batch: 10968

Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		323	mg/Kg	10	1.00

**Sample: 42484 - Exc 3N @ 3'**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.93	s.u.	1	0.00

**Sample: 42484 - Exc 3N @ 3'**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		180	mg/Kg	1	150	120	64.7 - 162

**Sample: 42484 - Exc 3N @ 3'**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>3</sup>	0.632	mg/Kg	10	0.100	63	70 - 130
4-Bromofluorobenzene (4-BFB)		0.870	mg/Kg	10	0.100	87	70 - 130

**Sample: 42485 - Exc 4S @ 1.5'**

<sup>3</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

Report Date: September 15, 2004  
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Analysis: Chloride (IC)  
QC Batch: 12420  
Prep Batch: 10968

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		913	mg/Kg	100	1.00

**Sample: 42485 - Exc 4S @ 1.5'**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.48	s.u.	1	0.00

**Sample: 42485 - Exc 4S @ 1.5'**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		168	mg/Kg	1	150	112	64.7 - 162

**Sample: 42485 - Exc 4S @ 1.5'**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>4</sup>	0.693	mg/Kg	10	0.100	69	70 - 130
4-Bromofluorobenzene (4-BFB)		0.921	mg/Kg	10	0.100	92	70 - 130

**Sample: 42486 - Exc 3N @ 1.5'**

<sup>4</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

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Analysis: Chloride (IC)  
QC Batch: 12420  
Prep Batch: 10968

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		957	mg/Kg	100	1.00

**Sample: 42486 - Exc 3N @ 1.5'**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.81	s.u.	1	0.00

**Sample: 42486 - Exc 3N @ 1.5'**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		168	mg/Kg	1	150	112	64.7 - 162

**Sample: 42486 - Exc 3N @ 1.5'**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.809	mg/Kg	10	0.100	81	70 - 130
4-Bromofluorobenzene (4-BFB)		0.899	mg/Kg	10	0.100	90	70 - 130

**Sample: 42487 - SB1 @ 10**

Analysis: Chloride (IC)

Analytical Method: E 300.0

Prep Method: N/A



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QC Batch: 12420  
Prep Batch: 10963

Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1610	mg/Kg	100	1.00

**Sample: 42487 - SB1 @ 10**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.68	s.u.	1	0.00

**Sample: 42487 - SB1 @ 10**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		165	mg/Kg	1	150	110	64.7 - 162

**Sample: 42487 - SB1 @ 10**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>5</sup>	0.604	mg/Kg	10	0.100	60	70 - 130
4-Bromofluorobenzene (4-BFB)		0.847	mg/Kg	10	0.100	85	70 - 130

**Sample: 42488 - SB1 @ 30**

<sup>5</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

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Analysis: Chloride (IC)  
QC Batch: 12420  
Prep Batch: 10968

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		107	mg/Kg	5	1.00

**Sample: 42488 - SB1 @ 30**

Analysis: pH  
QC Batch: 12428  
Prep Batch: 10979

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.44	s.u.	1	0.00

**Sample: 42488 - SB1 @ 30**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		166	mg/Kg	1	150	110	64.7 - 162

**Sample: 42488 - SB1 @ 30**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>6</sup>	0.620	mg/Kg	10	0.100	62	70 - 130
4-Bromofluorobenzene (4-BFB)		0.848	mg/Kg	10	0.100	85	70 - 130

**Sample: 42489 - SB2 @ 10**

<sup>6</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

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Analysis: Chloride (IC)  
QC Batch: 12422  
Prep Batch: 10969

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		699	mg/Kg	50	1.00

**Sample: 42489 - SB2 @ 10**

Analysis: pH  
QC Batch: 12427  
Prep Batch: 10980

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: RS  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.14	s.u.	1	0.00

**Sample: 42489 - SB2 @ 10**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		168	mg/Kg	1	150	112	64.7 - 162

**Sample: 42489 - SB2 @ 10**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.830	mg/Kg	10	0.100	83	70 - 130
4-Bromofluorobenzene (4-BFB)		0.929	mg/Kg	10	0.100	93	70 - 130

**Sample: 42490 - SB2 @ 30**

Analysis: Chloride (IC)

Analytical Method: E 300.0

Prep Method: N/A

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QC Batch: 12422  
Prep Batch: 10969

Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		121	mg/Kg	5	1.00

Sample: 42490 - SB2 @ 30

Analysis: pH  
QC Batch: 12427  
Prep Batch: 10980

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: RS  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.52	s.u.	1	0.00

Sample: 42490 - SB2 @ 30

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		157	mg/Kg	1	150	105	64.7 - 162

Sample: 42490 - SB2 @ 30

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	7	0.652	mg/Kg	10	0.100	65	70 - 130
4-Bromofluorobenzene (4-BFB)		0.877	mg/Kg	10	0.100	88	70 - 130

Sample: 42491 - SB3 @ 10

<sup>7</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

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Analysis: Chloride (IC)  
QC Batch: 12422  
Prep Batch: 10969

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		600	mg/Kg	100	1.00

**Sample: 42491 - SB3 @ 10**

Analysis: pH  
QC Batch: 12427  
Prep Batch: 10980

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: RS  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.28	s.u.	1	0.00

**Sample: 42491 - SB3 @ 10**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		163	mg/Kg	1	150	108	64.7 - 162

**Sample: 42491 - SB3 @ 10**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.697	mg/Kg	10	0.100	70	70 - 130
4-Bromofluorobenzene (4-BFB)		0.913	mg/Kg	10	0.100	91	70 - 130

**Sample: 42492 - SB3 @ 30**

Analysis: Chloride (IC)

Analytical Method: E 300.0

Prep Method: N/A

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QC Batch: 12422  
Prep Batch: 10969

Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		90.1	mg/Kg	5	1.00

**Sample: 42492 - SB3 @ 30**

Analysis: pH  
QC Batch: 12427  
Prep Batch: 10980

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: RS  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.73	s.u.	1	0.00

**Sample: 42492 - SB3 @ 30**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		167	mg/Kg	1	150	111	64.7 - 162

**Sample: 42492 - SB3 @ 30**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	<sup>8</sup>	0.668	mg/Kg	10	0.100	67	70 - 130
4-Bromofluorobenzene (4-BFB)		0.883	mg/Kg	10	0.100	88	70 - 130

**Sample: 42493 - SB4 @ 9-10**

<sup>8</sup>Low TFT surrogate recovery due to matrix interference. BFB surrogate recovery shows the method to be in control.

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Analysis: Chloride (IC)  
QC Batch: 12422  
Prep Batch: 10969

Analytical Method: E 300.0  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		29.6	mg/Kg	5	1.00

**Sample: 42493 - SB4 @ 9-10**

Analysis: pH  
QC Batch: 12427  
Prep Batch: 10980

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: RS  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.59	s.u.	1	0.00

**Sample: 42493 - SB4 @ 9-10**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		157	mg/Kg	1	150	105	64.7 - 162

**Sample: 42493 - SB4 @ 9-10**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.746	mg/Kg	10	0.100	75	70 - 130
4-Bromofluorobenzene (4-BFB)		0.910	mg/Kg	10	0.100	91	70 - 130

**Sample: 42494 - SB4 @ 30-32**

Analysis: Chloride (IC)

Analytical Method: E 300.0

Prep Method: N/A

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QC Batch: 12422  
Prep Batch: 10969

Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		275	mg/Kg	50	1.00

**Sample: 42494 - SB4 @ 30-32**

Analysis: pH  
QC Batch: 12427  
Prep Batch: 10980

Analytical Method: SM 4500-H+  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-31

Prep Method: N/A  
Analyzed By: RS  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
pH		8.43	s.u.	1	0.00

**Sample: 42494 - SB4 @ 30-32**

Analysis: TPH DRO  
QC Batch: 12399  
Prep Batch: 10948

Analytical Method: Mod. 8015B  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: BP  
Prepared By: DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		163	mg/Kg	1	150	109	64.7 - 162

**Sample: 42494 - SB4 @ 30-32**

Analysis: TPH GRO  
QC Batch: 12391  
Prep Batch: 10942

Analytical Method: S 8015B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5035  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.737	mg/Kg	10	0.100	74	70 - 130
4-Bromofluorobenzene (4-BFB)		0.906	mg/Kg	10	0.100	91	70 - 130

Method Blank (1) QC Batch: 12391



Parameter	Flag	Result	Units	RL
GRO		1.68	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.936	mg/Kg	10	0.100	94	70 - 130
4-Bromofluorobenzene (4-BFB)		0.802	mg/Kg	10	0.100	80	70 - 130

**Method Blank (1)** QC Batch: 12399

Parameter	Flag	Result	Units	RL
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		174	mg/Kg	1	150	116	64.7 - 162

**Matrix Blank (1)** QC Batch: 12420

Parameter	Flag	Result	Units	RL
Chloride		12.1	mg/Kg	1

**Matrix Blank (1)** QC Batch: 12422

Parameter	Flag	Result	Units	RL
Chloride		12.1	mg/Kg	1

**Duplicate (1)** QC Batch: 12427

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	8.40	8.37	s.u.	1	0	1

**Duplicate (1)** QC Batch: 12428

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	8.44	8.44	s.u.	1	0	1

**Laboratory Control Spike (LCS-1)** QC Batch: 12391

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	10.2	10.4	mg/Kg	10	1.00	<0.381	102	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	0.999	mg/Kg	10	0.100	102	100	70 - 130
4-Bromofluorobenzene (4-BFB)	0.997	0.987	mg/Kg	10	0.100	100	99	70 - 130

**Laboratory Control Spike (LCS-1)** QC Batch: 12399

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	271	274	mg/Kg	1	250	<12.0	108	1	64.2 - 138	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	164	162	mg/Kg	1	150	109	108	64.7 - 162

**Laboratory Control Spike (LCS-1)** QC Batch: 12420

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	24.2	23.9	mg/Kg	1	12.5	12.1	97	1	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)** QC Batch: 12422

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	24.0	24.1	mg/Kg	1	12.5	12.1	95	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12391

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	6.96	7.33	mg/Kg	10	1.00	<0.381	70	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.766	0.790	mg/Kg	10	0.1	77	79	70 - 130
4-Bromofluorobenzene (4-BFB)	0.954	0.976	mg/Kg	10	0.1	95	98	70 - 130

**Matrix Spike (MS-1)** QC Batch: 12399

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Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	255	258	mg/Kg	1	250	<12.0	102	1	62.4 - 128	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	159	162	mg/Kg	1	150	106	108	64.7 - 162

**Matrix Spike (MS-1)** QC Batch: 12420

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	170	169	mg/Kg	5	12.5	107	101	0	69.4 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12422

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	858	867	mg/Kg	50	12.5	275	93	1	69.4 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Standard (ICV-1)** QC Batch: 12391

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.994	99	85 - 115	2004-08-30

**Standard (CCV-1)** QC Batch: 12391

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.974	97	85 - 115	2004-08-30

**Standard (CCV-2)** QC Batch: 12391

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.976	98	85 - 115	2004-08-30

**Standard (ICV-1)** QC Batch: 12399

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	273	109	64.2 - 138	2004-08-31

Standard (CCV-1) QC Batch: 12399

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	304	122	64.2 - 138	2004-08-31

Standard (CCV-2) QC Batch: 12399

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	269	108	64.2 - 138	2004-08-31

Standard (ICV-1) QC Batch: 12420

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.8	94	90 - 110	2004-08-31

Standard (CCV-1) QC Batch: 12420

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.0	96	90 - 110	2004-08-31

Standard (ICV-1) QC Batch: 12422

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	11.8	94	90 - 110	2004-08-31

Standard (CCV-1) QC Batch: 12422

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.0	96	90 - 110	2004-08-31

Standard (ICV-1) QC Batch: 12427

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.08	101	98 - 102	2004-08-31

**Standard (CCV-1)**    QC Batch: 12427

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.04	100	98 - 102	2004-08-31

**Standard (ICV-1)**    QC Batch: 12428

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.04	100	98 - 102	2004-08-31

**Standard (CCV-1)**    QC Batch: 12428

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.08	101	98 - 102	2004-08-31

Page 1 of 2

<b>TraceAnalysis, Inc.</b> 6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1298		155 McCutchen, Suite H El Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 585-3443	
Company Name: <b>RESPEC</b> Phone #: <b>505 268 2661</b>		Address: <b>4775 Indian School Rd. NE</b> Fax #: <b>505 268 0040</b>	
Contact Person: <b>Ginger Grizzle</b>		Invoice to: (If different from above)	
Project #: <b>1507</b>		Project Name: <b>Runco</b>	
Project Location: <b>Jal, NM</b>		Sampler Signature: <i>[Signature]</i>	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		
				WATER	SOIL	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME	
4247	Exc 1 @ 8'	1	402	X											
80	Exc 25 @ 1.5'														
81	Exc 35 @ 3'														
82	Exc 4 M @ 3'														
83	Exc 3 M @ 1.5'														
84	Exc 3 M @ 3'														
85	Exc 45 @ 1.5'														
86	Exc 3 M @ 1.5'														
87	Exc 1 @ 10'														
88	Exc 1 @ 30'														
89	Exc 1 @ 10'														

Relinquished by: <i>[Signature]</i> Date: <b>8/17/04</b> Time: <b>1:00</b>	Received by: <i>[Signature]</i> Date: <b>8/17/04</b> Time: <b>12:00</b>
Relinquished by: <i>[Signature]</i> Date: <b>8/17/04</b> Time: <b>12:00</b>	Received by: <i>[Signature]</i> Date: <b>8/17/04</b> Time: <b>12:00</b>

ANALYSIS REQUEST (Circle or Specify Method No.)		REMARKS:	
Total Metals Ag As Ba Cd Cr Pb Se Hg 5010B/200 7 TCLP 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 PCB's 8082/608 Pesticides 8081A/608 BOD TSS (PH) Chlorides	TPH 418 1/TK1005 PAH 8270C BTEX 8021B/602 MTBE 8021B/602	Turn Around Time if different from standard	LAB USE ONLY Intact: <input checked="" type="checkbox"/> N Headspace: <input checked="" type="checkbox"/> Y Temp: <b>4°</b> Log-in Review: <input type="checkbox"/>

Chain-of-Custody and Analysis Request LAB Order ID #: <b>4083002</b>	Carrier #: <b>UPS 51645451946</b>
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ORIGINAL COPY

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Page 2 of 2

<b>TraceAnalysis, Inc.</b> 6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1296		155 McCutcheon Suite H El Paso, Texas 79932 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443	
Company Name: <u>Reeper</u> Address: <u>4775 Indian School NE #300</u> Contact Person: <u>G. Griffo</u> Phone #: <u>505 268 2661</u> Fax #: <u>505 268 0040</u>		Project Name: <u>Runco</u> Project Location: <u>Jal, NM</u> Project #: <u>1507</u> Invoice to: <u>(if different from above)</u> Project #: <u>1507</u>	
Chain-of-Custody and Analysis Request LAB Order ID #: <u>4083002</u>		ANALYSIS REQUEST (Circle or Specify Method No.)	
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS Volume/Amount	MATRIX WATER SOIL AIR SLUDGE
METHOD NONE ICE NaOH H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub> HCl		PRESERVATIVE NONE ICE NaOH H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub> HCl	SAMPLING DATE TIME
4290	5620-30	1	DATE: 8/28/04 TIME: 12:30
91	5630-10	1	DATE: 8/28/04 TIME: 9:00
92	5630-30	1	DATE: 8/28/04 TIME: 9:30
93	5640-10	1	DATE: 8/28/04 TIME: 1:00
94	5640-30-32	1	DATE: 8/28/04 TIME: 1:30
95	MW-1	1	DATE: 8/28/04 TIME: 9:30
96	MW-2	1	DATE: 8/28/04 TIME: 10:30
97	MW-3	1	DATE: 8/28/04 TIME: 11:00
98	MW-4	1	DATE: 8/28/04 TIME: 10:00
Relinquished by: <u>G. Griffo</u> Date: <u>8/28/04</u> Time: <u>1:00</u>		Received by: <u>[Signature]</u> Date: <u>8/28/04</u> Time: <u>12:00</u>	
Relinquished by: <u>G. Griffo</u> Date: <u>8/28/04</u> Time: <u>1:00</u>		Received by: <u>[Signature]</u> Date: <u>8/28/04</u> Time: <u>12:00</u>	
Relinquished by: <u>G. Griffo</u> Date: <u>8/28/04</u> Time: <u>1:00</u>		Received by: <u>[Signature]</u> Date: <u>8/28/04</u> Time: <u>12:00</u>	

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.  
ORIGINAL COPY

Carrier # UPS 516454519416

☐ Check if Special Reporting Limits Are Needed

REMARKS:

LAB USE ONLY

Intact Y  
 Headspace Y  
 Temp Y  
 Log-in Review N/A

Turn Around Time if different from standard	
Hold	
PAH 8270C	
BTEX 8021B/602	
TCP Metals Ag As Ba Cd Cr Pb Se Hg	
TCP Semis Volatiles	
TCP Pesticides	
GC/MS Vol 8260B/624	
GC/MS Semi Vol 8270C/625	
PCBs 8082/608	
Pesticides 8081A/608	
BOD TSS OH	
Major Cat Hn	

## Summary Report

Ginger Gritzso  
RESPEC  
4775 Indian School Rd. NE  
Suite 300  
Albuquerque, NM 87110

Report Date: September 15, 2004

Work Order: 4083002

Project Location: Jal,NM  
Project Name: RUNCO  
Project Number: 1507-1.0

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
42495	MW-1	water	2004-08-27	09:30	2004-08-28
42496	MW-2	water	2004-08-27	10:30	2004-08-28
42497	MW-3	water	2004-08-27	11:00	2004-08-28
42498	MW-4	water	2004-08-27	10:00	2004-08-28

### Comment(s)

Work Order 4083002: Sample #42496 and #42497 Were stored in plastic containers for PAH.

Sample - Field Code	BTX			
	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)
42495 - MW-1	<0.00100	<0.00100	<0.00100	<0.00100
42496 - MW-2	<0.00100	<0.00100	<0.00100	<0.00100
42497 - MW-3	<0.00100	<0.00100	<0.00100	<0.00100
42498 - MW-4	<0.00100	<0.00100	<0.00100	<0.00100

### Sample: 42495 - MW-1

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1.00
Bicarbonate Alkalinity		142	mg/L as CaCo3	4.00
Total Alkalinity		142	mg/L as CaCo3	4.00
Dissolved Calcium		321	mg/L	0.500
Dissolved Potassium		34.3	mg/L	0.500
Dissolved Magnesium		90.1	mg/L	0.500
Dissolved Sodium		323	mg/L	0.500
Chloride		472	mg/L	0.500
Fluoride		73.0	mg/L	0.200
Nitrate-N	1	28.0	mg/L	0.200
Naphthalene		<0.000200	mg/L	0.200
Acenaphthylene		<0.000200	mg/L	0.200

continued ...

<sup>1</sup> Sample ran out of holding time.



sample 42495 continued ...

Param	Flag	Result	Units	RL
Acenaphthene		<0.000200	mg/L	0.200
Fluorene		<0.000200	mg/L	0.200
Phenanthrene		<0.000200	mg/L	0.200
Anthracene		<0.000200	mg/L	0.200
Fluoranthene		<0.000200	mg/L	0.200
Pyrene		<0.000200	mg/L	0.200
Benzo(a)anthracene		<0.000200	mg/L	0.200
Chrysene		<0.000200	mg/L	0.200
Benzo(b)fluoranthene		<0.000200	mg/L	0.200
Benzo(k)fluoranthene		<0.000200	mg/L	0.200
Benzo(a)pyrene		<0.000200	mg/L	0.200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	0.200
Dibenzo(a,h)anthracene		<0.000200	mg/L	0.200
Benzo(g,h,i)perylene		<0.000200	mg/L	0.200
Sulfate		1080	mg/L	0.500
Total Dissolved Solids		2560	mg/L	10.00
Total Silver		<0.0125	mg/L	0.0125
Total Arsenic		<0.0100	mg/L	0.0100
Total Barium		<0.100	mg/L	0.100
Total Cadmium		<0.00500	mg/L	0.00500
Total Chromium		<0.0100	mg/L	0.0100
Total Mercury		<0.000200	mg/L	0.000200
Total Lead		<0.0100	mg/L	0.0100
Total Selenium		<0.0500	mg/L	0.0500

Sample: 42496 - MW-2

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1.00
Bicarbonate Alkalinity		220	mg/L as CaCo3	4.00
Total Alkalinity		220	mg/L as CaCo3	4.00
Dissolved Calcium		707	mg/L	0.500
Dissolved Potassium		39.0	mg/L	0.500
Dissolved Magnesium		104	mg/L	0.500
Dissolved Sodium		448	mg/L	0.500
Chloride		731	mg/L	0.500
Fluoride		3.99	mg/L	0.200
Nitrate-N	2	17.8	mg/L	0.200
Naphthalene		<0.200	mg/L	0.200
Acenaphthylene		<0.200	mg/L	0.200
Acenaphthene		<0.200	mg/L	0.200
Fluorene		<0.200	mg/L	0.200
Phenanthrene		<0.200	mg/L	0.200
Anthracene		<0.200	mg/L	0.200
Fluoranthene		<0.200	mg/L	0.200
Pyrene		<0.200	mg/L	0.200
Benzo(a)anthracene		<0.200	mg/L	0.200
Chrysene		<0.200	mg/L	0.200
Benzo(b)fluoranthene		<0.200	mg/L	0.200

continued ...

<sup>2</sup>sample ran out of holding time.

sample 42496 continued ...

Param	Flag	Result	Units	RL
Benzo(k)fluoranthene		<0.200	mg/L	0.200
Benzo(a)pyrene		<0.200	mg/L	0.200
Indeno(1,2,3-cd)pyrene		<0.200	mg/L	0.200
Dibenzo(a,h)anthracene		<0.200	mg/L	0.200
Benzo(g,h,i)perylene		<0.200	mg/L	0.200
Sulfate		981	mg/L	0.500
Total Dissolved Solids		3015	mg/L	10.00
Total Silver		<0.0125	mg/L	0.0125
Total Arsenic		0.0480	mg/L	0.0100
Total Barium		0.618	mg/L	0.100
Total Cadmium		<0.00500	mg/L	0.00500
Total Chromium		0.0230	mg/L	0.0100
Total Mercury		<0.000200	mg/L	0.000200
Total Lead		<0.0100	mg/L	0.0100
Total Selenium		<0.0500	mg/L	0.0500

Sample: 42497 - MW-3

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1.00
Bicarbonate Alkalinity		250	mg/L as CaCo3	4.00
Total Alkalinity		250	mg/L as CaCo3	4.00
Dissolved Calcium		403	mg/L	0.500
Dissolved Potassium		57.2	mg/L	0.500
Dissolved Magnesium		131	mg/L	0.500
Dissolved Sodium		49.4	mg/L	0.500
Chloride		965	mg/L	0.500
Fluoride		4.05	mg/L	0.200
Nitrate-N	3	15.2	mg/L	0.200
Naphthalene		<0.200	mg/L	0.200
Acenaphthylene		<0.200	mg/L	0.200
Acenaphthene		<0.200	mg/L	0.200
Fluorene		<0.200	mg/L	0.200
Phenanthrene		<0.200	mg/L	0.200
Anthracene		<0.200	mg/L	0.200
Fluoranthene		<0.200	mg/L	0.200
Pyrene		<0.200	mg/L	0.200
Benzo(a)anthracene		<0.200	mg/L	0.200
Chrysene		<0.200	mg/L	0.200
Benzo(b)fluoranthene		<0.200	mg/L	0.200
Benzo(k)fluoranthene		<0.200	mg/L	0.200
Benzo(a)pyrene		<0.200	mg/L	0.200
Indeno(1,2,3-cd)pyrene		<0.200	mg/L	0.200
Dibenzo(a,h)anthracene		<0.200	mg/L	0.200
Benzo(g,h,i)perylene		<0.200	mg/L	0.200
Sulfate		932	mg/L	0.500
Total Dissolved Solids		3185	mg/L	10.00
Total Silver		<0.0125	mg/L	0.0125
Total Arsenic		<0.0100	mg/L	0.0100

continued ...

<sup>3</sup>sample ran out of holding time.

sample 42497 continued ...

Param	Flag	Result	Units	RL
Total Barium		0.436	mg/L	0.100
Total Cadmium		<0.00500	mg/L	0.00500
Total Chromium		0.0110	mg/L	0.0100
Total Mercury		<0.000200	mg/L	0.000200
Total Lead		<0.0100	mg/L	0.0100
Total Selenium		<0.0500	mg/L	0.0500

Sample: 42498 - MW-4

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1.00
Bicarbonate Alkalinity		206	mg/L as CaCo3	4.00
Total Alkalinity		206	mg/L as CaCo3	4.00
Dissolved Calcium		612	mg/L	0.500
Dissolved Potassium		52.1	mg/L	0.500
Dissolved Magnesium		157	mg/L	0.500
Dissolved Sodium		500	mg/L	0.500
Chloride		1200	mg/L	0.500
Fluoride		<10.0	mg/L	0.200
Nitrate-N	4	16.9	mg/L	0.200
Naphthalene		<0.00100	mg/L	0.200
Acenaphthylene		<0.00100	mg/L	0.200
Acenaphthene		<0.00100	mg/L	0.200
Fluorene		<0.00100	mg/L	0.200
Phenanthrene		<0.00100	mg/L	0.200
Anthracene		<0.00100	mg/L	0.200
Fluoranthene		<0.00100	mg/L	0.200
Pyrene		<0.00100	mg/L	0.200
Benzo(a)anthracene		<0.00100	mg/L	0.200
Chrysene		<0.00100	mg/L	0.200
Benzo(b)fluoranthene		<0.00100	mg/L	0.200
Benzo(k)fluoranthene		<0.00100	mg/L	0.200
Benzo(a)pyrene		<0.00100	mg/L	0.200
Indeno(1,2,3-cd)pyrene		<0.00100	mg/L	0.200
Dibenzo(a,h)anthracene		<0.00100	mg/L	0.200
Benzo(g,h,i)perylene		<0.00100	mg/L	0.200
Sulfate		1100	mg/L	0.500
Total Dissolved Solids		3630	mg/L	10.00
Total Silver		<0.0125	mg/L	0.0125
Total Arsenic		<0.0100	mg/L	0.0100
Total Barium		0.140	mg/L	0.100
Total Cadmium		<0.00500	mg/L	0.00500
Total Chromium		<0.0100	mg/L	0.0100
Total Mercury		<0.000200	mg/L	0.000200
Total Lead		0.0360	mg/L	0.0100
Total Selenium		<0.0500	mg/L	0.0500

<sup>4</sup>sample ran out of holding time.

# TRACE ANALYSIS, INC.

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FAX 915•585•4944

## Analytical and Quality Control Report

Ginger Gritz  
RESPEC  
4775 Indian School Rd. NE  
Suite 300  
Albuquerque, NM 87110

Report Date: September 15, 2004

Work Order: 4083002

Project Location: Jal, NM  
Project Name: RUNCO  
Project Number: 1507-1.0

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
42495	MW-1	water	2004-08-27	09:30	2004-08-28
42496	MW-2	water	2004-08-27	10:30	2004-08-28
42497	MW-3	water	2004-08-27	11:00	2004-08-28
42498	MW-4	water	2004-08-27	10:00	2004-08-28

### Comment(s)

Work Order 4083002: Sample #42496 and #42497 Were stored in plastic containers for PAH.

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 26 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

  
Dr. Blair Leftwich, Director

## Analytical Report

### Sample: 42495 - MW-1

Analysis: Alkalinity  
QC Batch: 12672  
Prep Batch: 11204

Analytical Method: SM 2320B  
Date Analyzed: 2004-09-15  
Date Prepared: 2004-09-15

Prep Method: N/A  
Analyzed By: RS  
Prepared By: RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		142	mg/L as CaCo3	1	4.00
Total Alkalinity		142	mg/L as CaCo3	1	4.00

### Sample: 42495 - MW-1

Analysis: BTEX  
QC Batch: 12396  
Prep Batch: 10946

Analytical Method: S 8021B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5030B  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.109	mg/L	1	0.100	109	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0969	mg/L	1	0.100	97	53.1 - 149

### Sample: 42495 - MW-1

Analysis: Cations  
QC Batch: 12613  
Prep Batch: 11139

Analytical Method: S 6010B  
Date Analyzed: 2004-09-13  
Date Prepared: 2004-09-10

Prep Method: S 3005A  
Analyzed By: RR  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		321	mg/L	1	0.500
Dissolved Potassium		34.3	mg/L	1	0.500
Dissolved Magnesium		90.1	mg/L	1	0.500
Dissolved Sodium		323	mg/L	1	0.500

### Sample: 42495 - MW-1

Analysis: Chloride (IC)  
QC Batch: 12676  
Prep Batch: 11207

Analytical Method: E 300.0  
Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		472	mg/L	100	0.500

**Sample: 42495 - MW-1**

Analysis: Fluoride (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 12676	Date Analyzed: 2004-09-14	Analyzed By: MW
Prep Batch: 11207	Date Prepared: 2004-09-14	Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Fluoride		73.0	mg/L	100	0.200

**Sample: 42495 - MW-1**

Analysis: NO3 (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 12676	Date Analyzed: 2004-09-14	Analyzed By: MW
Prep Batch: 11207	Date Prepared: 2004-09-14	Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N	1	28.0	mg/L	100	0.200

**Sample: 42495 - MW-1**

Analysis: PAH	Analytical Method: S 8270C	Prep Method: S 3510C
QC Batch: 12505	Date Analyzed: 2004-09-06	Analyzed By: RC
Prep Batch: 11062	Date Prepared: 2004-09-03	Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000200	mg/L	0.001	0.200
Acenaphthylene		<0.000200	mg/L	0.001	0.200
Acenaphthene		<0.000200	mg/L	0.001	0.200
Fluorene		<0.000200	mg/L	0.001	0.200
Phenanthrene		<0.000200	mg/L	0.001	0.200
Anthracene		<0.000200	mg/L	0.001	0.200
Fluoranthene		<0.000200	mg/L	0.001	0.200
Pyrene		<0.000200	mg/L	0.001	0.200
Benzo(a)anthracene		<0.000200	mg/L	0.001	0.200
Chrysene		<0.000200	mg/L	0.001	0.200
Benzo(b)fluoranthene		<0.000200	mg/L	0.001	0.200
Benzo(k)fluoranthene		<0.000200	mg/L	0.001	0.200
Benzo(a)pyrene		<0.000200	mg/L	0.001	0.200
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	0.001	0.200
Dibenzo(a,h)anthracene		<0.000200	mg/L	0.001	0.200
Benzo(g,h,i)perylene		<0.000200	mg/L	0.001	0.200

<sup>1</sup> Sample ran out of holding time.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0310	mg/L	0.001	80.0	39	0 - 128
2-Fluorobiphenyl		0.0387	mg/L	0.001	80.0	48	0 - 140
Terphenyl-d14		0.0342	mg/L	0.001	80.0	43	0 - 165

**Sample: 42495 - MW-1**

Analysis: SO4 (IC)  
QC Batch: 12676  
Prep Batch: 11207

Analytical Method: E 300.0  
Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Sulfate		1080	mg/L	10	0.500

**Sample: 42495 - MW-1**

Analysis: TDS  
QC Batch: 12408  
Prep Batch: 10956

Analytical Method: SM 2540C  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: WB  
Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		2560	mg/L	1	10.00

**Sample: 42495 - MW-1**

Analysis: Total 8 Metals  
QC Batch: 12521  
Prep Batch: 11034  
Analysis: Total 8 Metals  
QC Batch: 12571  
Prep Batch: 10970

Analytical Method: S 7470A  
Date Analyzed: 2004-09-07  
Date Prepared: 2004-09-04  
Analytical Method: S 6010B  
Date Analyzed: 2004-09-09  
Date Prepared: 2004-09-01

Prep Method: N/A  
Analyzed By: TP  
Prepared By: TP  
Prep Method: S 3010A  
Analyzed By: RR  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Barium		<0.100	mg/L	1	0.100
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Chromium		<0.0100	mg/L	1	0.0100
Total Mercury		<0.000200	mg/L	1	0.000200
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500

**Sample: 42496 - MW-2**

Analysis: Alkalinity

Analytical Method: SM 2320B

Prep Method: N/A

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QC Batch: 12672  
Prep Batch: 11204

Date Analyzed: 2004-09-15  
Date Prepared: 2004-09-15

Analyzed By: RS  
Prepared By: RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		220	mg/L as CaCo3	1	4.00
Total Alkalinity		220	mg/L as CaCo3	1	4.00

**Sample: 42496 - MW-2**

Analysis: BTEX  
QC Batch: 12396  
Prep Batch: 10946

Analytical Method: S 8021B  
Date Analyzed: 2004-08-30  
Date Prepared: 2004-08-30

Prep Method: S 5030B  
Analyzed By: MS  
Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.108	mg/L	1	0.100	108	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0944	mg/L	1	0.100	94	53.1 - 149

**Sample: 42496 - MW-2**

Analysis: Cations  
QC Batch: 12611  
Prep Batch: 11116

Analytical Method: S 6010B  
Date Analyzed: 2004-09-13  
Date Prepared: 2004-09-09

Prep Method: S 3005A  
Analyzed By: RR  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		707	mg/L	1	0.500
Dissolved Potassium		39.0	mg/L	1	0.500
Dissolved Magnesium		104	mg/L	1	0.500
Dissolved Sodium		448	mg/L	1	0.500

**Sample: 42496 - MW-2**

Analysis: Chloride (IC)  
QC Batch: 12676  
Prep Batch: 11207

Analytical Method: E 300.0  
Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		731	mg/L	100	0.500



**Sample: 42496 - MW-2**

Analysis: Fluoride (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 12676	Date Analyzed: 2004-09-14	Analyzed By: MW
Prep Batch: 11207	Date Prepared: 2004-09-14	Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Fluoride		3.99	mg/L	10	0.200

**Sample: 42496 - MW-2**

Analysis: NO3 (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 12676	Date Analyzed: 2004-09-14	Analyzed By: MW
Prep Batch: 11207	Date Prepared: 2004-09-14	Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N	<sup>2</sup>	17.8	mg/L	10	0.200

**Sample: 42496 - MW-2**

Analysis: PAH	Analytical Method: S 8270C	Prep Method: S 3510C
QC Batch: 12505	Date Analyzed: 2004-09-06	Analyzed By: RC
Prep Batch: 11062	Date Prepared: 2004-09-03	Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.200	mg/L	1	0.200
Acenaphthylene		<0.200	mg/L	1	0.200
Acenaphthene		<0.200	mg/L	1	0.200
Fluorene		<0.200	mg/L	1	0.200
Phenanthrene		<0.200	mg/L	1	0.200
Anthracene		<0.200	mg/L	1	0.200
Fluoranthene		<0.200	mg/L	1	0.200
Pyrene		<0.200	mg/L	1	0.200
Benzo(a)anthracene		<0.200	mg/L	1	0.200
Chrysene		<0.200	mg/L	1	0.200
Benzo(b)fluoranthene		<0.200	mg/L	1	0.200
Benzo(k)fluoranthene		<0.200	mg/L	1	0.200
Benzo(a)pyrene		<0.200	mg/L	1	0.200
Indeno(1,2,3-cd)pyrene		<0.200	mg/L	1	0.200
Dibenzo(a,h)anthracene		<0.200	mg/L	1	0.200
Benzo(g,h,i)perylene		<0.200	mg/L	1	0.200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		27.1	mg/L	1	80.0	34	0 - 128
2-Fluorobiphenyl		39.2	mg/L	1	80.0	49	0 - 140
Terphenyl-d14		47.7	mg/L	1	80.0	60	0 - 165

<sup>2</sup>sample ran out of holding time.

**Sample: 42496 - MW-2**

Analysis: SO4 (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 12676	Date Analyzed: 2004-09-14	Analyzed By: MW
Prep Batch: 11207	Date Prepared: 2004-09-14	Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Sulfate		981	mg/L	100	0.500

**Sample: 42496 - MW-2**

Analysis: TDS	Analytical Method: SM 2540C	Prep Method: N/A
QC Batch: 12408	Date Analyzed: 2004-08-31	Analyzed By: WB
Prep Batch: 10956	Date Prepared: 2004-08-30	Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		3015	mg/L	1	10.00

**Sample: 42496 - MW-2**

Analysis: Total 8 Metals	Analytical Method: S 7470A	Prep Method: N/A
QC Batch: 12521	Date Analyzed: 2004-09-07	Analyzed By: TP
Prep Batch: 11034	Date Prepared: 2004-09-04	Prepared By: TP
Analysis: Total 8 Metals	Analytical Method: S 6010B	Prep Method: S 3010A
QC Batch: 12571	Date Analyzed: 2004-09-09	Analyzed By: RR
Prep Batch: 10970	Date Prepared: 2004-09-01	Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Arsenic		0.0480	mg/L	1	0.0100
Total Barium		0.618	mg/L	1	0.100
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Chromium		0.0230	mg/L	1	0.0100
Total Mercury		<0.000200	mg/L	1	0.000200
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500

**Sample: 42497 - MW-3**

Analysis: Alkalinity	Analytical Method: SM 2320B	Prep Method: N/A
QC Batch: 12672	Date Analyzed: 2004-09-15	Analyzed By: RS
Prep Batch: 11204	Date Prepared: 2004-09-15	Prepared By: RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		250	mg/L as CaCo3	1	4.00

continued ...

sample 42497 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Total Alkalinity		250	mg/L as CaCo3	1	4.00

**Sample: 42497 - MW-3**

Analysis: BTEX                      Analytical Method: S 8021B                      Prep Method: S 5030B  
QC Batch: 12396                      Date Analyzed: 2004-08-30                      Analyzed By: MS  
Prep Batch: 10946                      Date Prepared: 2004-08-30                      Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.108	mg/L	1	0.100	108	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0927	mg/L	1	0.100	93	53.1 - 149

**Sample: 42497 - MW-3**

Analysis: Cations                      Analytical Method: S 6010B                      Prep Method: S 3005A  
QC Batch: 12611                      Date Analyzed: 2004-09-13                      Analyzed By: RR  
Prep Batch: 11116                      Date Prepared: 2004-09-09                      Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		403	mg/L	1	0.500
Dissolved Potassium		57.2	mg/L	1	0.500
Dissolved Magnesium		131	mg/L	1	0.500
Dissolved Sodium		49.4	mg/L	1	0.500

**Sample: 42497 - MW-3**

Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
QC Batch: 12676                      Date Analyzed: 2004-09-14                      Analyzed By: MW  
Prep Batch: 11207                      Date Prepared: 2004-09-14                      Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		965	mg/L	100	0.500

**Sample: 42497 - MW-3**

Analysis: Fluoride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A

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QC Batch: 12676  
Prep Batch: 11207

Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Fluoride		4.05	mg/L	10	0.200

**Sample: 42497 - MW-3**

Analysis: NO3 (IC)  
QC Batch: 12676  
Prep Batch: 11207

Analytical Method: E 300.0  
Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N	<sup>3</sup>	15.2	mg/L	10	0.200

**Sample: 42497 - MW-3**

Analysis: PAH  
QC Batch: 12505  
Prep Batch: 11062

Analytical Method: S 8270C  
Date Analyzed: 2004-09-06  
Date Prepared: 2004-09-03

Prep Method: S 3510C  
Analyzed By: RC  
Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.200	mg/L	1	0.200
Acenaphthylene		<0.200	mg/L	1	0.200
Acenaphthene		<0.200	mg/L	1	0.200
Fluorene		<0.200	mg/L	1	0.200
Phenanthrene		<0.200	mg/L	1	0.200
Anthracene		<0.200	mg/L	1	0.200
Fluoranthene		<0.200	mg/L	1	0.200
Pyrene		<0.200	mg/L	1	0.200
Benzo(a)anthracene		<0.200	mg/L	1	0.200
Chrysene		<0.200	mg/L	1	0.200
Benzo(b)fluoranthene		<0.200	mg/L	1	0.200
Benzo(k)fluoranthene		<0.200	mg/L	1	0.200
Benzo(a)pyrene		<0.200	mg/L	1	0.200
Indeno(1,2,3-cd)pyrene		<0.200	mg/L	1	0.200
Dibenzo(a,h)anthracene		<0.200	mg/L	1	0.200
Benzo(g,h,i)perylene		<0.200	mg/L	1	0.200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		44.1	mg/L	1	80.0	55	0 - 128
2-Fluorobiphenyl		53.9	mg/L	1	80.0	67	0 - 140
Terphenyl-d14		58.4	mg/L	1	80.0	73	0 - 165

**Sample: 42497 - MW-3**

<sup>3</sup>sample ran out of holding time.

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Analysis: SO4 (IC)  
QC Batch: 12676  
Prep Batch: 11207

Analytical Method: E 300.0  
Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Sulfate		932	mg/L	100	0.500

**Sample: 42497 - MW-3**

Analysis: TDS  
QC Batch: 12408  
Prep Batch: 10956

Analytical Method: SM 2540C  
Date Analyzed: 2004-08-31  
Date Prepared: 2004-08-30

Prep Method: N/A  
Analyzed By: WB  
Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		3185	mg/L	1	10.00

**Sample: 42497 - MW-3**

Analysis: Total 8 Metals  
QC Batch: 12521  
Prep Batch: 11034  
Analysis: Total 8 Metals  
QC Batch: 12571  
Prep Batch: 10970

Analytical Method: S 7470A  
Date Analyzed: 2004-09-07  
Date Prepared: 2004-09-04  
Analytical Method: S 6010B  
Date Analyzed: 2004-09-09  
Date Prepared: 2004-09-01

Prep Method: N/A  
Analyzed By: TP  
Prepared By: TP  
Prep Method: S 3010A  
Analyzed By: RR  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Barium		0.436	mg/L	1	0.100
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Chromium		0.0110	mg/L	1	0.0100
Total Mercury		<0.000200	mg/L	1	0.000200
Total Lead		<0.0100	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500

**Sample: 42498 - MW-4**

Analysis: Alkalinity  
QC Batch: 12672  
Prep Batch: 11204

Analytical Method: SM 2320B  
Date Analyzed: 2004-09-15  
Date Prepared: 2004-09-15

Prep Method: N/A  
Analyzed By: RS  
Prepared By: RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		206	mg/L as CaCo3	1	4.00
Total Alkalinity		206	mg/L as CaCo3	1	4.00

**Sample: 42498 - MW-4**

Analysis: BTEX                      Analytical Method: S 8021B                      Prep Method: S 5030B  
QC Batch: 12396                      Date Analyzed: 2004-08-30                      Analyzed By: MS  
Prep Batch: 10946                      Date Prepared: 2004-08-30                      Prepared By: MS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.110	mg/L	1	0.100	110	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0957	mg/L	1	0.100	96	53.1 - 149

**Sample: 42498 - MW-4**

Analysis: Cations                      Analytical Method: S 6010B                      Prep Method: S 3005A  
QC Batch: 12611                      Date Analyzed: 2004-09-13                      Analyzed By: RR  
Prep Batch: 11116                      Date Prepared: 2004-09-09                      Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		612	mg/L	1	0.500
Dissolved Potassium		52.1	mg/L	1	0.500
Dissolved Magnesium		157	mg/L	1	0.500
Dissolved Sodium		500	mg/L	1	0.500

**Sample: 42498 - MW-4**

Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
QC Batch: 12676                      Date Analyzed: 2004-09-14                      Analyzed By: MW  
Prep Batch: 11207                      Date Prepared: 2004-09-14                      Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		1200	mg/L	50	0.500

**Sample: 42498 - MW-4**

Analysis: Fluoride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
QC Batch: 12676                      Date Analyzed: 2004-09-14                      Analyzed By: MW  
Prep Batch: 11207                      Date Prepared: 2004-09-14                      Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Fluoride		<10.0	mg/L	50	0.200

**Sample: 42498 - MW-4**

Analysis: NO3 (IC)  
QC Batch: 12676  
Prep Batch: 11207

Analytical Method: E 300.0  
Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N	4	16.9	mg/L	50	0.200

**Sample: 42498 - MW-4**

Analysis: PAH  
QC Batch: 12505  
Prep Batch: 11062

Analytical Method: S 8270C  
Date Analyzed: 2004-09-06  
Date Prepared: 2004-09-03

Prep Method: S 3510C  
Analyzed By: RC  
Prepared By: RC

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.00100	mg/L	0.005	0.200
Acenaphthylene		<0.00100	mg/L	0.005	0.200
Acenaphthene		<0.00100	mg/L	0.005	0.200
Fluorene		<0.00100	mg/L	0.005	0.200
Phenanthrene		<0.00100	mg/L	0.005	0.200
Anthracene		<0.00100	mg/L	0.005	0.200
Fluoranthene		<0.00100	mg/L	0.005	0.200
Pyrene		<0.00100	mg/L	0.005	0.200
Benzo(a)anthracene		<0.00100	mg/L	0.005	0.200
Chrysene		<0.00100	mg/L	0.005	0.200
Benzo(b)fluoranthene		<0.00100	mg/L	0.005	0.200
Benzo(k)fluoranthene		<0.00100	mg/L	0.005	0.200
Benzo(a)pyrene		<0.00100	mg/L	0.005	0.200
Indeno(1,2,3-cd)pyrene		<0.00100	mg/L	0.005	0.200
Dibenzo(a,h)anthracene		<0.00100	mg/L	0.005	0.200
Benzo(g,h,i)perylene		<0.00100	mg/L	0.005	0.200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.175	mg/L	0.005	80.0	44	0 - 128
2-Fluorobiphenyl		0.229	mg/L	0.005	80.0	57	0 - 140
Terphenyl-d14		0.271	mg/L	0.005	80.0	68	0 - 165

**Sample: 42498 - MW-4**

Analysis: SO4 (IC)  
QC Batch: 12676  
Prep Batch: 11207

Analytical Method: E 300.0  
Date Analyzed: 2004-09-14  
Date Prepared: 2004-09-14

Prep Method: N/A  
Analyzed By: MW  
Prepared By: MW

Parameter	Flag	RL Result	Units	Dilution	RL
Sulfate		1100	mg/L	50	0.500

<sup>4</sup>sample ran out of holding time.

**Sample: 42498 - MW-4**

Analysis: TDS	Analytical Method: SM 2540C	Prep Method: N/A
QC Batch: 12408	Date Analyzed: 2004-08-31	Analyzed By: WB
Prep Batch: 10956	Date Prepared: 2004-08-30	Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		3630	mg/L	1	10.00

**Sample: 42498 - MW-4**

Analysis: Total 8 Metals	Analytical Method: S 7470A	Prep Method: N/A
QC Batch: 12521	Date Analyzed: 2004-09-07	Analyzed By: TP
Prep Batch: 11034	Date Prepared: 2004-09-04	Prepared By: TP
Analysis: Total 8 Metals	Analytical Method: S 6010B	Prep Method: S 3010A
QC Batch: 12571	Date Analyzed: 2004-09-09	Analyzed By: RR
Prep Batch: 10970	Date Prepared: 2004-09-01	Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.0125	mg/L	1	0.0125
Total Arsenic		<0.0100	mg/L	1	0.0100
Total Barium		0.140	mg/L	1	0.100
Total Cadmium		<0.00500	mg/L	1	0.00500
Total Chromium		<0.0100	mg/L	1	0.0100
Total Mercury		<0.000200	mg/L	1	0.000200
Total Lead		0.0360	mg/L	1	0.0100
Total Selenium		<0.0500	mg/L	1	0.0500

**Method Blank (1) QC Batch: 12396**

Parameter	Flag	Result	Units	RL
Benzene		<0.00100	mg/L	0.001
Toluene		<0.00100	mg/L	0.001
Ethylbenzene		<0.00100	mg/L	0.001
Xylene		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.109	mg/L	1	0.100	109	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0932	mg/L	1	0.100	93	70 - 130

**Method Blank (1) QC Batch: 12408**

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		< 10	mg/L	10



Method Blank (1) QC Batch: 12505

Parameter	Flag	Result	Units	RL
Naphthalene		<0.000200	mg/L	0.2
Acenaphthylene		<0.000200	mg/L	0.2
Acenaphthene		<0.000200	mg/L	0.2
Fluorene		<0.000200	mg/L	0.2
Phenanthrene		<0.000200	mg/L	0.2
Anthracene		<0.000200	mg/L	0.2
Fluoranthene		<0.000200	mg/L	0.2
Pyrene		<0.000200	mg/L	0.2
Benzo(a)anthracene		<0.000200	mg/L	0.2
Chrysene		<0.000200	mg/L	0.2
Benzo(b)fluoranthene		<0.000200	mg/L	0.2
Benzo(k)fluoranthene		<0.000200	mg/L	0.2
Benzo(a)pyrene		<0.000200	mg/L	0.2
Indeno(1,2,3-cd)pyrene		<0.000200	mg/L	0.2
Dibenzo(a,h)anthracene		<0.000200	mg/L	0.2
Benzo(g,h,i)perylene		<0.000200	mg/L	0.2

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0555	mg/L	0.001	80.0	69	0 - 128
2-Fluorobiphenyl		0.0629	mg/L	0.001	80.0	79	0 - 140
Terphenyl-d14		0.0673	mg/L	0.001	80.0	84	0 - 165

Method Blank (1) QC Batch: 12521

Parameter	Flag	Result	Units	RL
Total Mercury		<0.000200	mg/L	0.0002

Method Blank (1) QC Batch: 12571

Parameter	Flag	Result	Units	RL
Total Silver		<0.0125	mg/L	0.0125
Total Arsenic		<0.0100	mg/L	0.01
Total Barium		<0.100	mg/L	0.1
Total Cadmium		<0.00500	mg/L	0.005
Total Chromium		<0.0100	mg/L	0.01
Total Lead		<0.0100	mg/L	0.01
Total Selenium		<0.0500	mg/L	0.05

Method Blank (1) QC Batch: 12611

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5

continued ...

method blank continued ...

Parameter	Flag	Result	Units	RL
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12613

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12672

Parameter	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 12676

Parameter	Flag	Result	Units	RL
Chloride		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 12676

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 12676

Parameter	Flag	Result	Units	RL
Nitrate-N		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 12676

Parameter	Flag	Result	Units	RL
Sulfate		<0.500	mg/L	0.5

**Duplicate (1)** QC Batch: 12408

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	1640	1676	mg/L	1	2	8.7

**Duplicate (1)** QC Batch: 12672

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	200	206	mg/L as CaCo3	1	3	20
Total Alkalinity	200	206	mg/L as CaCo3	1	3	4.8

**Laboratory Control Spike (LCS-1)** QC Batch: 12396

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0926	0.0932	mg/L	1	0.100	<0.000136	93	1	70 - 130	20
Toluene	0.0955	0.0969	mg/L	1	0.100	<0.000247	96	1	70 - 130	20
Ethylbenzene	0.0992	0.100	mg/L	1	0.100	<0.000550	99	1	70 - 130	20
Xylene	0.325	0.327	mg/L	1	0.300	<0.00156	108	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.108	0.109	mg/L	1	0.100	108	109	70 - 130
4-Bromofluorobenzene (4-BFB)	0.106	0.107	mg/L	1	0.100	106	107	70 - 130

**Laboratory Control Spike (LCS-1)** QC Batch: 12505

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Naphthalene	24.3	24.6	mg/L	1	80.0	<0.0445	30	1	22.5 - 119	20
Acenaphthylene	<sup>56</sup> 30.1	30.6	mg/L	1	80.0	<0.0383	38	2	42.3 - 127	20
Acenaphthene	<sup>78</sup> 29.1	29.0	mg/L	1	80.0	<0.0421	36	0	38 - 125	20
Fluorene	31.9	31.5	mg/L	1	80.0	<0.0655	40	1	36.6 - 130	20
Phenanthrene	34.7	34.6	mg/L	1	80.0	<0.0383	43	0	40.3 - 131	20

*continued ...*

<sup>5</sup>The average of the spike compounds shows that the process is in control.

<sup>6</sup>The average of the spike compounds shows that the process is in control.

<sup>7</sup>The average of the spike compounds shows that the process is in control.

<sup>8</sup>The average of the spike compounds shows that the process is in control.

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Anthracene	37.2	36.8	mg/L	1	80.0	<0.0468	46	1	36.7 - 135	20
Fluoranthene	41.7	41.7	mg/L	1	80.0	<0.0550	52	0	43.2 - 133	20
Pyrene	41.6	41.6	mg/L	1	80.0	<0.0904	52	0	48.8 - 157	20
Benzo(a)anthracene	39.4	40.2	mg/L	1	80.0	<0.0993	49	2	40.2 - 138	20
Chrysene	30.3	30.6	mg/L	1	80.0	<0.121	38	1	5.5 - 179	20
Benzo(b)fluoranthene	38.8	38.5	mg/L	1	80.0	<0.171	48	1	16.4 - 156	20
Benzo(k)fluoranthene	40.4	41.9	mg/L	1	80.0	<0.0951	50	4	40.9 - 150	20
Benzo(a)pyrene	40.2	40.3	mg/L	1	80.0	<0.135	50	0	38.7 - 149	20
Indeno(1,2,3-cd)pyrene	37.7	37.7	mg/L	1	80.0	<0.176	47	0	32 - 153	20
Dibenzo(a,h)anthracene	26.4	26.8	mg/L	1	80.0	<0.184	33	2	0 - 202	20
Benzo(g,h,i)perylene	37.7	37.7	mg/L	1	80.0	<0.134	47	0	39.1 - 144	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	26.4	26.0	mg/L	1	80.0	33	32	0 - 128
2-Fluorobiphenyl	31.6	31.8	mg/L	1	80.0	40	40	0 - 140
Terphenyl-d14	50.0	50.6	mg/L	1	80.0	62	63	0 - 165

**Laboratory Control Spike (LCS-1) QC Batch: 12521**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.000970	0.000940	mg/L	1	0.00100	<0.0000329	97	3	82 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1) QC Batch: 12571**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.125	0.123	mg/L	1	0.125	<0.000199	100	2	85 - 115	20
Total Arsenic	0.491	0.486	mg/L	1	0.500	<0.00860	98	1	85 - 115	20
Total Barium	1.03	1.02	mg/L	1	1.00	<0.000984	103	1	85 - 115	20
Total Cadmium	0.245	0.242	mg/L	1	0.250	<0.000577	98	1	85 - 115	20
Total Chromium	0.104	0.103	mg/L	1	0.100	<0.000437	104	1	85 - 115	20
Total Lead	0.503	0.498	mg/L	1	0.500	<0.00310	101	1	85 - 115	20
Total Selenium	0.456	0.452	mg/L	1	0.500	<0.00370	91	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1) QC Batch: 12611**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	106	104	mg/L	1	100	<0.00971	106	2	85 - 115	20
Dissolved Potassium	107	102	mg/L	1	100	<0.0297	107	5	85 - 115	20
Dissolved Magnesium	107	104	mg/L	1	100	<0.0138	107	3	85 - 115	20
Dissolved Sodium	105	103	mg/L	1	100	<0.0309	105	2	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1) QC Batch: 12613**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	102	101	mg/L	1	100	<0.00971	102	1	85 - 115	20
Dissolved Potassium	101	102	mg/L	1	100	<0.0297	101	1	85 - 115	20
Dissolved Magnesium	101	101	mg/L	1	100	<0.0138	101	0	85 - 115	20
Dissolved Sodium	102	103	mg/L	1	100	<0.0309	102	1	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1) QC Batch: 12676**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	12.3	12.6	mg/L	1	12.5	<0.337	98	2	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1) QC Batch: 12676**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.37	2.44	mg/L	1	2.50	<0.0594	95	3	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1) QC Batch: 12676**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.43	2.44	mg/L	1	2.50	<0.0217	97	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1) QC Batch: 12676**

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Sulfate	12.1	12.2	mg/L	1	12.5	<0.409	97	1	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1) QC Batch: 12521**

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Mercury	0.000940	0.000950	mg/L	1	0.00100	<0.0000329	94	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12571

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Total Silver	0.122	0.122	mg/L	1	0.125	<0.000199	98	0	75 - 125	20
Total Arsenic	0.486	0.483	mg/L	1	0.500	<0.00860	97	1	75 - 125	20
Total Barium	1.03	1.06	mg/L	1	1.00	<0.000984	103	3	75 - 125	20
Total Cadmium	0.211	0.211	mg/L	1	0.250	<0.000577	84	0	75 - 125	20
Total Chromium	0.100	0.101	mg/L	1	0.100	<0.000437	100	1	75 - 125	20
Total Lead	0.434	0.436	mg/L	1	0.500	<0.00310	87	0	75 - 125	20
Total Selenium	0.460	0.463	mg/L	1	0.500	<0.00370	92	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12611

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	190	188	mg/L	1	100	84.9	105	1	75 - 125	20
Dissolved Potassium	113	112	mg/L	1	100	14.4	99	1	75 - 125	20
Dissolved Magnesium	202	200	mg/L	1	100	95.8	106	1	75 - 125	20
Dissolved Sodium	159	157	mg/L	1	100	53.2	106	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12613

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	103	105	mg/L	1	100	0.018	103	2	75 - 125	20
Dissolved Potassium	94.0	95.2	mg/L	1	100	0.477	94	1	75 - 125	20
Dissolved Magnesium	104	105	mg/L	1	100	0.042	104	1	75 - 125	20
Dissolved Sodium	98.9	99.1	mg/L	1	100	0.269	99	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12676

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	7830	7870	mg/L	500	12.5	2180	90	0	74.3 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12676

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	1210	1210	mg/L	500	2.50	74.7	91	0	84.9 - 104	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12676

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	1250	1240	mg/L	500	2.50	<10.8	100	1	79.6 - 109	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 12676

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Sulfate	7590	7620	mg/L	500	12.5	1550	97	0	77.8 - 112	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Standard (ICV-1)** QC Batch: 12396

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0971	97	85 - 115	2004-08-30
Toluene		mg/L	0.100	0.102	102	85 - 115	2004-08-30
Ethylbenzene		mg/L	0.100	0.104	104	85 - 115	2004-08-30
Xylene		mg/L	0.300	0.341	114	85 - 115	2004-08-30

**Standard (CCV-1)** QC Batch: 12396

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.101	101	85 - 115	2004-08-30
Toluene		mg/L	0.100	0.108	108	85 - 115	2004-08-30
Ethylbenzene		mg/L	0.100	0.106	106	85 - 115	2004-08-30
Xylene		mg/L	0.300	0.344	115	85 - 115	2004-08-30

**Standard (ICV-1)** QC Batch: 12408

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	998.0	100	90 - 110	2004-08-31

**Standard (CCV-1)** QC Batch: 12408

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1028	103	90 - 110	2004-08-31

**Standard (CCV-1)** QC Batch: 12505

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	61.8	103	80 - 120	2004-09-06
Acenaphthylene		mg/L	60.0	61.8	103	80 - 120	2004-09-06
Acenaphthene		mg/L	60.0	62.4	104	80 - 120	2004-09-06
Fluorene		mg/L	60.0	64.5	108	80 - 120	2004-09-06
Phenanthrene		mg/L	60.0	61.8	103	80 - 120	2004-09-06
Anthracene		mg/L	60.0	62.3	104	80 - 120	2004-09-06
Fluoranthene		mg/L	60.0	61.1	102	80 - 120	2004-09-06
Pyrene		mg/L	60.0	63.4	106	80 - 120	2004-09-06
Benzo(a)anthracene		mg/L	60.0	63.7	106	80 - 120	2004-09-06
Chrysene		mg/L	60.0	64.0	107	80 - 120	2004-09-06
Benzo(b)fluoranthene		mg/L	60.0	72.0	120	80 - 120	2004-09-06
Benzo(k)fluoranthene		mg/L	60.0	60.8	101	80 - 120	2004-09-06
Benzo(a)pyrene		mg/L	60.0	63.8	106	80 - 120	2004-09-06
Indeno(1,2,3-cd)pyrene		mg/L	60.0	59.5	99	80 - 120	2004-09-06
Dibenzo(a,h)anthracene		mg/L	60.0	60.9	102	80 - 120	2004-09-06
Benzo(g,h,i)perylene		mg/L	60.0	59.5	99	80 - 120	2004-09-06

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		57.8	mg/L	1	60.0	96	80 - 120
2-Fluorobiphenyl		65.1	mg/L	1	60.0	108	80 - 120
Terphenyl-d14		65.2	mg/L	1	60.0	109	80 - 120

**Standard (ICV-1)** QC Batch: 12521

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.000970	97	80 - 120	2004-09-07

**Standard (CCV-1)** QC Batch: 12521

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.00100	0.00102	102	80 - 120	2004-09-07

**Standard (ICV-1)** QC Batch: 12571

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.125	100	90 - 110	2004-09-09
Total Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-09-09
Total Barium		mg/L	1.00	1.01	101	90 - 110	2004-09-09
Total Cadmium		mg/L	1.00	1.01	101	90 - 110	2004-09-09
Total Chromium		mg/L	1.00	1.01	101	90 - 110	2004-09-09
Total Lead		mg/L	1.00	1.00	100	90 - 110	2004-09-09
Total Selenium		mg/L	1.00	1.00	100	90 - 110	2004-09-09



**Standard (CCV-1)** QC Batch: 12571

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.122	98	90 - 110	2004-09-09
Total Arsenic		mg/L	1.00	0.949	95	90 - 110	2004-09-09
Total Barium		mg/L	1.00	0.913	91	90 - 110	2004-09-09
Total Cadmium		mg/L	1.00	0.960	96	90 - 110	2004-09-09
Total Chromium		mg/L	1.00	0.960	96	90 - 110	2004-09-09
Total Lead		mg/L	1.00	0.950	95	90 - 110	2004-09-09
Total Selenium		mg/L	1.00	0.940	94	90 - 110	2004-09-09

**Standard (ICV-1)** QC Batch: 12611

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.9	100	90 - 110	2004-09-13
Dissolved Potassium		mg/L	25.0	25.0	100	90 - 110	2004-09-13
Dissolved Magnesium		mg/L	25.0	24.9	100	90 - 110	2004-09-13
Dissolved Sodium		mg/L	25.0	24.9	100	90 - 110	2004-09-13

**Standard (CCV-1)** QC Batch: 12611

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.0	100	90 - 110	2004-09-13
Dissolved Potassium		mg/L	25.0	24.9	100	90 - 110	2004-09-13
Dissolved Magnesium		mg/L	25.0	24.9	100	90 - 110	2004-09-13
Dissolved Sodium		mg/L	25.0	25.0	100	90 - 110	2004-09-13

**Standard (ICV-1)** QC Batch: 12613

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.9	100	90 - 110	2004-09-13
Dissolved Potassium		mg/L	25.0	25.0	100	90 - 110	2004-09-13
Dissolved Magnesium		mg/L	25.0	24.9	100	90 - 110	2004-09-13
Dissolved Sodium		mg/L	25.0	24.9	100	90 - 110	2004-09-13

**Standard (CCV-1)** QC Batch: 12613

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.0	100	90 - 110	2004-09-13
Dissolved Potassium		mg/L	25.0	25.1	100	90 - 110	2004-09-13
Dissolved Magnesium		mg/L	25.0	24.8	99	90 - 110	2004-09-13
Dissolved Sodium		mg/L	25.0	25.0	100	90 - 110	2004-09-13

**Standard (ICV-1) QC Batch: 12672**

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2004-09-15

**Standard (CCV-1) QC Batch: 12672**

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 110	2004-09-15

**Standard (ICV-1) QC Batch: 12676**

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.3	98	90 - 110	2004-09-14

**Standard (ICV-1) QC Batch: 12676**

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.36	94	90 - 110	2004-09-14

**Standard (ICV-1) QC Batch: 12676**

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.38	95	90 - 110	2004-09-14

**Standard (ICV-1) QC Batch: 12676**

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/L	12.5	12.3	98	90 - 110	2004-09-14

**Standard (CCV-1) QC Batch: 12676**

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.4	99	90 - 110	2004-09-14

**Standard (CCV-1) QC Batch: 12676**

Report Date: September 15, 2004  
1507-1.0

Work Order: 4083002  
RUNCO

Page Number: 24 of 26  
Jal,NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.33	93	90 - 110	2004-09-14

Standard (CCV-1) QC Batch: 12676

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.43	97	90 - 110	2004-09-14

Standard (CCV-1) QC Batch: 12676

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/L	12.5	12.5	100	90 - 110	2004-09-14



6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1298		Trace Analysis, Inc.		155 McCutcheon, Suite H El Paso, Texas 79932 Tel (915) 585-5945 Fax (915) 585-4944 1 (888) 585-3443	
Company Name: RESPEC		Phone #: 505 268 2661		Chain-of-Custody and Analysis Request Form	
Address: 4775 Indian School Rd. NE		Fax #: 505 268 0040		LAB Order ID #: 4083002	
Contact Person: Gary Goltz				ANALYSIS REQUEST (Circle or Specify Method No.)	
Invoice to:				Pesticides B081A/608	
Project #: 1507				PCBs B082/608	
Project Location: JAL, NM				GC/MS Semi Vol B270C/625	
				GC/MS Vol B260B/624	
				RCI	
				TCLP Pesticides	
				TCLP Semi Volatiles	
				TCLP Volatiles	
				TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
				Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007	
				PAH 8270C	
				TPH 418 17X1005	
				BTEX 8021B/602	
				MTBE 8021B/602	
LAB # 42479		FIELD CODE Exc 281		X CHLORIDES	
LAB USE ONLY		EXC 35 @ 1.5'		X BOD TSS PH	
		EXC 35 @ 3'			
		EXC 4M @ 3'			
		EXC 3M @ 1.5'			
		EXC 3M @ 3'			
		EXC 45 @ 1.5'			
		EXC 3M @ 1.5'			
		EXC 3M @ 3'			
		EXC 45 @ 1.5'			
		EXC 3M @ 1.5'			
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		EXC 45 @ 1.5'			
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		EXC 45 @ 1.5'			
		EXC 3M @ 1.5'			
		EXC 3M @ 3'			
		EXC 45 @ 1.5'			
		EXC 3M @ 1.5'			
		EXC 3M			

Page 2 of 2

<b>TraceAnalysis, Inc.</b> 6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 Tel (806) 794-1256 Fax (806) 794-1298 1 (800) 378-1296		155 McCutcheon, Suite H El Paso, Texas 79932 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443	
Company Name: <u>Reoper</u> Address: <u>4715 Indian School ME #300</u> Contact Person: <u>G. Griffo</u> Phone #: <u>505 268 2661</u> Fax #: <u>505 268 0040</u>		Chain-of-Custody and Analysis Request LAB Order ID #: <u>4083002</u>	
Invoice to: (if different from above) Project #: <u>1507</u> Project Location: <u>Jal, NM</u> Project Name: <u>Runco</u> Sampler Signature: <u>[Signature]</u>		ANALYSIS REQUEST (Circle or Specify Method No.) <input type="checkbox"/> BOD TSS OH <input type="checkbox"/> PCB's 8082/608 <input type="checkbox"/> GC/MS Semi Vol 8270C/625 <input type="checkbox"/> GC/MS Vol 8260B/624 <input type="checkbox"/> TCLP Pesticides <input type="checkbox"/> TCLP Semi Volatiles <input type="checkbox"/> TCLP Volatiles <input type="checkbox"/> TCLP Metals Ag As Ba Cd Cr Pb Se Hg <input type="checkbox"/> Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007 <input type="checkbox"/> PAH 8270C <input type="checkbox"/> TPH 418 1/1X1005 <input type="checkbox"/> MTBE 8021B/602 <input type="checkbox"/> BTX 8021B/602	
Turn Around Time if different from standard: _____		Turn Around Time if different from standard: _____	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE
42490	5820-30	1		X									8/23	9:00
91	5830-10	1											8/23	9:30
92	5830-30	1											8/23	1:00
93	5840-10	1											8/23	1:30
94	5840-30-32	1											8/23	9:30
95	MW-1	1											8/23	10:30
96	MW-2	1											8/23	11:00
97	MW-3	1											8/23	11:00
98	MW-4	1											8/23	10:00

Relinquished by: <u>[Signature]</u> Date: <u>8/23/04</u> Time: <u>1:00</u>	Received by: _____ Date: _____ Time: _____
Relinquished by: _____ Date: _____ Time: _____	Received by: _____ Date: _____ Time: _____
Relinquished by: _____ Date: _____ Time: _____	Received by: _____ Date: <u>8/28/04</u> Time: <u>12:00</u>

REMARKS: LAB USE ONLY Intact <u>Y</u> N Headspace <u>Y</u> N Temp <u>5</u> °C Log-in Review <u>MS</u>		Check if Special Reporting Limits Are Needed <input type="checkbox"/>
Carrier # <u>415 J1645451946</u>		Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. ORIGINAL COPY

6701 Aberdeen Avenue, Ste. 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (800) 378-1296

# TraceAnalysis, Inc.

155 McCutcheon, Suite H  
El Paso, Texas 79932  
Tel (915) 585-3443  
Fax (915) 585-4944  
1 (888) 588-3443

Company Name: **RESPEC**

Phone #: **505 268 2661**

Address: (Street, City, Zip)

**4775 Indian School Rd. NE**

Fax #:

**505 268 0040**

Contact Person:

**Ginger Gritz**

Invoice to:  
(If different from above)

Project #:

**1507**

Project Location:

**JAL, NM**

Project Name:

**RUNGO**

Sampler Signature:

*[Signature]*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING	
				WATER	SOIL	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	DATE	TIME
42479	Exc 08'	1	402	X	X	X						8/13	3:05
80	Exc 25 @ 1.5'	1										8/13	3:10
81	Exc 35 @ 3'	1										11	3:15
82	Exc 4M @ 3'	1										11	3:20
83	Exc 3M @ 1.5'	1										11	3:25
84	Exc 3N @ 3'	1										11	3:30
85	Exc 45 @ 1.5'	1										11	3:35
86	Exc 3N @ 1.5'	1										8/15	3:40
87	Exc 10 @ 10	1										8/15	11:00
88	Exc 30 @ 30	1										11	11:30
89	Exc 10 @ 10	1										11	3:00

Relinquished by: <b>Ginger Gritz</b>	Date: <b>8/13/04</b>	Time: <b>1:00</b>	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: <i>[Signature]</i>	Date: <b>8/28/04</b>	Time: <b>12:00</b>

REMARKS:

LAB USE ONLY

Intact ☒ N

Headspace ☒ N

Temp ☒ 4

Log-in Review

Check if Special Reporting Limits Are Needed ☐

LAB ORDER ID # **4083002**

ANALYSIS REQUEST  
(Circle or Specify Method No.)

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1/TX1005	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP 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	
PCBs 8082/608	
Pesticides 8081A/608	
BOD, TSS pH	
X. chlorides	

Turn Around Time if different from standard









**APPENDIX H**

**SOIL BORE LOGS**  
**WITH**  
**WELL COMPLETION DIAGRAMS**



## SOIL BORING LOG

PROJECT NAME:		Runco		DATE:		8/25/2004		Page		1 Of		4					
PROJECT NO.:		1507-01		LOGGED BY:		D.Henard											
CLIENT NAME:		OCD		SITE ELEV.:		~3000'		DRILLING METHOD:		HAS							
Monitor Well/Boring No.:												MW-1/SB-1		GW DEPTH:		~30'	
Depth	Blow count	PID (ppm)	Sample	Graphic	USCS	Geologic Description						Well Design					
1	17, 26, 17	0.0			SM	Sandy loam, tan											
2																	
3																	
4																	
5																	
6	50 @ 4"	0.0	X			Sandy loam, tan											
7																	
8																	
9																	
10																	
11	50 @ 4"	0.0	X			Caliche, white, soft											
12																	
13																	
14																	
15																	
16	50 @ 4"	0.0	X		GM	Caliche, white, soft											
17																	
18																	
19																	
20																	
21	50 @ 6"	0.0				Caliche, white, soft, sandy											
22																	
23																	
24																	
25																	
26	50 @ 6"	0.0	X		SM	Buff colored sand, soft											
27																	
28																	
29																	
30																	
31	6, 17, 50	0.0	X		CL	Clayey silt, very moist, soft											
32																	
33																	
34																	
35																	
36	6, 17, 50	0.0	X			Clayey silt, soft, wet						Static Water Level					
37																	
38																	
39																	
40																	
						Well Specifications -											
						0.010 Screened Interval 39.5- 24.5'											
						Sand Interval 39.5-23'											
						Bentonite Seal 23- 21'											
						Grout 21' to surface											
						Clayey silt, wet											

**SOIL BORING LOG**

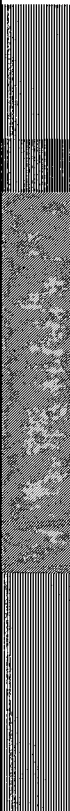
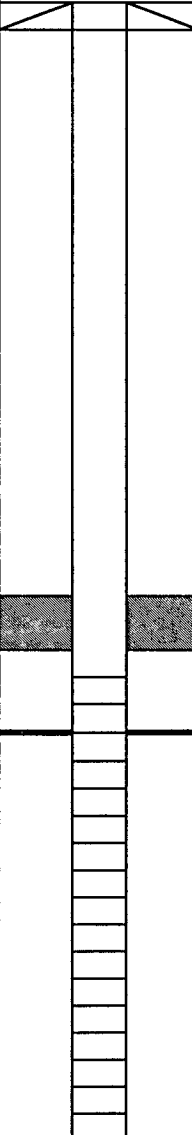
PROJECT NAME: Runco		DATE: 8/25/2004		Page 2 Of 4	
PROJECT NO.: 1507-01		LOGGED BY: G.Gritz			
CLIENT NAME: OCD		SITE ELEV.: ~3000'		DRILLING METHOD: HAS	
Monitor Well/Boring No.: MW-2/SB-2 GW DEPTH: ~30'					

Depth	Blow count	PID (ppm)	Sample	Graphic	USCS	Geologic Description	Well Design
1	4, 3, 4	0.0			SM	Sandy loam, tan	
2							
3							
4							
5	15, 20, 40	0.0	X		GM	Sandy loam, tan	
6							
7							
8							
9	7, 22, 19	0.0			GM	Caliche, white, soft	
10							
11							
12							
13	26, 50 @ 5"	0.0	X		CL	Caliche, white, soft, gravel	
14							
15							
16							
17		0.0				Clayey silt, very moist, soft	
18							
19							
20							
21		0.0				Clayey silt, wet, soft	
22							
23							
24							
25		0.0				Well Specifications - 0.010 Screened Interval 40- 25' Sand Interval 40-23' Bentonite Seal 23- 21' Grout 21' to surface	
26							
27							
28							
29		0.0				Clayey silt, wet	
30							
31							
32							
33		0.0					
34							
35							
36							
37		0.0					
38							
39							
40							
41		0.0					
42							
43							
44							

Static Water Level 30'



**SOIL BORING LOG**

PROJECT NAME:		Runco	DATE:		8/26/2004	Page		4	Of	4				
PROJECT NO.:		1507-01	LOGGED BY:		J.Bunch									
CLIENT NAME:		OCD	SITE ELEV.:		~3000'	DRILLING METHOD:		HAS						
Monitor Well/Boring No.: MW-1/SB-1						GW DEPTH:		~27'						
Depth	Blow count	PID (ppm)	Sample	Graphic	USCS	Geologic Description			Well Design					
1	1, 2, 2	0.0	X		SM	Sandy loam, tan								
2														
3														
4														
5		0.0				Sandy loam, tan								
6		0.0				Sandy loam, tan								
7		0.0			GM	Hard caliche, buff								
8						Hard caliche, buff								
9	33, 50 @ 4"	0.0												
10		0.0												
11		0.0			GM	Caliche, buff w/small gravels								
12														
13														
14														
15		0.0			GC	Grayish/ochre diogenetic silty, clay (moist) w/small sparse gravels, CaCo3 concretions								
16		0.0				Clayey silt, moist, buff								
17		5, 2, 4			0.0	X		CL						
18														
19														
20					0.0									
21	0.0				CL									
22														
23														
24														
25	0.0				CL									
26														
27														
28								0.0				Silty clay, tan, moist to very moist		
29	0.0				Static Water Level									
30					~27 ft									
31					2" recovery tan, silty clay, very moist									
32	5, 18, 14	0.0	GM		Clayey silt, tan, saturated									
33		0.0												
34														
35		0.0	GM		Hard caliche									
36		0.0												
37														
38														
39														
40		0.0			GM									
41		0.0	Soft zone											
42		0.0	Hard caliche											
						Well Specifications -								
						0.010 Screened Interval 41- 26'								
						Sand Interval 41-25'								
						Bentonite Seal 25-22.5'								
						Grout 22.5' to surface								

Static Water Level  
~27 ft

Well Specifications -  
0.010 Screened Interval 41- 26'  
Sand Interval 41-25'  
Bentonite Seal 25-22.5'  
Grout 22.5' to surface

**APPENDIX I**

**SURVEY RESULTS**



# MONITOR WELL ELEVATIONS

(ALL ELEVATIONS NAVD 29)

WELL #1  
3030.17 FT ELEV. AT  
MARK ON PIPE  
3030.38 FT ELEV. ON TOP  
OF LATCH COVER  
3027.72 FT ELEV. AT TOP  
OF CONCRETE BESIDE  
LATCH BOX

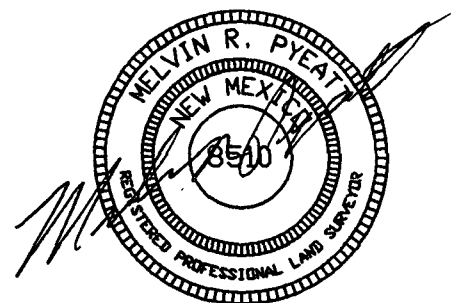
WELL #2  
3033.91 FT ELEV. AT  
MARK ON PIPE  
3034.10 FT ELEV. ON TOP  
OF LATCH COVER  
3031.39 FT ELEV. AT TOP  
OF CONCRETE BESIDE  
LATCH BOX

WELL #3  
3031.94 FT ELEV. AT  
MARK ON PIPE  
3032.16 FT ELEV. ON TOP  
OF LATCH COVER  
3029.44 FT ELEV. AT TOP  
OF CONCRETE BESIDE  
LATCH BOX

WELL #4  
3033.13 FT ELEV. AT  
MARK ON PIPE  
3033.21 FT ELEV. ON TOP  
OF LATCH COVER  
3030.51 FT ELEV. AT TOP  
OF CONCRETE BESIDE  
LATCH BOX



Scale 1" = 60'



INDEXING INF. FOR WELLS	
SEC. 20	T25S R37E N.M.P.M.
CITY: JAL	
COUNTY: LEA	
STATE: NEW MEXICO	
DATE: SEPTEMBER 17, 2004	

N89°22'50"E

81.40'

*Runco Acidizing & Fracturing Company 380/354*

WELL #3

WELL #4

N00°37'10"W

S09°35'02"E  
620.00'

WELL #2

±1.82A

WELL #1  
S89°22'32"W

178.00'

TEXAS/NEW MEXICO RAILROAD

62361

# BOUNDARY SURVEY

THIS IS A BOUNDARY SURVEY PLAT OF AN EXISTING TRACT, IT IS NOT A LAND DIVISION OR A SUBDIVISION, AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT.

OF A TRACT OF LAND DESCRIBED AS FOLLOWS: BEGINNING AT A POINT THAT LIES N89°22'30"E 1320.00 FEET and N01°00'32"W 811.60 FEET FROM THE SW CORNER OF SEC 20, T25S, R37E, N.M.P.M., IN JAL, LEA COUNTY, NEW MEXICO; THEN N00°37'10"W FOR 612.40 FEET; THEN N89°22'50"E, ALONG THE SOUTH R.O.W. OF EAST UTAH AVENUE, FOR 81.40 FEET; THEN S09°35'02"E, ALONG THE WEST R.O.W. OF THE TEXAS/NEW MEXICO RAILROAD, FOR 620.00 FEET; THEN S89°22'32"W FOR 178.00 FEET TO THE POINT OF BEGINNING. CONTAINING 1.82 ACRES MORE OR LESS.

DICK HERWIG & STUART THIRD ADDITION

E. PANTHER AVE. (99') LOT 10 75' E. UTAH AVE. (100') LOT 1 50'

N89°22'50"E 81.40'  
Runco Acidizing & Fracturing Company 380/354  
N00°37'10"W 612.40'  
±1.82A

S09°35'02"E 620.00'

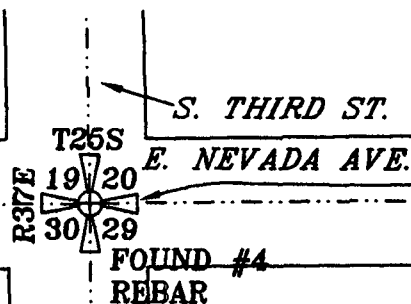
S89°22'32"W 178.00'

TEXAS/NEW MEXICO RAILROAD

BASIS OF BEARING  
(DELINEATED BY GPS 9/8/2004)  
(DISTANCES: SURFACE / BEARINGS: TRUE)

## LEGEND

- ◇ CORNER FOUND
- CORNER SET
- ✦ SECTION CORNER
- LAND LINE
- ++++ RAILROAD



TIES TO SUBJECT PROPERTY

N89°22'30"E 1320.00' SEC 20  
E. NEVADA AVE. SEC 29

THE PROPERTY DESCRIBED ON THIS PLAT LIES WITHIN THE PLATTING JURISDICTION OF: THE CITY OF JAL



Scale 1" = 100'

I, MELVIN R. PYEATT, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR, CERTIFY THAT I CONDUCTED, AND AM RESPONSIBLE FOR THIS SURVEY, AND THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

*Melvin R. Pyeatt*

MELVIN R. PYEATT, 609 EAST CHERRY LANE, CARLSBAD, N.M., 88220  
CERTIFICATE NO. 8510 TELE. 885-6867 FAX 885-6867

STATE OF NEW MEXICO, COUNTY OF LEA, I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD ON THE 27 DAY OF September 2004 A.D. AT 1:55 O'CLOCK P.M.

BOOK PAGE

MELINDA HUGHES-COUNTY CLERK

BY *R. Berge*

DEPUTY



## INDEXING INF. FOR CO. CLERK

SEC. 20	T25S R37E N.M.P.M.
SUBDIVISION:	NONE
OWNER:	SEE DRAWING
CITY:	JAL
COUNTY:	LEA
STATE:	NEW MEXICO
DATE:	SEPTEMBER 17, 2004
ACCESS:	YES
AREA:	±1.82 ACRES

Report Date: April 29, 2004  
Runco Mud

Work Order: 4042127  
Runco

Page Number: 1 of 15  
Jal,New Mexico

## Summary Report

Ed Martin  
OCD-Santa Fe  
1220 S. Saint Francis Dr.  
Santa Fe, NM 87505

Report Date: April 29, 2004

Work Order: 4042127

Project Location: Jal,New Mexico  
Project Name: Runco  
Project Number: Runco Mud

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
32002	0420041004 (Tank 1)	soil	2004-04-20	00:00	2004-04-21
32003	0420041008 (Tank 2)	soil	2004-04-20	00:00	2004-04-21
32004	0420041015 (Tank 3)	soil	2004-04-20	00:00	2004-04-21
32005	0420041032 (Tank 4)	soil	2004-04-20	00:00	2004-04-21
32006	0420041025 (Tank 5)	soil	2004-04-20	00:00	2004-04-21
32007	0420041036 (Tank 6)	soil	2004-04-20	00:00	2004-04-21
32008	0420041050 (White 7)	soil	2004-04-20	00:00	2004-04-21
32009	0420041100 (Tank 7)	soil	2004-04-20	00:00	2004-04-21
32010	0420041105 (Tank 8)	soil	2004-04-20	00:00	2004-04-21
32011	0420041047 (Tank 11)	soil	2004-04-20	00:00	2004-04-21
32012	0420041125 (Pile)	soil	2004-04-20	00:00	2004-04-21

### Sample: 32002 - 0420041004 (Tank 1)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.40	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100

*continued ...*

sample 32002 continued ...

Param	Flag	Result	Units	RL
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		0.759	mg/L	0.100
TCLP Cadmium		0.100	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		0.216	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

Sample: 32003 - 0420041008 (Tank 2)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.40	s.u.	0.00

continued ...

sample 32003 continued ...

Param	Flag	Result	Units	RL
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		0.495	mg/L	0.100
TCLP Cadmium		0.116	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		1.25	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100

continued ...

sample 32003 continued ...

Param	Flag	Result	Units	RL
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

**Sample: 32004 - 0420041015 (Tank 3)**

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.40	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		0.712	mg/L	0.100

continued ...

sample 32004 continued ...

Param	Flag	Result	Units	RL
TCLP Cadmium		0.142	mg/L	0.0500
TCLP Chromium		0.111	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		0.867	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

Sample: 32005 - 0420041032 (Tank 4)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		10.0	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0

continued ...

sample 32005 continued ...

Param	Flag	Result	Units	RL
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		1.35	mg/L	0.100
TCLP Cadmium		0.146	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		0.650	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

Sample: 32006 - 0420041025 (Tank 5)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.20	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		0.00550	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100

continued ...



sample 32006 continued ...

Param	Flag	Result	Units	RL
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		0.619	mg/L	0.100
TCLP Cadmium		0.254	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		1.74	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

Sample: 32007 - 0420041036 (Tank 6)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.10	s.u.	0.00
Ignitability		non-ignitable		0.00

continued ...

sample 32007 continued ...

Param	Flag	Result	Units	RL
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		0.0552	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		0.848	mg/L	0.100
TCLP Cadmium		0.0520	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		0.108	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100

continued ...

sample 32007 continued ...

Param	Flag	Result	Units	RL
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

**Sample: 32008 - 0420041050 (White 7)**

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		12.2	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		0.177	mg/L	0.100
TCLP Barium		0.657	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500

continued ...

sample 32008 continued ...

Param	Flag	Result	Units	RL
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		<0.100	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

Sample: 32009 - 0420041100 (Tank 7)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.60	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0

continued ...

sample 32009 continued ...

Param	Flag	Result	Units	RL
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		1.59	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		<0.100	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

Sample: 32010 - 0420041105 (Tank 8)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		9.10	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100

continued ...

sample 32010 continued ...

Param	Flag	Result	Units	RL
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		8.91	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		<0.100	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

Sample: 32011 - 0420041047 (Tank 11)

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.50	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100

continued ...

sample 32011 continued ...

Param	Flag	Result	Units	RL
gamma-BHC (Lindane)		<0.00250	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		0.801	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		<0.100	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100

continued ...

sample 32011 continued ...

Param	Flag	Result	Units	RL
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

**Sample: 32012 - 0420041125 (Pile)**

Param	Flag	Result	Units	RL
Reactivity		non-reactive		0.00
Hydrogen Sulfide		<10.0	mg/Kg	10.0
Hydrogen Cyanide		<2.50	mg/Kg	2.50
Corrosivity		non-corrosive	mm/yr	0.00
pH		8.50	s.u.	0.00
Ignitability		non-ignitable		0.00
alpha-BHC		<0.00250	mg/L	0.100
gamma-BHC (Lindane)		0.00300	mg/L	0.100
beta-BHC		<0.00250	mg/L	0.100
delta-BHC		<0.00250	mg/L	0.100
Heptachlor		<0.00250	mg/L	0.100
Aldrin		<0.00250	mg/L	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.100
gamma-Chlordane		<0.00250	mg/L	0.100
alpha-Chlordane		<0.00250	mg/L	0.100
Endosulfan I		<0.00250	mg/L	0.100
p,p-DDE		<0.00250	mg/L	0.100
Dieldrin		<0.00250	mg/L	0.100
Endrin		<0.00250	mg/L	0.100
p,p-DDD		<0.00250	mg/L	0.100
Endosulfan II		<0.00250	mg/L	0.100
p,p-DDT		<0.00250	mg/L	0.100
Endrin aldehyde		<0.00250	mg/L	0.100
Endosulfan sulfate		<0.00250	mg/L	0.100
Methoxychlor		<0.00250	mg/L	0.100
Endrin Ketone		<0.00250	mg/L	0.100
Toxaphene		<0.0250	mg/L	1.00
Technical Chlordane		<0.0250	mg/L	1.00
Pyridine		<0.0500	mg/L	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10.0
o-Cresol		<0.0500	mg/L	10.0
m,p-Cresol		<0.0500	mg/L	10.0
Hexachloroethane		<0.0500	mg/L	10.0
Nitrobenzene		<0.0500	mg/L	10.0
Hexachlorobutadiene		<0.0500	mg/L	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10.0
Hexachlorobenzene		<0.0500	mg/L	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10.0
Pentachlorophenol		<0.0500	mg/L	10.0
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.100
TCLP Barium		1.19	mg/L	0.100
TCLP Cadmium		<0.0500	mg/L	0.0500
TCLP Chromium		<0.100	mg/L	0.100

continued ...



*sample 32012 continued ...*

Param	Flag	Result	Units	RL
TCLP Mercury		<0.0100	mg/L	0.0100
TCLP Lead		<0.100	mg/L	0.100
TCLP Selenium		<0.500	mg/L	0.500
Vinyl Chloride		<0.0500	mg/L	0.00100
1,1-Dichloroethene		<0.0500	mg/L	0.00100
2-Butanone (MEK)		<0.500	mg/L	0.0100
Chloroform		<0.0500	mg/L	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.00100
Benzene		<0.0500	mg/L	0.00100
Carbon Tetrachloride		<0.0500	mg/L	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	0.00100
Chlorobenzene		<0.0500	mg/L	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.00100

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## Analytical and Quality Control Report

Ed Martin  
OCD-Santa Fe  
1220 S. Saint Francis Dr.  
Santa Fe, NM 87505

Report Date: April 29, 2004

Work Order: 4042127

Project Location: Jal, New Mexico  
Project Name: Runco  
Project Number: Runco Mud

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
32002	0420041004 (Tank 1)	soil	2004-04-20	00:00	2004-04-21
32003	0420041008 (Tank 2)	soil	2004-04-20	00:00	2004-04-21
32004	0420041015 (Tank 3)	soil	2004-04-20	00:00	2004-04-21
32005	0420041032 (Tank 4)	soil	2004-04-20	00:00	2004-04-21
32006	0420041025 (Tank 5)	soil	2004-04-20	00:00	2004-04-21
32007	0420041036 (Tank 6)	soil	2004-04-20	00:00	2004-04-21
32008	0420041050 (White 7)	soil	2004-04-20	00:00	2004-04-21
32009	0420041100 (Tank 7)	soil	2004-04-20	00:00	2004-04-21
32010	0420041105 (Tank 8)	soil	2004-04-20	00:00	2004-04-21
32011	0420041047 (Tank 11)	soil	2004-04-20	00:00	2004-04-21
32012	0420041125 (Pile)	soil	2004-04-20	00:00	2004-04-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 44 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

## Analytical Report

### Sample: 32002 - 0420041004 (Tank 1)

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.40	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

### Sample: 32002 - 0420041004 (Tank 1)

Analysis: TCLP Pesticides	Analytical Method: S 8081A	Prep Method: TCLP 1311
QC Batch: 9175	Date Analyzed: 2004-04-26	Analyzed By: AG
Prep Batch: 8083	Date Prepared: 2004-04-22	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00280	mg/L	0.025	0.200	56	34.9 - 149

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Deca chlorobiphenyl		0.00350	mg/L	0.025	0.200	70	52.2 - 187

**Sample: 32002 - 0420041004 (Tank 1)**

Analysis:	TCLP Semivolatiles	Analytical Method:	S 8270C	Prep Method:	TCLP 1311
QC Batch:	9235	Date Analyzed:	2004-04-27	Analyzed By:	RC
Prep Batch:	8060	Date Prepared:	2004-04-21	Prepared By:	JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.100	mg/L	0.005	80.0	25	2.83 - 110.33
Phenol-d5		0.0570	mg/L	0.005	80.0	14	0 - 82.08
Nitrobenzene-d5		0.247	mg/L	0.005	80.0	62	26.72 - 155
2-Fluorobiphenyl		0.228	mg/L	0.005	80.0	57	35.89 - 150.5
2,4,6-Tribromophenol		0.298	mg/L	0.005	80.0	74	0 - 204.91
Terphenyl-d14		0.263	mg/L	0.005	80.0	66	33.98 - 168.85

**Sample: 32002 - 0420041004 (Tank 1)**

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	9128	Date Analyzed:	2004-04-26	Analyzed By:	RR
Prep Batch:	8106	Date Prepared:	2004-04-23	Prepared By:	TP
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	9263	Date Analyzed:	2004-04-28	Analyzed By:	BC
Prep Batch:	8192	Date Prepared:	2004-04-28	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		0.759	mg/L	1	0.100
TCLP Cadmium		0.100	mg/L	1	0.0500

continued ...

sample 32002 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		0.216	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32002 - 0420041004 (Tank 1)**

Analysis: TCLP Volatiles  
QC Batch: 9201  
Prep Batch: 8170

Analytical Method: S 8260B  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-22

Prep Method: TCLP 1311  
Analyzed By: JG  
Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.2	mg/L	1	50.0	104	82 - 118
Toluene-d8		53.3	mg/L	1	50.0	107	91 - 107
4-Bromofluorobenzene (4-BFB)		48.5	mg/L	1	50.0	97	73 - 112

**Sample: 32003 - 0420041008 (Tank 2)**

Analysis: RCI  
QC Batch: 9088  
Prep Batch: 8073  
Analysis: RCI  
Analysis: RCI

Analytical Method: ASTM D 5049-90/4978-95  
Date Analyzed: 2004-04-22  
Date Prepared: 2004-04-22  
Analytical Method: S 1110  
Analytical Method: SW-846 Ch. 7.1

Prep Method: N/A  
Analyzed By: JH  
Prepared By: JH  
Prep Method: N/A  
Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.40	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32003 - 0420041008 (Tank 2)**

Analysis: TCLP Pesticides  
QC Batch: 9175  
Prep Batch: 8083

Analytical Method: S 8081A  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-22

Prep Method: TCLP 1311  
Analyzed By: AG  
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00260	mg/L	0.025	0.200	52	34.9 - 149
Deca chlorobiphenyl		0.00360	mg/L	0.025	0.200	72	52.2 - 187

**Sample: 32003 - 0420041008 (Tank 2)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0

continued...

sample 32003 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.106	mg/L	0.005	80.0	26	2.83 - 110.33
Phenol-d5		0.0568	mg/L	0.005	80.0	14	0 - 82.08
Nitrobenzene-d5		0.272	mg/L	0.005	80.0	68	26.72 - 155
2-Fluorobiphenyl		0.250	mg/L	0.005	80.0	62	35.89 - 150.5
2,4,6-Tribromophenol		0.325	mg/L	0.005	80.0	81	0 - 204.91
Terphenyl-d14		0.270	mg/L	0.005	80.0	68	33.98 - 168.85

**Sample: 32003 - 0420041008 (Tank 2)**

Analysis: TCLP Total 8 Metals	Analytical Method: S 6010B	Prep Method: TCLP 1311
QC Batch: 9128	Date Analyzed: 2004-04-26	Analyzed By: RR
Prep Batch: 8106	Date Prepared: 2004-04-23	Prepared By: TP
Analysis: TCLP Total 8 Metals	Analytical Method: S 7470A	Prep Method: TCLP 1311
QC Batch: 9263	Date Analyzed: 2004-04-28	Analyzed By: BC
Prep Batch: 8192	Date Prepared: 2004-04-28	Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		0.495	mg/L	1	0.100
TCLP Cadmium		0.116	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		1.25	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32003 - 0420041008 (Tank 2)**

Analysis: TCLP Volatiles	Analytical Method: S 8260B	Prep Method: TCLP 1311
QC Batch: 9201	Date Analyzed: 2004-04-26	Analyzed By: JG
Prep Batch: 8170	Date Prepared: 2004-04-22	Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100

continued...

sample 32003 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.5	mg/L	1	50.0	105	82 - 118
Toluene-d8		52.7	mg/L	1	50.0	105	91 - 107
4-Bromofluorobenzene (4-BFB)		47.0	mg/L	1	50.0	94	73 - 112

**Sample: 32004 - 0420041015 (Tank 3)**

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.40	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32004 - 0420041015 (Tank 3)**

Analysis: TCLP Pesticides	Analytical Method: S 8081A	Prep Method: TCLP 1311
QC Batch: 9175	Date Analyzed: 2004-04-26	Analyzed By: AG
Prep Batch: 8083	Date Prepared: 2004-04-22	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100

continued ...



sample 32004 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00290	mg/L	0.025	0.200	58	34.9 - 149
Deca chlorobiphenyl		0.00350	mg/L	0.025	0.200	70	52.2 - 187

**Sample: 32004 - 0420041015 (Tank 3)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.101	mg/L	0.005	80.0	25	2.83 - 110.33
Phenol-d5		0.0546	mg/L	0.005	80.0	14	0 - 82.08
Nitrobenzene-d5		0.265	mg/L	0.005	80.0	66	26.72 - 155
2-Fluorobiphenyl		0.242	mg/L	0.005	80.0	60	35.89 - 150.5
2,4,6-Tribromophenol		0.310	mg/L	0.005	80.0	78	0 - 204.91
Terphenyl-d14		0.263	mg/L	0.005	80.0	66	33.98 - 168.85

**Sample: 32004 - 0420041015 (Tank 3)**

Analysis: TCLP Total 8 Metals	Analytical Method: S 6010B	Prep Method: TCLP 1311
QC Batch: 9128	Date Analyzed: 2004-04-26	Analyzed By: RR
Prep Batch: 8106	Date Prepared: 2004-04-23	Prepared By: TP
Analysis: TCLP Total 8 Metals	Analytical Method: S 7470A	Prep Method: TCLP 1311
QC Batch: 9263	Date Analyzed: 2004-04-28	Analyzed By: BC
Prep Batch: 8192	Date Prepared: 2004-04-28	Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		0.712	mg/L	1	0.100
TCLP Cadmium		0.142	mg/L	1	0.0500
TCLP Chromium		0.111	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		0.867	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32004 - 0420041015 (Tank 3)**

Analysis: TCLP Volatiles	Analytical Method: S 8260B	Prep Method: TCLP 1311
QC Batch: 9201	Date Analyzed: 2004-04-26	Analyzed By: JG
Prep Batch: 8170	Date Prepared: 2004-04-22	Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	mg/L	1	50.0	105	82 - 118
Toluene-d8		52.6	mg/L	1	50.0	105	91 - 107
4-Bromofluorobenzene (4-BFB)		47.3	mg/L	1	50.0	95	73 - 112

**Sample: 32005 - 0420041032 (Tank 4)**

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

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Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		10.0	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32005 - 0420041032 (Tank 4)**

Analysis: TCLP Pesticides  
QC Batch: 9175  
Prep Batch: 8083

Analytical Method: S 8081A  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-22

Prep Method: TCLP 1311  
Analyzed By: AG  
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00280	mg/L	0.025	0.200	56	34.9 - 149
Deca chlorobiphenyl		0.00380	mg/L	0.025	0.200	76	52.2 - 187

**Sample: 32005 - 0420041032 (Tank 4)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0986	mg/L	0.005	80.0	25	2.83 - 110.33
Phenol-d5		0.0543	mg/L	0.005	80.0	14	0 - 82.08
Nitrobenzene-d5		0.243	mg/L	0.005	80.0	61	26.72 - 155
2-Fluorobiphenyl		0.223	mg/L	0.005	80.0	56	35.89 - 150.5
2,4,6-Tribromophenol		0.270	mg/L	0.005	80.0	68	0 - 204.91
Terphenyl-d14		0.235	mg/L	0.005	80.0	59	33.98 - 168.85

**Sample: 32005 - 0420041032 (Tank 4)**

Analysis: TCLP Total 8 Metals	Analytical Method: S 6010B	Prep Method: TCLP 1311
QC Batch: 9128	Date Analyzed: 2004-04-26	Analyzed By: RR
Prep Batch: 8106	Date Prepared: 2004-04-23	Prepared By: TP
Analysis: TCLP Total 8 Metals	Analytical Method: S 7470A	Prep Method: TCLP 1311
QC Batch: 9263	Date Analyzed: 2004-04-28	Analyzed By: BC
Prep Batch: 8192	Date Prepared: 2004-04-28	Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		1.35	mg/L	1	0.100
TCLP Cadmium		0.146	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		0.650	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32005 - 0420041032 (Tank 4)**

Analysis: TCLP Volatiles	Analytical Method: S 8260B	Prep Method: TCLP 1311
QC Batch: 9201	Date Analyzed: 2004-04-26	Analyzed By: JG
Prep Batch: 8170	Date Prepared: 2004-04-22	Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.1	mg/L	1	50.0	104	82 - 118
Toluene-d8		53.3	mg/L	1	50.0	107	91 - 107
4-Bromofluorobenzene (4-BFB)		47.1	mg/L	1	50.0	94	73 - 112

**Sample: 32006 - 0420041025 (Tank 5)**

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.20	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32006 - 0420041025 (Tank 5)**

Analysis: TCLP Pesticides	Analytical Method: S 8081A	Prep Method: TCLP 1311
QC Batch: 9175	Date Analyzed: 2004-04-26	Analyzed By: AG
Prep Batch: 8083	Date Prepared: 2004-04-22	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		0.00550	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100

continued ...

sample 32006 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00390	mg/L	0.025	0.200	78	34.9 - 149
Deca chlorobiphenyl		0.00400	mg/L	0.025	0.200	80	52.2 - 187

**Sample: 32006 - 0420041025 (Tank 5)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0920	mg/L	0.005	80.0	23	2.83 - 110.33
Phenol-d5		0.0508	mg/L	0.005	80.0	13	0 - 82.08
Nitrobenzene-d5		0.243	mg/L	0.005	80.0	61	26.72 - 155

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl		0.225	mg/L	0.005	80.0	56	35.89 - 150.5
2,4,6-Tribromophenol		0.266	mg/L	0.005	80.0	66	0 - 204.91
Terphenyl-d14		0.240	mg/L	0.005	80.0	60	33.98 - 168.85

**Sample: 32006 - 0420041025 (Tank 5)**

Analysis: TCLP Total 8 Metals  
QC Batch: 9128  
Prep Batch: 8106  
Analysis: TCLP Total 8 Metals  
QC Batch: 9263  
Prep Batch: 8192

Analytical Method: S 6010B  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-23  
Analytical Method: S 7470A  
Date Analyzed: 2004-04-28  
Date Prepared: 2004-04-28

Prep Method: TCLP 1311  
Analyzed By: RR  
Prepared By: TP  
Prep Method: TCLP 1311  
Analyzed By: BC  
Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		0.619	mg/L	1	0.100
TCLP Cadmium		0.254	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		1.74	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32006 - 0420041025 (Tank 5)**

Analysis: TCLP Volatiles  
QC Batch: 9201  
Prep Batch: 8170

Analytical Method: S 8260B  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-22

Prep Method: TCLP 1311  
Analyzed By: JG  
Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.4	mg/L	1	50.0	105	82 - 118
Toluene-d8		52.5	mg/L	1	50.0	105	91 - 107
4-Bromofluorobenzene (4-BFB)		46.9	mg/L	1	50.0	94	73 - 112

**Sample: 32007 - 0420041036 (Tank 6)**

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.10	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32007 - 0420041036 (Tank 6)**

Analysis: TCLP Pesticides	Analytical Method: S 8081A	Prep Method: TCLP 1311
QC Batch: 9175	Date Analyzed: 2004-04-26	Analyzed By: AG
Prep Batch: 8083	Date Prepared: 2004-04-22	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00410	mg/L	0.025	0.200	82	34.9 - 149
Deca chlorobiphenyl		0.00410	mg/L	0.025	0.200	82	52.2 - 187



**Sample: 32007 - 0420041036 (Tank 6)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		0.0552	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0657	mg/L	0.005	80.0	16	2.83 - 110.33
Phenol-d5		0.0373	mg/L	0.005	80.0	9	0 - 82.08
Nitrobenzene-d5		0.160	mg/L	0.005	80.0	40	26.72 - 155
2-Fluorobiphenyl		0.146	mg/L	0.005	80.0	36	35.89 - 150.5
2,4,6-Tribromophenol		0.189	mg/L	0.005	80.0	47	0 - 204.91
Terphenyl-d14		0.196	mg/L	0.005	80.0	49	33.98 - 168.85

**Sample: 32007 - 0420041036 (Tank 6)**

Analysis: TCLP Total 8 Metals  
QC Batch: 9128  
Prep Batch: 8106  
Analysis: TCLP Total 8 Metals  
QC Batch: 9263  
Prep Batch: 8192

Analytical Method: S 6010B  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-23  
Analytical Method: S 7470A  
Date Analyzed: 2004-04-28  
Date Prepared: 2004-04-28

Prep Method: TCLP 1311  
Analyzed By: RR  
Prepared By: TP  
Prep Method: TCLP 1311  
Analyzed By: BC  
Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		0.848	mg/L	1	0.100
TCLP Cadmium		0.0520	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		0.108	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32007 - 0420041036 (Tank 6)**

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Analysis: TCLP Volatiles  
QC Batch: 9226  
Prep Batch: 8198

Analytical Method: S 8260B  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-26

Prep Method: TCLP 1311  
Analyzed By: JG  
Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.0	mg/L	1	50.0	104	82 - 118
Toluene-d8		52.5	mg/L	1	50.0	105	91 - 107
4-Bromofluorobenzene (4-BFB)		46.7	mg/L	1	50.0	93	73 - 112

**Sample: 32008 - 0420041050 (White 7)**

Analysis: RCI  
QC Batch: 9088  
Prep Batch: 8073  
Analysis: RCI  
Analysis: RCI

Analytical Method: ASTM D 5049-90/4978-95  
Date Analyzed: 2004-04-22  
Date Prepared: 2004-04-22  
Analytical Method: S 1110  
Analytical Method: SW-846 Ch. 7.1

Prep Method: N/A  
Analyzed By: JH  
Prepared By: JH  
Prep Method: N/A  
Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		12.2	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32008 - 0420041050 (White 7)**

Analysis: TCLP Pesticides  
QC Batch: 9175  
Prep Batch: 8083

Analytical Method: S 8081A  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-22

Prep Method: TCLP 1311  
Analyzed By: AG  
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100

*continued ...*

sample 32008 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00350	mg/L	0.025	0.200	70	34.9 - 149
Deca chlorobiphenyl		0.00360	mg/L	0.025	0.200	72	52.2 - 187

**Sample: 32008 - 0420041050 (White 7)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.105	mg/L	0.005	80.0	26	2.83 - 110.33
Phenol-d5		0.0584	mg/L	0.005	80.0	15	0 - 82.08
Nitrobenzene-d5		0.244	mg/L	0.005	80.0	61	26.72 - 155
2-Fluorobiphenyl		0.221	mg/L	0.005	80.0	55	35.89 - 150.5
2,4,6-Tribromophenol		0.241	mg/L	0.005	80.0	60	0 - 204.91
Terphenyl-d14		0.229	mg/L	0.005	80.0	57	33.98 - 168.85

**Sample: 32008 - 0420041050 (White 7)**

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	9128	Date Analyzed:	2004-04-26	Analyzed By:	RR
Prep Batch:	8106	Date Prepared:	2004-04-23	Prepared By:	TP
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	9263	Date Analyzed:	2004-04-28	Analyzed By:	BC
Prep Batch:	8192	Date Prepared:	2004-04-28	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		0.177	mg/L	1	0.100
TCLP Barium		0.657	mg/L	1	0.100
TCLP Cadmium		<0.0500	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		<0.100	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32008 - 0420041050 (White 7)**

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	9226	Date Analyzed:	2004-04-27	Analyzed By:	JG
Prep Batch:	8198	Date Prepared:	2004-04-26	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.1	mg/L	1	50.0	104	82 - 118

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		52.9	mg/L	1	50.0	106	91 - 107
4-Bromofluorobenzene (4-BFB)		46.7	mg/L	1	50.0	93	73 - 112

**Sample: 32009 - 0420041100 (Tank 7)**

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.60	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32009 - 0420041100 (Tank 7)**

Analysis: TCLP Pesticides	Analytical Method: S 8081A	Prep Method: TCLP 1311
QC Batch: 9175	Date Analyzed: 2004-04-26	Analyzed By: AG
Prep Batch: 8083	Date Prepared: 2004-04-22	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00

continued ...

sample 32009 continued...

Parameter	Flag	RL Result	Units	Dilution	RL
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00200	mg/L	0.025	0.200	40	34.9 - 149
Deca chlorobiphenyl	<sup>1</sup>	0.00210	mg/L	0.025	0.200	42	52.2 - 187

**Sample: 32009 - 0420041100 (Tank 7)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0989	mg/L	0.005	80.0	25	2.83 - 110.33
Phenol-d5		0.0606	mg/L	0.005	80.0	15	0 - 82.08
Nitrobenzene-d5		0.238	mg/L	0.005	80.0	60	26.72 - 155
2-Fluorobiphenyl		0.214	mg/L	0.005	80.0	54	35.89 - 150.5
2,4,6-Tribromophenol		0.00	mg/L	0.005	80.0	0	0 - 204.91
Terphenyl-d14		0.228	mg/L	0.005	80.0	57	33.98 - 168.85

**Sample: 32009 - 0420041100 (Tank 7)**

Analysis: TCLP Total 8 Metals  
QC Batch: 9128  
Prep Batch: 8106  
Analysis: TCLP Total 8 Metals  
QC Batch: 9263  
Prep Batch: 8192

Analytical Method: S 6010B  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-23  
Analytical Method: S 7470A  
Date Analyzed: 2004-04-28  
Date Prepared: 2004-04-28

Prep Method: TCLP 1311  
Analyzed By: RR  
Prepared By: TP  
Prep Method: TCLP 1311  
Analyzed By: BC  
Prepared By: BC

<sup>1</sup> Surrogate recovery is low due to prep procedure.

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		1.59	mg/L	1	0.100
TCLP Cadmium		<0.0500	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		<0.100	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32009 - 0420041100 (Tank 7)**

Analysis: TCLP Volatiles  
QC Batch: 9226  
Prep Batch: 8198

Analytical Method: S 8260B  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-26

Prep Method: TCLP 1311  
Analyzed By: JG  
Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.1	mg/L	1	50.0	104	82 - 118
Toluene-d8		52.9	mg/L	1	50.0	106	91 - 107
4-Bromofluorobenzene (4-BFB)		47.1	mg/L	1	50.0	94	73 - 112

**Sample: 32010 - 0420041105 (Tank 8)**

Analysis: RCI  
QC Batch: 9088  
Prep Batch: 8073  
Analysis: RCI  
Analysis: RCI

Analytical Method: ASTM D 5049-90/4978-95  
Date Analyzed: 2004-04-22  
Date Prepared: 2004-04-22  
Analytical Method: S 1110  
Analytical Method: SW-846 Ch. 7.1

Prep Method: N/A  
Analyzed By: JH  
Prepared By: JH  
Prep Method: N/A  
Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		9.10	s.u.	1	0.00

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sample 32010 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ignitability		non-ignitable		1	0.00

**Sample: 32010 - 0420041105 (Tank 8)**

Analysis: TCLP Pesticides

Analytical Method: S 8081A

Prep Method: TCLP 1311

QC Batch: 9175

Date Analyzed: 2004-04-26

Analyzed By: AG

Prep Batch: 8083

Date Prepared: 2004-04-22

Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00290	mg/L	0.025	0.200	58	34.9 - 149
Deca chlorobiphenyl		0.00340	mg/L	0.025	0.200	68	52.2 - 187

**Sample: 32010 - 0420041105 (Tank 8)**

Analysis: TCLP Semivolatiles

Analytical Method: S 8270C

Prep Method: TCLP 1311

QC Batch: 9235

Date Analyzed: 2004-04-27

Analyzed By: RC

Prep Batch: 8060

Date Prepared: 2004-04-21

Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0

continued ...



sample 32010 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.102	mg/L	0.005	80.0	26	2.83 - 110.33
Phenol-d5		0.0577	mg/L	0.005	80.0	14	0 - 82.08
Nitrobenzene-d5		0.235	mg/L	0.005	80.0	59	26.72 - 155
2-Fluorobiphenyl		0.219	mg/L	0.005	80.0	55	35.89 - 150.5
2,4,6-Tribromophenol		0.246	mg/L	0.005	80.0	62	0 - 204.91
Terphenyl-d14		0.234	mg/L	0.005	80.0	58	33.98 - 168.85

**Sample: 32010 - 0420041105 (Tank 8)**

Analysis: TCLP Total 8 Metals	Analytical Method: S 6010B	Prep Method: TCLP 1311
QC Batch: 9128	Date Analyzed: 2004-04-26	Analyzed By: RR
Prep Batch: 8106	Date Prepared: 2004-04-23	Prepared By: TP
Analysis: TCLP Total 8 Metals	Analytical Method: S 7470A	Prep Method: TCLP 1311
QC Batch: 9263	Date Analyzed: 2004-04-28	Analyzed By: BC
Prep Batch: 8192	Date Prepared: 2004-04-28	Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		8.91	mg/L	1	0.100
TCLP Cadmium		<0.0500	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		<0.100	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32010 - 0420041105 (Tank 8)**

Analysis: TCLP Volatiles	Analytical Method: S 8260B	Prep Method: TCLP 1311
QC Batch: 9226	Date Analyzed: 2004-04-27	Analyzed By: JG
Prep Batch: 8198	Date Prepared: 2004-04-26	Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.5	mg/L	1	50.0	105	82 - 118
Toluene-d8		52.6	mg/L	1	50.0	105	91 - 107
4-Bromofluorobenzene (4-BFB)		46.4	mg/L	1	50.0	93	73 - 112

**Sample: 32011 - 0420041047 (Tank 11)**

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.50	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32011 - 0420041047 (Tank 11)**

Analysis: TCLP Pesticides	Analytical Method: S 8081A	Prep Method: TCLP 1311
QC Batch: 9175	Date Analyzed: 2004-04-26	Analyzed By: AG
Prep Batch: 8083	Date Prepared: 2004-04-22	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		<0.00250	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100

continued...

sample 32011 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00360	mg/L	0.025	0.200	72	34.9 - 149
Deca chlorobiphenyl		0.00380	mg/L	0.025	0.200	76	52.2 - 187

**Sample: 32011 - 0420041047 (Tank 11)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.110	mg/L	0.005	80.0	28	2.83 - 110.33
Phenol-d5		0.0614	mg/L	0.005	80.0	15	0 - 82.08
Nitrobenzene-d5		0.258	mg/L	0.005	80.0	64	26.72 - 155

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorobiphenyl		0.238	mg/L	0.005	80.0	60	35.89 - 150.5
2,4,6-Tribromophenol		0.264	mg/L	0.005	80.0	66	0 - 204.91
Terphenyl-d14		0.246	mg/L	0.005	80.0	62	33.98 - 168.85

**Sample: 32011 - 0420041047 (Tank 11)**

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	9131	Date Analyzed:	2004-04-26	Analyzed By:	RR
Prep Batch:	8106	Date Prepared:	2004-04-23	Prepared By:	TP
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	9263	Date Analyzed:	2004-04-28	Analyzed By:	BC
Prep Batch:	8192	Date Prepared:	2004-04-28	Prepared By:	BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		0.801	mg/L	1	0.100
TCLP Cadmium		<0.0500	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		<0.100	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32011 - 0420041047 (Tank 11)**

Analysis:	TCLP Volatiles	Analytical Method:	S 8260B	Prep Method:	TCLP 1311
QC Batch:	9226	Date Analyzed:	2004-04-27	Analyzed By:	JG
Prep Batch:	8198	Date Prepared:	2004-04-26	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.2	mg/L	1	50.0	104	82 - 118
Toluene-d8		53.1	mg/L	1	50.0	106	91 - 107
4-Bromofluorobenzene (4-BFB)		46.6	mg/L	1	50.0	93	73 - 112

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**Sample: 32012 - 0420041125 (Pile)**

Analysis: RCI	Analytical Method: ASTM D 5049-90/4978-95	Prep Method: N/A
QC Batch: 9088	Date Analyzed: 2004-04-22	Analyzed By: JH
Prep Batch: 8073	Date Prepared: 2004-04-22	Prepared By: JH
Analysis: RCI	Analytical Method: S 1110	Prep Method: N/A
Analysis: RCI	Analytical Method: SW-846 Ch. 7.1	Prep Method: N/A

Parameter	Flag	RL Result	Units	Dilution	RL
Reactivity		non-reactive		1	0.00
Hydrogen Sulfide		<10.0	mg/Kg	1	10.0
Hydrogen Cyanide		<2.50	mg/Kg	1	2.50
Corrosivity		non-corrosive	mm/yr	1	0.00
pH		8.50	s.u.	1	0.00
Ignitability		non-ignitable		1	0.00

**Sample: 32012 - 0420041125 (Pile)**

Analysis: TCLP Pesticides	Analytical Method: S 8081A	Prep Method: TCLP 1311
QC Batch: 9175	Date Analyzed: 2004-04-26	Analyzed By: AG
Prep Batch: 8083	Date Prepared: 2004-04-22	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
alpha-BHC		<0.00250	mg/L	0.025	0.100
gamma-BHC (Lindane)		0.00300	mg/L	0.025	0.100
beta-BHC		<0.00250	mg/L	0.025	0.100
delta-BHC		<0.00250	mg/L	0.025	0.100
Heptachlor		<0.00250	mg/L	0.025	0.100
Aldrin		<0.00250	mg/L	0.025	0.100
Heptachlor Epoxide		<0.00250	mg/L	0.025	0.100
gamma-Chlordane		<0.00250	mg/L	0.025	0.100
alpha-Chlordane		<0.00250	mg/L	0.025	0.100
Endosulfan I		<0.00250	mg/L	0.025	0.100
p,p-DDE		<0.00250	mg/L	0.025	0.100
Dieldrin		<0.00250	mg/L	0.025	0.100
Endrin		<0.00250	mg/L	0.025	0.100
p,p-DDD		<0.00250	mg/L	0.025	0.100
Endosulfan II		<0.00250	mg/L	0.025	0.100
p,p-DDT		<0.00250	mg/L	0.025	0.100
Endrin aldehyde		<0.00250	mg/L	0.025	0.100
Endosulfan sulfate		<0.00250	mg/L	0.025	0.100
Methoxychlor		<0.00250	mg/L	0.025	0.100
Endrin Ketone		<0.00250	mg/L	0.025	0.100
Toxaphene		<0.0250	mg/L	0.025	1.00
Technical Chlordane		<0.0250	mg/L	0.025	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00340	mg/L	0.025	0.200	68	34.9 - 149
Deca chlorobiphenyl		0.00360	mg/L	0.025	0.200	72	52.2 - 187

**Sample: 32012 - 0420041125 (Pile)**

Analysis: TCLP Semivolatiles  
QC Batch: 9235  
Prep Batch: 8060

Analytical Method: S 8270C  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-21

Prep Method: TCLP 1311  
Analyzed By: RC  
Prepared By: JH

Parameter	Flag	RL Result	Units	Dilution	RL
Pyridine		<0.0500	mg/L	0.005	10.0
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.005	10.0
o-Cresol		<0.0500	mg/L	0.005	10.0
m,p-Cresol		<0.0500	mg/L	0.005	10.0
Hexachloroethane		<0.0500	mg/L	0.005	10.0
Nitrobenzene		<0.0500	mg/L	0.005	10.0
Hexachlorobutadiene		<0.0500	mg/L	0.005	10.0
2,4,6-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenol		<0.0500	mg/L	0.005	10.0
2,4-Dinitrotoluene		<0.0500	mg/L	0.005	10.0
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	0.005	10.0
Hexachlorobenzene		<0.0500	mg/L	0.005	10.0
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	0.005	10.0
Pentachlorophenol		<0.0500	mg/L	0.005	10.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.0915	mg/L	0.005	80.0	23	2.83 - 110.33
Phenol-d5		0.0486	mg/L	0.005	80.0	12	0 - 82.08
Nitrobenzene-d5		0.233	mg/L	0.005	80.0	58	26.72 - 155
2-Fluorobiphenyl		0.213	mg/L	0.005	80.0	53	35.89 - 150.5
2,4,6-Tribromophenol		0.259	mg/L	0.005	80.0	65	0 - 204.91
Terphenyl-d14		0.224	mg/L	0.005	80.0	56	33.98 - 168.85

**Sample: 32012 - 0420041125 (Pile)**

Analysis: TCLP Total 8 Metals  
QC Batch: 9131  
Prep Batch: 8106  
Analysis: TCLP Total 8 Metals  
QC Batch: 9263  
Prep Batch: 8192

Analytical Method: S 6010B  
Date Analyzed: 2004-04-26  
Date Prepared: 2004-04-23  
Analytical Method: S 7470A  
Date Analyzed: 2004-04-28  
Date Prepared: 2004-04-28

Prep Method: TCLP 1311  
Analyzed By: RR  
Prepared By: TP  
Prep Method: TCLP 1311  
Analyzed By: BC  
Prepared By: BC

Parameter	Flag	RL Result	Units	Dilution	RL
TCLP Silver		<0.125	mg/L	1	0.125
TCLP Arsenic		<0.100	mg/L	1	0.100
TCLP Barium		1.19	mg/L	1	0.100
TCLP Cadmium		<0.0500	mg/L	1	0.0500
TCLP Chromium		<0.100	mg/L	1	0.100
TCLP Mercury		<0.0100	mg/L	1	0.0100
TCLP Lead		<0.100	mg/L	1	0.100
TCLP Selenium		<0.500	mg/L	1	0.500

**Sample: 32012 - 0420041125 (Pile)**

Report Date: April 29, 2004  
Runco Mud

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Runco

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Analysis: TCLP Volatiles  
QC Batch: 9226  
Prep Batch: 8198

Analytical Method: S 8260B  
Date Analyzed: 2004-04-27  
Date Prepared: 2004-04-26

Prep Method: TCLP 1311  
Analyzed By: JG  
Prepared By: JG

Parameter	Flag	RL Result	Units	Dilution	RL
Vinyl Chloride		<0.0500	mg/L	50	0.00100
1,1-Dichloroethene		<0.0500	mg/L	50	0.00100
2-Butanone (MEK)		<0.500	mg/L	50	0.0100
Chloroform		<0.0500	mg/L	50	0.00100
1,2-Dichloroethane (EDC)		<0.0500	mg/L	50	0.00100
Benzene		<0.0500	mg/L	50	0.00100
Carbon Tetrachloride		<0.0500	mg/L	50	0.00100
Trichloroethene (TCE)		<0.0500	mg/L	50	0.00100
Tetrachloroethene (PCE)		<0.0500	mg/L	50	0.00100
Chlorobenzene		<0.0500	mg/L	50	0.00100
1,4-Dichlorobenzene (para)		<0.0500	mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.7	mg/L	1	50.0	105	82 - 118
Toluene-d8		52.6	mg/L	1	50.0	105	91 - 107
4-Bromofluorobenzene (4-BFB)		46.8	mg/L	1	50.0	94	73 - 112

**Method Blank (1)** QC Batch: 9128

Parameter	Flag	Result	Units	RL
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		<0.100	mg/L	0.1
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Lead		<0.100	mg/L	0.1
TCLP Selenium		<0.500	mg/L	0.5

**Method Blank (1)** QC Batch: 9131

Parameter	Flag	Result	Units	RL
TCLP Silver		<0.125	mg/L	0.125
TCLP Arsenic		<0.100	mg/L	0.1
TCLP Barium		<0.100	mg/L	0.1
TCLP Cadmium		<0.0500	mg/L	0.05
TCLP Chromium		<0.100	mg/L	0.1
TCLP Lead		<0.100	mg/L	0.1
TCLP Selenium		<0.500	mg/L	0.5

**Method Blank (1)** QC Batch: 9175

Parameter	Flag	Result	Units	RL
alpha-BHC		<0.00250	mg/L	0.1
gamma-BHC (Lindane)		<0.00250	mg/L	0.1
beta-BHC		<0.00250	mg/L	0.1
delta-BHC		<0.00250	mg/L	0.1
Heptachlor		<0.00250	mg/L	0.1
Aldrin		<0.00250	mg/L	0.1
Heptachlor Epoxide		<0.00250	mg/L	0.1
gamma-Chlordane		<0.00250	mg/L	0.1
alpha-Chlordane		<0.00250	mg/L	0.1
Endosulfan I		<0.00250	mg/L	0.1
p,p-DDE		<0.00250	mg/L	0.1
Dieldrin		<0.00250	mg/L	0.1
Endrin		<0.00250	mg/L	0.1
p,p-DDD		<0.00250	mg/L	0.1
Endosulfan II		<0.00250	mg/L	0.1
p,p-DDT		<0.00250	mg/L	0.1
Endrin aldehyde		<0.00250	mg/L	0.1
Endosulfan sulfate		<0.00250	mg/L	0.1
Methoxychlor		<0.00250	mg/L	0.1
Endrin Ketone		<0.00250	mg/L	0.1
Toxaphene		<0.0250	mg/L	1
Technical Chlordane		<0.0250	mg/L	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00320	mg/L	0.025	0.200	64	34.9 - 149
Deca chlorobiphenyl		0.00350	mg/L	0.025	0.200	70	52.2 - 187

**Method Blank (1)**    QC Batch: 9201

Parameter	Flag	Result	Units	RL
Vinyl Chloride		<0.0500	mg/L	0.001
1,1-Dichloroethene		<0.0500	mg/L	0.001
2-Butanone (MEK)		<0.500	mg/L	0.01
Chloroform		<0.0500	mg/L	0.001
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.001
Benzene		<0.0500	mg/L	0.001
Carbon Tetrachloride		<0.0500	mg/L	0.001
Trichloroethene (TCE)		<0.0500	mg/L	0.001
Tetrachloroethene (PCE)		<0.0500	mg/L	0.001
Chlorobenzene		<0.0500	mg/L	0.001
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.1	mg/L	1	50.0	102	82 - 118
Toluene-d8		52.6	mg/L	1	50.0	105	91 - 107
4-Bromofluorobenzene (4-BFB)		47.7	mg/L	1	50.0	95	73 - 112



**Method Blank (1)** QC Batch: 9226

Parameter	Flag	Result	Units	RL
Vinyl Chloride		<0.0500	mg/L	0.001
1,1-Dichloroethene		<0.0500	mg/L	0.001
2-Butanone (MEK)		<0.500	mg/L	0.01
Chloroform		<0.0500	mg/L	0.001
1,2-Dichloroethane (EDC)		<0.0500	mg/L	0.001
Benzene		<0.0500	mg/L	0.001
Carbon Tetrachloride		<0.0500	mg/L	0.001
Trichloroethene (TCE)		<0.0500	mg/L	0.001
Tetrachloroethene (PCE)		<0.0500	mg/L	0.001
Chlorobenzene		<0.0500	mg/L	0.001
1,4-Dichlorobenzene (para)		<0.0500	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.7	mg/L	1	50.0	105	82 - 118
Toluene-d8		52.8	mg/L	1	50.0	106	91 - 107
4-Bromofluorobenzene (4-BFB)		47.3	mg/L	1	50.0	95	73 - 112

**Method Blank (1)** QC Batch: 9235

Parameter	Flag	Result	Units	RL
Pyridine		<0.0500	mg/L	10
1,4-Dichlorobenzene (para)		<0.0500	mg/L	10
o-Cresol		<0.0500	mg/L	10
m,p-Cresol		<0.0500	mg/L	10
Hexachloroethane		<0.0500	mg/L	10
Nitrobenzene		<0.0500	mg/L	10
Hexachlorobutadiene		<0.0500	mg/L	10
2,4,6-Trichlorophenol		<0.0500	mg/L	10
2,4,5-Trichlorophenol		<0.0500	mg/L	10
2,4-Dinitrotoluene		<0.0500	mg/L	10
2,4-Dichlorophenoxyacetic acid		<0.0500	mg/L	10
Hexachlorobenzene		<0.0500	mg/L	10
2,4,5-Trichlorophenoxypropionic acid		<0.0500	mg/L	10
Pentachlorophenol		<0.0500	mg/L	10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		0.159	mg/L	0.005	80.0	40	2.83 - 110.33
Phenol-d5		0.106	mg/L	0.005	80.0	26	0 - 82.08
Nitrobenzene-d5		0.270	mg/L	0.005	80.0	68	26.72 - 155
2-Fluorobiphenyl		0.256	mg/L	0.005	80.0	64	35.89 - 150.5
2,4,6-Tribromophenol		0.252	mg/L	0.005	80.0	63	0 - 204.91
Terphenyl-d14		0.291	mg/L	0.005	80.0	73	33.98 - 168.85

**Method Blank (1)** QC Batch: 9263

Parameter	Flag	Result	Units	RL
TCLP Mercury		<0.0100	mg/L	0.01

**Duplicate (1)** QC Batch: 9088

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Reactivity	non-reactive	non-reactive		1	0	
Hydrogen Sulfide	0.00	0.00	mg/Kg	1	0	20
Hydrogen Cyanide	0.00	0.00	mg/Kg	1	0	20
Corrosivity	non-corrosive	non-corrosive	mm/yr	1	0	20
pH	8.50	8.50	s.u.	1	0	20
Ignitability	non-ignitable	non-ignitable		1	0	20

**Laboratory Control Spike (LCS-1)** QC Batch: 9128

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TCLP Silver	1.23	1.26	mg/L	1	1.25	<0.00780	98	2	91.1 - 118	20
TCLP Arsenic	4.84	4.91	mg/L	1	5.00	<0.0590	97	1	81.1 - 123	20
TCLP Barium	10.8	11.0	mg/L	1	10.0	<0.00340	108	2	86 - 122	20
TCLP Cadmium	2.43	2.48	mg/L	1	2.50	<0.00270	97	2	84.8 - 124	20
TCLP Chromium	1.03	1.05	mg/L	1	1.00	<0.00660	103	2	81.7 - 120	20
TCLP Lead	4.93	5.02	mg/L	1	5.00	<0.0370	99	2	86.4 - 123	20
TCLP Selenium	4.40	4.41	mg/L	1	5.00	<0.100	88	0	84.4 - 111	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)** QC Batch: 9131

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TCLP Silver	1.23	1.26	mg/L	1	1.25	<0.00780	98	2	91.1 - 118	20
TCLP Arsenic	4.84	4.91	mg/L	1	5.00	<0.0590	97	1	81.1 - 123	20
TCLP Barium	10.8	11.0	mg/L	1	10.0	<0.00340	108	2	86 - 122	20
TCLP Cadmium	2.43	2.48	mg/L	1	2.50	<0.00270	97	2	84.8 - 124	20
TCLP Chromium	1.03	1.05	mg/L	1	1.00	<0.00660	103	2	81.7 - 120	20
TCLP Lead	4.93	5.02	mg/L	1	5.00	<0.0370	99	2	86.4 - 123	20
TCLP Selenium	4.40	4.41	mg/L	1	5.00	<0.100	88	0	84.4 - 111	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)** QC Batch: 9175

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	0.00380	0.00380	mg/L	0.025	0.200	<0.00000800	76	0	40.4 - 155	20
gamma-BHC (Lindane)	0.00380	0.00380	mg/L	0.025	0.200	<0.00000742	76	0	45.4 - 149	20

continued...

control spikes continued...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
beta-BHC	0.00370	0.00370	mg/L	0.025	0.200	<0.00000745	74	0	41.8 - 154	20
delta-BHC	0.00400	0.00410	mg/L	0.025	0.200	<0.00000595	80	2	50.8 - 159	20
Heptachlor	0.00380	0.00380	mg/L	0.025	0.200	<0.00000885	76	0	43.4 - 149	20
Aldrin	0.00400	0.00420	mg/L	0.025	0.200	<0.0000118	80	5	40 - 152	20
Heptachlor Epoxide	0.00370	0.00370	mg/L	0.025	0.200	<0.0000174	74	0	45.3 - 148	20
gamma-Chlordane	0.00370	0.00370	mg/L	0.025	0.200	<0.00000748	74	0	43.3 - 150	20
alpha-Chlordane	0.00360	0.00370	mg/L	0.025	0.200	<0.0000135	72	3	44.2 - 147	20
Endosulfan I	0.00370	0.00380	mg/L	0.025	0.200	<0.0000157	74	3	43.7 - 148	20
p,p-DDE	0.00380	0.00390	mg/L	0.025	0.200	<0.0000197	76	2	45.5 - 146	20
Dieldrin	0.00380	0.00380	mg/L	0.025	0.200	<0.00000875	76	0	43.9 - 146	20
Endrin	0.00360	0.00380	mg/L	0.025	0.200	<0.00000555	72	5	55.2 - 152	20
p,p-DDD	0.00370	0.00360	mg/L	0.025	0.200	<0.00000890	74	3	48.6 - 150	20
Endosulfan II	0.00400	0.00400	mg/L	0.025	0.200	<0.00000840	80	0	46.7 - 148	20
p,p-DDT	0.00410	0.00420	mg/L	0.025	0.200	<0.0000108	82	2	45.3 - 146	20
Endrin aldehyde	0.00380	0.00390	mg/L	0.025	0.200	<0.00000530	76	2	39.4 - 150	20
Endosulfan sulfate	0.00430	0.00430	mg/L	0.025	0.200	<0.0000152	86	0	0 - 394	20
Methoxychlor	0.00410	0.00420	mg/L	0.025	0.200	<0.00000538	82	2	55 - 156	20
Endrin Ketone	0.00390	0.00390	mg/L	0.025	0.200	<0.00000890	78	0	16 - 287	20
Toxaphene	0.0182	0.0209	mg/L	0.025	0.800	<0.000360	91	14	61 - 122	28
Technical Chlordane	0.0166	0.0165	mg/L	0.025	0.800	<0.000170	83	1	13 - 153	8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.00410	0.00410	mg/L	0.025	0.200	82	82	34.9 - 149
Deca chlorobiphenyl	0.00420	0.00420	mg/L	0.025	0.200	84	84	52.2 - 187

Laboratory Control Spike (LCS-1) QC Batch: 9201

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Vinyl Chloride	5.30	5.23	mg/L	50	0.100	<0.00845	106	1	20.8 - 173	20
1,1-Dichloroethene	5.34	5.22	mg/L	50	0.100	<0.00790	107	2	76.9 - 127	20
2-Butanone (MEK)	3.86	4.00	mg/L	50	0.100	<0.0185	77	4	77.7 - 134	20
Chloroform	5.15	5.03	mg/L	50	0.100	<0.00480	103	2	78.2 - 124	20
1,2-Dichloroethane (EDC)	5.17	5.11	mg/L	50	0.100	<0.00470	103	1	52.9 - 129	20
Benzene	5.32	5.16	mg/L	50	0.100	<0.00520	106	3	87.4 - 116	20
Carbon Tetrachloride	5.14	5.10	mg/L	50	0.100	<0.00390	103	1	53 - 140	20
Trichloroethene (TCE)	5.25	5.13	mg/L	50	0.100	<0.00585	105	2	85.9 - 111	20
Tetrachloroethene (PCE)	3.86	3.79	mg/L	50	0.100	<0.0205	77	2	51.7 - 80.1	20
Chlorobenzene	5.41	5.22	mg/L	50	0.100	<0.00300	108	4	88.2 - 114	20
1,4-Dichlorobenzene (para)	4.80	4.72	mg/L	50	0.100	<0.00425	96	2	84.3 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	50.4	50.4	mg/L	1	50.0	101	101	82.9 - 118

continued...

<sup>2</sup>recovery low due to purging characteristics of ketones.

control spikes continued...

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Toluene-d8 <sup>34</sup>	52.7	52.7	mg/L	1	50.0	105	105	94.4 - 104
4-Bromofluorobenzene (4-BFB)	48.8	48.8	mg/L	1	50.0	98	98	78.8 - 113

Laboratory Control Spike (LCS-1) QC Batch: 9226

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Vinyl Chloride	5.22	5.30	mg/L	50	0.100	<0.00845	104	2	20.8 - 173	20
1,1-Dichloroethene	5.15	5.23	mg/L	50	0.100	<0.00790	103	2	76.9 - 127	20
2-Butanone (MEK)	3.88	4.06	mg/L	50	0.100	<0.0185	78	4	77.7 - 134	20
Chloroform	4.99	5.00	mg/L	50	0.100	<0.00480	100	0	78.2 - 124	20
1,2-Dichloroethane (EDC)	5.11	5.14	mg/L	50	0.100	<0.00470	102	0	52.9 - 129	20
Benzene	5.09	5.14	mg/L	50	0.100	<0.00520	102	1	87.4 - 116	20
Carbon Tetrachloride	5.10	5.07	mg/L	50	0.100	<0.00390	102	0	53 - 140	20
Trichloroethene (TCE)	5.07	5.11	mg/L	50	0.100	<0.00585	101	1	85.9 - 111	20
Tetrachloroethene (PCE)	3.80	3.83	mg/L	50	0.100	<0.0205	76	1	51.7 - 80.1	20
Chlorobenzene	5.19	5.22	mg/L	50	0.100	<0.00300	104	0	88.2 - 114	20
1,4-Dichlorobenzene (para)	4.63	4.65	mg/L	50	0.100	<0.00425	93	0	84.3 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	51.4	51.1	mg/L	1	50.0	103	102	82.9 - 118
Toluene-d8	52.2	51.9	mg/L	1	50.0	104	104	94.4 - 104
4-Bromofluorobenzene (4-BFB)	48.7	47.6	mg/L	1	50.0	97	95	78.8 - 113

Laboratory Control Spike (LCS-1) QC Batch: 9235

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Pyridine	19.2	19.4	mg/L	1	80.0	<2.41	24	1	12.6 - 50.02	20
1,4-Dichlorobenzene (para)	62.6	63.4	mg/L	1	80.0	<1.93	78	1	13.67 - 139.56	20
o-Cresol	53.5	52.6	mg/L	1	80.0	<1.46	67	2	18.58 - 114.05	20
m,p-Cresol	48.4	46.8	mg/L	1	80.0	<1.19	60	3	10.62 - 252.59	20
Hexachloroethane	65.7	66.6	mg/L	1	80.0	<1.91	82	1	25.17 - 146.78	20
Nitrobenzene	76.6	77.2	mg/L	1	80.0	<1.50	96	1	26.78 - 144.08	20
Hexachlorobutadiene	66.7	67.8	mg/L	1	80.0	<1.57	83	2	0 - 171.61	20
2,4,6-Trichlorophenol	76.5	76.9	mg/L	1	80.0	<1.64	96	0	19.23 - 144.93	20
2,4,5-Trichlorophenol	79.7	79.2	mg/L	1	80.0	<1.95	100	1	40.38 - 144.67	20
2,4-Dinitrotoluene	114	114	mg/L	1	80.0	<2.09	142	0	18.51 - 158.26	20
2,4-Dichlorophenoxyacetic acid <sup>56</sup>	144	145	mg/L	1	160	0	90	1	0 - 165.81	20
Hexachlorobenzene	80.0	77.9	mg/L	1	80.0	<1.63	100	3	2.35 - 182.77	20
2,4,5-Trichlorophenoxypropionic acid <sup>78</sup>	133	129	mg/L	1	160	0	83	3	22.1 - 144.74	20

continued...

<sup>3</sup> surrogate recovery biased high. Samples non-detect.

<sup>4</sup> surrogate recovery biased high. Samples non-detect.

<sup>5</sup> Changed spike amount from 80 to 160 due to the amount in the spike is double.

<sup>6</sup> Changed spike amount from 80 to 160 due to the amount in the spike is double.

<sup>7</sup> Changed spike amount from 80 to 160 due to the amount in the spike is double.

<sup>8</sup> Changed spike amount from 80 to 160 due to the amount in the spike is double.

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Pentachlorophenol	98.0	97.1	mg/L	1	80.0	<3.04	122	1	0 - 156.72	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
2-Fluorophenol	24.3	24.4	mg/L	1	80.0	30	30	2.83 - 110.33
Phenol-d5	14.7	14.6	mg/L	1	80.0	18	18	0 - 82.08
Nitrobenzene-d5	52.8	52.6	mg/L	1	80.0	66	66	26.72 - 155
2-Fluorobiphenyl	45.0	45.6	mg/L	1	80.0	56	57	35.89 - 150.5
2,4,6-Tribromophenol	65.0	64.9	mg/L	1	80.0	81	81	0 - 204.91
Terphenyl-d14	57.7	57.8	mg/L	1	80.0	72	72	33.98 - 168.85

**Laboratory Control Spike (LCS-1)** QC Batch: 9263

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TCLP Mercury	0.0502	0.0499	mg/L	1	0.0500	<0.00177	100	0	82.3 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 9128

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TCLP Silver	1.23	1.25	mg/L	1	1.25	<0.00780	98	2	91.1 - 118	20
TCLP Arsenic	4.75	4.81	mg/L	1	5.00	0.077	93	1	81.1 - 123	20
TCLP Barium	9.92	10.1	mg/L	1	10.0	0.759	92	2	86 - 122	20
TCLP Cadmium	2.38	2.41	mg/L	1	2.50	0.1	91	1	84.8 - 124	20
TCLP Chromium	1.03	1.04	mg/L	1	1.00	0.069	96	1	81.7 - 120	20
TCLP Lead	4.77	4.84	mg/L	1	5.00	0.216	91	1	86.4 - 123	20
TCLP Selenium	4.28	4.27	mg/L	1	5.00	<0.100	86	0	84.4 - 111	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 9131

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TCLP Silver	1.23	1.26	mg/L	1	1.25	<0.00780	98	2	91.1 - 118	20
TCLP Arsenic	4.87	4.98	mg/L	1	5.00	<0.0590	97	2	81.1 - 123	20
TCLP Barium	10.2	10.5	mg/L	1	10.0	0.801	94	3	86 - 122	20
TCLP Cadmium	2.34	2.40	mg/L	1	2.50	0.012	93	2	84.8 - 124	20
TCLP Chromium	1.00	1.03	mg/L	1	1.00	0.016	98	3	81.7 - 120	20
TCLP Lead	4.71	4.84	mg/L	1	5.00	0.038	93	3	86.4 - 123	20
TCLP Selenium	4.39	4.45	mg/L	1	5.00	<0.100	88	1	84.4 - 111	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** QC Batch: 9175

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
alpha-BHC	0.00230	0.00240	mg/L	0.025	0.200	<0.00000800	46	4	0 - 84.7	20
gamma-BHC (Lindane)	0.00410	0.00420	mg/L	0.025	0.200	<0.00000742	82	2	0 - 69.6	20
beta-BHC	0.00320	0.00330	mg/L	0.025	0.200	<0.00000745	64	3	0 - 80.6	20
delta-BHC	0.00350	0.00350	mg/L	0.025	0.200	<0.00000595	70	0	0 - 103	20
Heptachlor	0.00270	0.00280	mg/L	0.025	0.200	<0.00000885	54	4	0 - 70	20
Aldrin	0.00260	0.00270	mg/L	0.025	0.200	<0.0000118	52	4	0 - 110	20
Heptachlor Epoxide	0.00280	0.00280	mg/L	0.025	0.200	<0.0000174	56	0	0 - 64.5	20
gamma-Chlordane	0.00290	0.00300	mg/L	0.025	0.200	<0.00000748	58	3	0 - 122	20
alpha-Chlordane	0.00290	0.00300	mg/L	0.025	0.200	<0.0000135	58	3	0 - 110	20
Endosulfan I	0.00280	0.00280	mg/L	0.025	0.200	<0.0000157	56	0	0 - 63.3	20
p,p-DDE	0.00330	0.00340	mg/L	0.025	0.200	<0.0000197	66	3	0 - 110	20
Dieldrin	0.00290	0.00290	mg/L	0.025	0.200	<0.00000875	58	0	0 - 66.3	20
Endrin	0.00330	0.00330	mg/L	0.025	0.200	<0.00000555	66	0	0 - 63.9	20
p,p-DDD	0.00290	0.00290	mg/L	0.025	0.200	<0.00000890	58	0	0 - 73.1	20
Endosulfan II	0.00260	0.00260	mg/L	0.025	0.200	<0.00000840	52	0	0 - 87.9	20
p,p-DDT	0.00350	0.00360	mg/L	0.025	0.200	<0.0000108	70	3	0 - 153	20
Endrin aldehyde	0.00250	0.00250	mg/L	0.025	0.200	<0.00000530	50	0	0 - 73.4	20
Endosulfan sulfate	0.00340	0.00350	mg/L	0.025	0.200	<0.0000152	68	3	0 - 241	20
Methoxychlor	0.00370	0.00380	mg/L	0.025	0.200	<0.00000538	74	3	0 - 86	20
Endrin Ketone	0.00290	0.00300	mg/L	0.025	0.200	<0.00000890	58	3	0 - 131	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2,4,5,6-Tetrachloro-m-xylene	0.00230	0.00240	mg/L	0.025	0.2	46	48	34.9 - 149
Deca chlorobiphenyl	0.00340	0.00350	mg/L	0.025	0.2	68	70	52.5 - 187

**Matrix Spike (MS-1) QC Batch: 9201**

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Vinyl Chloride	5.17	5.24	mg/L	50	0.100	<0.00845	103	1	20.8 - 170	20
1,1-Dichloroethene	5.25	5.25	mg/L	50	0.100	<0.00790	105	0	77.9 - 125	20
2-Butanone (MEK)	3.60	3.64	mg/L	50	0.100	<0.0185	72	1	84.9 - 134	20
Chloroform	5.09	5.11	mg/L	50	0.100	<0.00480	102	0	79.5 - 125	20
1,2-Dichloroethane (EDC)	5.25	5.32	mg/L	50	0.100	<0.00470	105	1	43.4 - 107	20
Benzene	5.25	5.22	mg/L	50	0.100	<0.00520	105	0	89.2 - 116	20
Carbon Tetrachloride	5.13	5.09	mg/L	50	0.100	<0.00390	103	1	52.3 - 133	20
Trichloroethene (TCE)	5.14	5.08	mg/L	50	0.100	<0.00585	103	1	83.5 - 111	20
Tetrachloroethene (PCE)	3.72	3.74	mg/L	50	0.100	<0.0205	74	0	49.1 - 80.8	20
Chlorobenzene	5.24	5.31	mg/L	50	0.100	<0.00300	105	1	88.9 - 113	20
1,4-Dichlorobenzene (para)	4.81	4.68	mg/L	50	0.100	<0.00425	96	3	84.2 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<sup>9</sup> Analyte recovery is out of control limits, but the LCS and LCSD show the method to be in control.

<sup>10</sup> Analyte recovery is out of control limits, but the LCS and LCSD show the method to be in control.

<sup>11</sup> Analyte recovery is out of control limits, but the LCS and LCSD show the method to be in control.

<sup>12</sup> Analyte recovery is out of control limits, but the LCS and LCSD show the method to be in control.

<sup>13</sup> recovery out of control due to purging characteristics of ketones.

<sup>14</sup> recovery out of control due to purging characteristics of ketones.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	51.8	51.4	mg/L	1	50	104	103	81.6 - 122
Toluene-d8	52.3	52.7	mg/L	1	50	105	105	94.4 - 105
4-Bromofluorobenzene (4-BFB)	48.3	48.0	mg/L	1	50	97	96	81.9 - 108

**Matrix Spike (MS-1)** QC Batch: 9226

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Vinyl Chloride	5.19	5.32	mg/L	50	0.100	<0.00845	104	2	20.8 - 170	20
1,1-Dichloroethene	5.12	5.24	mg/L	50	0.100	<0.00790	102	2	77.9 - 125	20
2-Butanone (MEK)	5.63	5.42	mg/L	50	0.100	<0.0185	113	4	84.9 - 134	20
Chloroform	4.92	5.09	mg/L	50	0.100	<0.00480	98	3	79.5 - 125	20
1,2-Dichloroethane (EDC)	5.19	5.30	mg/L	50	0.100	<0.00470	104	2	43.4 - 107	20
Benzene	5.14	5.30	mg/L	50	0.100	<0.00520	103	3	89.2 - 116	20
Carbon Tetrachloride	4.92	5.11	mg/L	50	0.100	<0.00390	98	4	52.3 - 133	20
Trichloroethene (TCE)	5.00	5.19	mg/L	50	0.100	<0.00585	100	4	83.5 - 111	20
Tetrachloroethene (PCE)	3.66	3.83	mg/L	50	0.100	<0.0205	73	4	49.1 - 80.8	20
Chlorobenzene	5.16	5.34	mg/L	50	0.100	<0.00300	103	3	88.9 - 113	20
1,4-Dichlorobenzene (para)	4.70	4.95	mg/L	50	0.100	<0.00425	94	5	84.2 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	50.8	50.7	mg/L	1	50	102	101	81.6 - 122
Toluene-d8	51.4	52.3	mg/L	1	50	103	105	94.4 - 105
4-Bromofluorobenzene (4-BFB)	46.2	47.1	mg/L	1	50	92	94	81.9 - 108

**Matrix Spike (MS-1)** QC Batch: 9235

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Pyridine	<sup>15</sup> 8.72	8.39	mg/L	1	80.0	<2.41	11	4	12.6 - 50.02	20
1,4-Dichlorobenzene (para)	50.0	49.2	mg/L	1	80.0	<1.93	62	2	13.67 - 139.56	20
o-Cresol	42.8	42.9	mg/L	1	80.0	<1.46	54	0	18.58 - 114.05	20
m,p-Cresol	74.3	75.0	mg/L	1	80.0	<1.19	93	1	10.62 - 252.59	20
Hexachloroethane	53.0	52.8	mg/L	1	80.0	<1.91	66	0	25.17 - 146.78	20
Nitrobenzene	67.3	67.1	mg/L	1	80.0	<1.50	84	0	26.78 - 144.08	20
Hexachlorobutadiene	59.5	59.2	mg/L	1	80.0	<1.57	74	0	0 - 171.61	20
2,4,6-Trichlorophenol	74.7	73.0	mg/L	1	80.0	<1.64	93	2	19.23 - 144.93	20
2,4,5-Trichlorophenol	74.1	74.3	mg/L	1	80.0	<1.95	93	0	40.38 - 144.67	20
2,4-Dinitrotoluene	<sup>17</sup> 131	130	mg/L	1	80.0	<2.09	164	1	18.51 - 158.26	20
2,4-Dichlorophenoxyacetic acid	<sup>19</sup> 134	136	mg/L	1	160	0	84	1	0 - 165.81	20
Hexachlorobenzene	70.7	70.3	mg/L	1	80.0	<1.63	88	0	2.35 - 182.77	20

continued...

<sup>15</sup>The average of the spike compounds shows that the process is in control.

<sup>16</sup>The average of the spike compounds shows that the process is in control.

<sup>17</sup>The average of the spike compounds shows that the process is in control.

<sup>18</sup>The average of the spike compounds shows that the process is in control.

<sup>19</sup>Changed spike amount from 80 to 160 due to the amount in the spike is double.

<sup>20</sup>Changed spike amount from 80 to 160 due to the amount in the spike is double.

matrix spikes continued...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
2,4,5-Trichlorophenoxypropionic acid <sup>2122</sup>	130	142	mg/L	1	160	0	81	9	22.1 - 144.74	20
Pentachlorophenol	96.5	96.3	mg/L	1	80.0	<3.04	121	0	0 - 156.72	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
2-Fluorophenol	35.8	35.8	mg/L	1	80	45	45	2.83 - 110.33
Phenol-d5	21.6	21.5	mg/L	1	80	27	27	0 - 82.08
Nitrobenzene-d5	91.0	90.7	mg/L	1	80	114	113	26.72 - 155
2-Fluorobiphenyl	83.6	83.6	mg/L	1	80	104	104	35.89 - 150.5
2,4,6-Tribromophenol	123	122	mg/L	1	80	154	152	0 - 204.91
Terphenyl-d14	104	105	mg/L	1	80	130	131	33.98 - 168.85

**Matrix Spike (MS-1)** QC Batch: 9263

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TCLP Mercury	0.0491	0.0503	mg/L	1	0.0500	<0.00177	98	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-2)** QC Batch: 9263

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TCLP Mercury	0.0489	0.0494	mg/L	1	0.0500	<0.00177	98	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Standard (ICV-1)** QC Batch: 9128

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Silver		mg/L	0.125	0.123	98	90 - 110	2004-04-26
TCLP Arsenic		mg/L	1.00	0.998	100	90 - 110	2004-04-26
TCLP Barium		mg/L	1.00	0.990	99	90 - 110	2004-04-26
TCLP Cadmium		mg/L	1.00	0.991	99	90 - 110	2004-04-26
TCLP Chromium		mg/L	1.00	0.989	99	90 - 110	2004-04-26
TCLP Lead		mg/L	1.00	0.990	99	90 - 110	2004-04-26
TCLP Selenium		mg/L	1.00	0.991	99	90 - 110	2004-04-26

**Standard (CCV-1)** QC Batch: 9128

<sup>21</sup> Changed spike amount from 80 to 160 due to the amount in the spike is double.

<sup>22</sup> Changed spike amount from 80 to 160 due to the amount in the spike is double.



Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Silver		mg/L	0.125	0.125	100	90 - 110	2004-04-26
TCLP Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Barium		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Chromium		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Lead		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Selenium		mg/L	1.00	1.00	100	90 - 110	2004-04-26

**Standard (ICV-1)** QC Batch: 9131

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Silver		mg/L	0.125	0.123	98	90 - 110	2004-04-26
TCLP Arsenic		mg/L	1.00	0.998	100	90 - 110	2004-04-26
TCLP Barium		mg/L	1.00	0.990	99	90 - 110	2004-04-26
TCLP Cadmium		mg/L	1.00	0.991	99	90 - 110	2004-04-26
TCLP Chromium		mg/L	1.00	0.989	99	90 - 110	2004-04-26
TCLP Lead		mg/L	1.00	0.990	99	90 - 110	2004-04-26
TCLP Selenium		mg/L	1.00	0.991	99	90 - 110	2004-04-26

**Standard (CCV-1)** QC Batch: 9131

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Silver		mg/L	0.125	0.125	100	90 - 110	2004-04-26
TCLP Arsenic		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Barium		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Cadmium		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Chromium		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Lead		mg/L	1.00	1.00	100	90 - 110	2004-04-26
TCLP Selenium		mg/L	1.00	1.00	100	90 - 110	2004-04-26

**Standard (ICV-1)** QC Batch: 9175

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.108	108	85 - 115	2004-04-26
gamma-BHC (Lindane)		mg/L	0.100	0.107	107	85 - 115	2004-04-26
beta-BHC		mg/L	0.100	0.109	109	85 - 115	2004-04-26
delta-BHC		mg/L	0.100	0.112	112	85 - 115	2004-04-26
Heptachlor		mg/L	0.100	0.109	109	85 - 115	2004-04-26
Aldrin		mg/L	0.100	0.108	108	85 - 115	2004-04-26
Heptachlor Epoxide		mg/L	0.100	0.109	109	85 - 115	2004-04-26
gamma-Chlordane		mg/L	0.100	0.110	110	85 - 115	2004-04-26
alpha-Chlordane		mg/L	0.100	0.109	109	85 - 115	2004-04-26
Endosulfan I		mg/L	0.100	0.108	108	85 - 115	2004-04-26

continued...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
p,p-DDE		mg/L	0.100	0.113	113	85 - 115	2004-04-26
Dieldrin		mg/L	0.100	0.112	112	85 - 115	2004-04-26
Endrin		mg/L	0.100	0.105	105	85 - 115	2004-04-26
p,p-DDD		mg/L	0.100	0.102	102	85 - 115	2004-04-26
Endosulfan II		mg/L	0.100	0.110	110	85 - 115	2004-04-26
p,p-DDT		mg/L	0.100	0.108	108	85 - 115	2004-04-26
Endrin aldehyde		mg/L	0.100	0.108	108	85 - 115	2004-04-26
Endosulfan sulfate		mg/L	0.100	0.104	104	85 - 115	2004-04-26
Methoxychlor		mg/L	0.100	0.102	102	85 - 115	2004-04-26
Endrin Ketone		mg/L	0.100	0.102	102	85 - 115	2004-04-26
Toxaphene		mg/L	0.800	0.760	95	85 - 115	2004-04-26
Technical Chlordane		mg/L	0.800	0.895	112	85 - 115	2004-04-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.106	mg/L	1	0.100	106	34.9 - 149
Deca chlorobiphenyl		0.104	mg/L	1	0.100	104	52.5 - 187

Standard (CCV-1) QC Batch: 9175

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.100	0.0981	98	85 - 115	2004-04-26
gamma-BHC (Lindane)		mg/L	0.100	0.0965	96	85 - 115	2004-04-26
beta-BHC		mg/L	0.100	0.0997	100	85 - 115	2004-04-26
delta-BHC		mg/L	0.100	0.110	110	85 - 115	2004-04-26
Heptachlor		mg/L	0.100	0.0991	99	85 - 115	2004-04-26
Aldrin		mg/L	0.100	0.0944	94	85 - 115	2004-04-26
Heptachlor Epoxide		mg/L	0.100	0.0936	94	85 - 115	2004-04-26
gamma-Chlordane		mg/L	0.100	0.0932	93	85 - 115	2004-04-26
alpha-Chlordane		mg/L	0.100	0.0934	93	85 - 115	2004-04-26
Endosulfan I		mg/L	0.100	0.0964	96	85 - 115	2004-04-26
p,p-DDE		mg/L	0.100	0.109	109	85 - 115	2004-04-26
Dieldrin		mg/L	0.100	0.0994	99	85 - 115	2004-04-26
Endrin		mg/L	0.100	0.108	108	85 - 115	2004-04-26
p,p-DDD		mg/L	0.100	0.0950	95	85 - 115	2004-04-26
Endosulfan II		mg/L	0.100	0.103	103	85 - 115	2004-04-26
p,p-DDT		mg/L	0.100	0.100	100	85 - 115	2004-04-26
Endrin aldehyde		mg/L	0.100	0.0950	95	85 - 115	2004-04-26
Endosulfan sulfate		mg/L	0.100	0.114	114	85 - 115	2004-04-26
Methoxychlor		mg/L	0.100	0.115	115	85 - 115	2004-04-26
Endrin Ketone		mg/L	0.100	0.106	106	85 - 115	2004-04-26
Toxaphene		mg/L	0.800	0.693	87	85 - 115	2004-04-26
Technical Chlordane		mg/L	0.800	0.728	91	85 - 115	2004-04-26

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.0958	mg/L	1	0.100	96	34.9 - 149
Deca chlorobiphenyl		0.0921	mg/L	1	0.100	92	52.2 - 187

Standard (CCV-1) QC Batch: 9201

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		mg/L	50.0	56.0	112	80 - 120	2004-04-26
1,1-Dichloroethene		mg/L	50.0	54.0	108	80 - 120	2004-04-26
2-Butanone (MEK)		mg/L	50.0	53.0	106	80 - 120	2004-04-26
Chloroform		mg/L	50.0	52.0	104	80 - 120	2004-04-26
1,2-Dichloroethane (EDC)		mg/L	50.0	52.0	104	80 - 120	2004-04-26
Benzene		mg/L	50.0	54.0	108	80 - 120	2004-04-26
Carbon Tetrachloride		mg/L	50.0	53.0	106	80 - 120	2004-04-26
Trichloroethene (TCE)		mg/L	50.0	54.0	108	80 - 120	2004-04-26
Tetrachloroethene (PCE)		mg/L	50.0	43.0	86	80 - 120	2004-04-26
Chlorobenzene		mg/L	50.0	55.0	110	80 - 120	2004-04-26
1,4-Dichlorobenzene (para)		mg/L	50.0	50.0	100	80 - 120	2004-04-26

Standard (CCV-1) QC Batch: 9226

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		mg/L	50.0	57.0	114	80 - 120	2004-04-27
1,1-Dichloroethene		mg/L	50.0	53.0	106	80 - 120	2004-04-27
2-Butanone (MEK)	23	mg/L	50.0	36.0	72	80 - 120	2004-04-27
Chloroform		mg/L	50.0	51.0	102	80 - 120	2004-04-27
1,2-Dichloroethane (EDC)		mg/L	50.0	50.0	100	80 - 120	2004-04-27
Benzene		mg/L	50.0	54.0	108	80 - 120	2004-04-27
Carbon Tetrachloride		mg/L	50.0	52.0	104	80 - 120	2004-04-27
Trichloroethene (TCE)		mg/L	50.0	53.0	106	80 - 120	2004-04-27
Tetrachloroethene (PCE)		mg/L	50.0	42.0	84	80 - 120	2004-04-27
Chlorobenzene		mg/L	50.0	54.0	108	80 - 120	2004-04-27
1,4-Dichlorobenzene (para)		mg/L	50.0	48.0	96	80 - 120	2004-04-27

Standard (CCV-1) QC Batch: 9235

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Pyridine		mg/L	60.0	61.3	102	80 - 120	2004-04-27
1,4-Dichlorobenzene (para)		mg/L	60.0	63.2	105	80 - 120	2004-04-27
o-Cresol		mg/L	60.0	61.1	102	80 - 120	2004-04-27
m,p-Cresol		mg/L	60.0	62.7	104	80 - 120	2004-04-27
Hexachloroethane		mg/L	60.0	66.5	111	80 - 120	2004-04-27
Nitrobenzene		mg/L	60.0	66.3	110	80 - 120	2004-04-27
Hexachlorobutadiene		mg/L	60.0	58.6	98	80 - 120	2004-04-27
2,4,6-Trichlorophenol		mg/L	60.0	69.9	116	80 - 120	2004-04-27
2,4,5-Trichlorophenol		mg/L	60.0	67.5	112	80 - 120	2004-04-27
2,4-Dinitrotoluene		mg/L	60.0	62.3	104	80 - 120	2004-04-27
2,4-Dichlorophenoxyacetic acid		mg/L	60.0	69.6	116	80 - 120	2004-04-27
Hexachlorobenzene		mg/L	60.0	63.1	105	80 - 120	2004-04-27
2,4,5-Trichlorophenoxypropionic acid		mg/L	60.0	67.9	113	80 - 120	2004-04-27

continued ...

<sup>23</sup>average of ccv analytes=100 which is within acceptable limits showing analysis to be in control.

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Pentachlorophenol		mg/L	60.0	71.0	118	80 - 120	2004-04-27

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		64.7	mg/L	1	60.0	108	80 - 120
Phenol-d5		59.8	mg/L	1	60.0	100	80 - 120
Nitrobenzene-d5		66.0	mg/L	1	60.0	110	80 - 120
2-Fluorobiphenyl		62.4	mg/L	1	60.0	104	80 - 120
2,4,6-Tribromophenol		67.7	mg/L	1	60.0	113	80 - 120
Terphenyl-d14		64.2	mg/L	1	60.0	107	80 - 120

**Standard (ICV-1)** QC Batch: 9263

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Mercury		mg/L	0.00500	0.00491	98	90 - 110	2004-04-28

**Standard (CCV-1)** QC Batch: 9263

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Mercury		mg/L	0.00500	0.00465	93	80 - 120	2004-04-28

**Standard (CCV-2)** QC Batch: 9263

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TCLP Mercury		mg/L	0.00500	0.00465	93	80 - 120	2004-04-28

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<b>TraceAnalysis, Inc.</b> 6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 T (800) 378-1296		4725 Ripley Dr., Ste A El Paso, Texas 79922-1028 Tel (915) 585-3443 Fax (915) 585-4944 T (888) 588-3443	
Company Name: <u>New Mexico Oil Conservation Division</u> Address: <u>(Street, City, Zip)</u> <u>1220 South Saint Frances Dr.</u> Contact Person: <u>Ed Martin</u> Invoice to: <u>(If different from above) Same</u> Project #: <u>Runco Mud</u> Project Location: <u>Jal, New Mexico</u>		Phone #: <u>505-476-3492</u> Fax #: <u>505-476-3462</u> Project Name: <u>Runco</u> Sampler Signature: _____	

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING			
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	NaHSO4	H2SO4	NaOH	ICE	NONE	DATE
32002	0420041004 (Tank 1)	2	402	X								X		4/22/04	
03	0420041008 (Tank 2)	2	402	X								X		4/22/04	
04	0420041015 (Tank 3)	2	402	X								X		4/22/04	
05	0420041032 (Tank 4)	2	402	X								X		4/22/04	
06	0420041025 (Tank 5)	2	402	X								X		4/22/04	
07	0420041036 (Tank 6)	2	402	X								X		4/22/04	
08	0420041050 (Whk 7)	2	402	X								X		4/22/04	
09	0420041100 (Tank 7)	2	402	X								X		4/22/04	
10	0420041105 (Tank 8)	2	402	X								X		4/22/04	
11	0420041047 (Tank 11)	2	402	X								X		4/22/04	
12	0420041125 (Pile)	2	402	X								X		4/22/04	
Relinquished by: <u>Ed Martin</u>		Date: <u>4/20/04</u>	Time: <u>3:05 PM</u>	Received by: _____		Date: _____	Time: _____	Relinquished by: _____		Date: _____	Time: _____	Received by: _____		Date: _____	Time: _____

<b>CHAIN-OF-CUSTODY AND ANALYSIS REQUEST</b> LAB Order ID # <u>4042127</u>		<b>ANALYSIS REQUEST</b> (Circle or Specify Method No.)	
Turn Around Time if different from standard _____ BOD TSS pH _____ Pesticides 8081A/608 _____ PCBs 8082/608 _____ GC/MS Semi Vol 8270C/625 _____ GC-MS Vol 8260B/624 _____ RCI _____ TCLP Pesticides _____ TCLP Semi Volatiles _____ TCLP Volatiles _____ TCLP Metals Ag As Ba Cd Cr Pb Se Hg _____ Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007 _____ PAH 8270C _____ TPH 418 1/7X1005 _____ BTX 8021B/602 _____ MTBE 8021B/602 _____		REMARKS: LAB USE ONLY Intact <u>(Y/N)</u> Headspace <u>Y/N</u> Temp <u>N</u> ° Log-in Review <u>✓</u> Carrier # <u>GLT 67812844</u>	

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Submital of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

