STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF GANDY MARLEY, INC.
TO MODIFY THEIR EXISTING NMOCD RULE 711
PERMIT NO. NM-01-019 SO THEY MAY ACCEPT
SALT-CONTAMINATED OILFIELD WASTES

APPEAL OF ORDER NO. R-12306-B **CASE NO.**
CASE NO. 13480

REQUEST FOR PARTIAL STAY
OF DIVISION ORDER R-12306-B

COMES NOW Gandy Marley, Inc. ("GMI"), by and through undersigned counsel of record, and pursuant to 19.15.14.1220.B NMAC, requests a partial stay of Division Order R-12306-B ("the Order"), issued following a hearing on GMI's request for a permit modification, held May 23 and 24, 2005. (Exhibit A, Decision and Order of the Division, Order No. R-12306-B, attached hereto). GMI specifically requests a stay of the portion of the Order that rescinds Order No. 12306-A, Emergency Order Extension ("Emergency Order Extension"). The Emergency Order Extension, issued March 25, 2005, allows GMI to continue accepting salt-contaminated oilfield waste until a final decision is made on GMI's request for a permit modification. In support of the Request for Partial Stay, GMI states as follows.

FACTUAL BACKGROUND

GMI is the operator of record and surface owner of a commercial surface waste management facility located in Sections 4, 5, 8, and 9, Township 11 South, Range 31 East, in Chaves County, New Mexico. The facility is permitted pursuant to 19.15.9.711 NMAC ("Rule 711") under OCD permit number NM-01-0019. The permit was originally issued by the Oil

Conservation Division ("the Division") on January 27, 1995. Pursuant to the permit, the GMI facility accepted hydrocarbon contaminated and salt-contaminated oilfield waste.

On March 4, 2005, Division Director Mark Fesmire notified GMI (along with other landfarm owners) that its permit was being immediately modified to add the following condition: "Effective immediately, the NMOCD permitted landfarm...is prohibited from accepting oilfield waste contaminated with salts." (Exhibit B, March 4, 2005 letter from Mark E. Fesmire, attached hereto). The March 4, 2005, letter stated that for a landfarm to accept salt-contaminated oilfield waste, GMI was required to apply for a modification of the permit pursuant to Rule 711.B(1) NMAC and follow the notice requirements of Rule 711.B(2).

On March 10, 2005, GMI applied for an emergency order allowing it to accept salt-contaminated oilfield waste pending a decision on its application for a permit modification. On March 11, 2005, the Division issued Emergency Order 12306 ("Emergency Order"), allowing GMI to accept salt contaminated oilfield wastes pending a decision on its application for a permit modification. (Exhibit C, Order No. R-12306, attached hereto). Pursuant to NMSA 1978, §70-2-23, the Emergency Order expired after March 26, 2005, fifteen days from its effective date. After a hearing held on March 25, 2005, the Division issued the Emergency Order Extension, which extended the Emergency Order and allowed GMI to continue to operate under its existing permit without being subject to the Division's March 4, 2005 letter. (Exhibit D, Order of the Division, 12306-A, attached hereto). The Emergency Order Extension was granted until a determination is made by the Division on Gandy Marley's application to modify its current landfarm permit. (*Id.* at 5, ¶1). The Emergency Order Extension also requires that salt-contaminated oilfield water be kept separate from non-salt-contaminated waste. (*Id.*)

GMI submitted an application to modify its permit to allow it to accept salt-contaminated oilfield wastes. A hearing was held by the Division on May 23 and 24, 2005, before Hearing Examiner William V. Jones. On August 5, 2005, the Division issued the Order, which denied GMI's permit modification application and rescinded the Emergency Order Extension. (Exhibit A at 19, ¶1). The Division ordered GMI to immediately comply with the Division's March 4, 2005 letter, which prohibits GMI from accepting salt-contaminated oilfield wastes. (*Id.* at 20, ¶2). The permit modification application was denied because the Division found that GMI's application did not include all of the information required by Rule 711 and did not comply with the notice requirements of Rule 711. (*Id.* at 19, ¶5).

The Order granted GMI the opportunity to submit a revised permit modification application, which the Director will refer directly to the Commission for hearing. (*Id.* at 19, ¶¶8-10; 20, ¶¶3-5). The Order also included a section identifying technical issues that GMI should address in a revised permit modification application and included specific recommendations for permit conditions. (*Id.* at 15-17). The recommended permit conditions include: 1) the installation depth for the cells in which salt-contaminated waste will be disposed; 2) installation of a clay liner in each cell; 3) testing requirements for the clay to be used in the cells; 4) installation of a permanent leachate and monitoring system; 5) the height at which the salt-contaminated waste may be disposed; 6) installation of a clay cap at closure; 7) post-closure re-vegetation requirements; 7) installation of an additional berm on the boundary of the facility; 8) additional monitoring requirements; 9) development of more detailed closure and post-closure plan. For the purposes of this request for stay, the most important recommendations are those addressing the installation of a clay liner and leachate system. In its permit modification application, GMI proposed to install a clay liner in each cell that will be used for salt-

contaminated waste. If the stay is granted and GMI is authorized to continue accepting salt-contaminated oilfield waste, GMI will install a clay liner and a leachate system in the cell that will receive waste under the Emergency Extension Order, as recommended by the Division in the technical section of the Order.

GMI filed a timely application for a de novo hearing before the Commission on the Order.

ARGUMENT

GMI is requesting that the Commission issue a stay of the portion of the Order that rescinds the Emergency Extension Order. A stay of a division order may be issued by the Commission upon a showing of "(1) likelihood that applicant will prevail on the merits of the appeal; (2) a showing of irreparable harm to applicant unless the stay is granted; (3) evidence that no substantial harm will result to other interested persons; and (4) a showing that no harm will ensue to the public interest." *Tenneco Oil Co. v. New Mexico Water Quality Control Commission,* 105 N.M. 708, 710, 735 P.2d 986 (N.M.App. 1986). The granting of a stay is within the discretion of the Commission and depends on the facts and circumstances of the individual case. *Id.* GMI meets all of the requirements for granting a stay of the rescission of the Emergency Order Extension.

A. GMI is likely to succeed on the merits of its permit modification application.

In order to obtain a stay, GMI must make a showing of likely or probable success on the merits. *See State ex rel. v. Director of Revenue,* 925 S.W.2d 838 (Mo. 1996)("a petitioner must make some showing of probability of success on the merits"); *Tony L. Merkert v. George H. Ryan, Secretary,* 617 N.E.2d 1373 (Ill.App. 1993)(in requesting a stay, the plaintiff must raise "at least a fair question as to the likelihood of success on the merits"); *Medical Board of California*

v. Superior Court of Sacramento, 278 Cal.Rptr. 247 (Cal.App.Dist.3, 1991)(to receive a stay, a preliminary assessment of the merits of the plaintiff's case is made in order to determine if he is likely to obtain the requested relief); *Beverly Miller Summers v. R.T. Sutton, Commissioner,* 428 So.2d 1121 (La. 1983)(indication of probable success required for stay). GMI has requested a de novo appeal of the Division's denial of its permit modification application and will file a revised permit modification application as set forth in the Order. Based on the requirements for the issuance of a permit and the Division's Order, it is likely that GMI will prevail on the merits of the appeal of the Order.

A permit may be issued "upon a finding that an acceptable application has been filed and that the conditions of paragraphs 2 [Notice Requirements] and 3 [Financial Assurance Requirements] above have been met." 19.15.9.711.B(7) NMAC. The Order provides that GMI may submit a revised permit modification application in conformity with Rule 711. (Exhibit A at 20, ¶3, 4). The Order also states that the Director will refer the revised permit modification application directly to the Commission. (*Id.* at 20, ¶5). GMI has requested that the de novo appeal be stayed until GMI has prepared and submitted a revised permit modification application.

The permit modification was denied based on the Division's determination that GMI had not met the public notice requirements and had not provided all of the information required by Rule 711(B). (Exhibit A at 19-20). Rule 711(B) identifies information that must be submitted as part of a permit modification application. 19.15.9.711(B)(2). The Decision section of the Order includes specific recommendations for the revised permit application, including information that should be included as part of a revised application and, as stated above, permit conditions addressing various aspects of the facility. (Exhibit A at 13-17). The technical issues identified

in the Order would not have been the basis for a denial but instead would likely have formed the basis for specific permit conditions. GMI will submit a revised permit application that includes the information required pursuant to Rule 711 and that meets the public notice requirements. Based on the opportunity to submit a revised permit modification application, GMI has a reasonable chance of success on the merits of its application to modify its permit to allow acceptance of salt-contaminated oilfield waste.

The Order is divided into two sections-a "Decision" section and an "Order" section. The "Decision" section includes a section that raises issues of GMI's compliance with the quarterly reporting requirements in its existing permit. (Exhibit A at 18). The section includes a recommendation that "if GMI's application is ultimately granted, or granted with conditions, a period of time (possibly six months to one year) should be required for GMI to first demonstrate that it can comply with Division reporting requirements before it should be allowed to operate a landfill facility." (*Id.*). This portion of the Order does not decrease the likelihood of GMI's success on the merits for a number of reasons.

First, the recommendation is advisory and is not binding on the Commission in a de novo hearing. The proposed condition is also not supported by the administrative record. GMI has submitted the 4th quarterly report for 2004 and the two quarterly reports for 2005. (Exhibits I, Affidavit of Bill Mansker, attached hereto; Exhibit J, Quarterly Reporting transmittal letters, attached hereto). The sampling for the third quarterly report for 2005 has been completed and will be submitted to the Division by September 1, 2005. The summary report of the sampling for the September 1, 2005 Quarterly Report is attached hereto as Exhibit H. The quarterly sampling is comprehensive and includes 5 times the number of samples required by GMI's permit. (Exhibit I). The sampling demonstrates that the facility, including cells that contain salt-

contaminated waste, does not present a threat to groundwater or the environment. (*Id.*). The Division did not make any findings that the GMI facility is not an appropriate location for the continued disposal of salt-contaminated waste. The indication from the Order is that, if the cells are clay-lined and a leachate system is installed, the disposal of salt-contaminated waste at the GMI facility would likely be approved by the Division. Additionally, the denial of the permit was based on a finding that GMI did not comply with notice requirements for a permit modification, not on a finding that the facility is not in compliance or a finding that the facility is a threat to the environment or groundwater resources. (Exhibit A at 14, 15). The "Decision" section of the Order includes a recommendation that salt-contaminated waste be placed in a clay-lined cell with a leachate system, which GMI will follow. (*Id.* at 16). The installation of a clay liner and a leachate system will be protective of groundwater. The "Technical Issues" section of the Order strongly indicates that GMI will be issued a permit with conditions. (*Id.* at 15-17).

Second, GMI was not provided notice that its compliance history would be considered as part of its application for a permit modification. The Division, as evidenced by the Order, is clearly concerned about compliance with the notice requirements for public hearings. The imposition of a condition based on compliance history without notice and an opportunity for hearing violates the Oil and Gas Act, 70-2-23 NMSA 1978 (notice and hearing requirements). It also violates Rule 711(B)(5), which states that a permit "may be denied, revoked or additional requirements imposed by *a written finding of the Director that a permittee has a history of failure to comply with Division rules and orders and state or federal environmental laws.*" (emphasis added). The Director has not made any such written finding for the GMI facility. The Order does not contain a finding on GMI compliance with quarterly reporting requirements. (*See* Exhibit A at 19-20).

Third, the Division has not followed its own enforcement guidelines. The OCD Enforcement Guidelines provide specific step-by-step enforcement procedures that allow the Division to provide notice of alleged violations and the permittee the opportunity to respond to the allegations before a notice of violation is issued. If a notice of violation is issued, the permittee has the right to a hearing. GMI has never received any notice of alleged violations from the Division nor has GMI been provided an opportunity for a hearing on compliance issues. A permit modification hearing and subsequent order are not the appropriate place to determine compliance issues. The compliance issues identified in the Order do not support a finding that GMI will not succeed on the merits.

B. GMI will suffer irreparable harm if the stay is not granted.

GMI will also suffer irreparable harm if a stay of the portion of the Order rescinding the Emergency Order Extension is not granted. Prior to March 4, 2005, GMI accepted salt-contaminated oilfield waste and did not have any notice that the Division intended to amend its permit to prevent further acceptance of such waste. Prior to the March 4, 2005 letter, GMI invested in equipment and obtained contracts directly related to the acceptance of salt-contaminated oilfield waste. GMI has received additional contracts since the issuance of the Emergency Order Extension. GMI's customers have regulatory and other deadlines that must be met and GMI has made commitments to its customers that will allow those deadlines to be met. The purpose of the Emergency Order Extension was to assure that there are adequate facilities for the disposal of salt-contaminated oilfield wastes and to avoid a crisis in the oil and gas industry. In support of the Emergency Order Extension, the Division made the following findings:

> (7) "The recent adoption of the Pit Rule (19.15.2.50 NMAC) has increased the need for remediation and disposal of drill cuttings within New Mexico.

(8) Removing the capability of a majority of landfarms to accept salt-contaminated oil field wastes represented to the Division in unforeseen combination of circumstances calling for immediate action by the Division. This constituted an emergency.
(9) It was necessary for the Division to take appropriate action to ensure that adequate facilities would continue to be available to receive and treat salt contaminated oil field waste.

(Exhibit D at 4). The emergency conditions identified by the Division in March, 2005, have not changed. As of this date, of the landfarms subject to the March 4, 2005 letter, only GMI has submitted a permit modification application. If GMI is no longer allowed to accept salt-contaminated oilfield wastes, the consequences which the Emergency Order Extension was intended to avoid will occur. Not only will GMI suffer irreparable harm if the stay is not issued, its customers will be irreparably harmed. There is no adequate remedy at law for the injury that will be suffered by GMI and its customers while the Commission moves forward with consideration of GMI's permit modification application.

The information upon which the Division based its rescission of the Emergency Order Extension was available at the March 25, 2005 hearing and was not questioned or challenged by the Division. The basis for rescinding the Emergency Order Extension appears to be that the previous geological and hydrological information presented at the hearing for the Emergency Order Extension "can no longer be relied on to support the Emergency Order Extension." (Exhibit A at 17). However, the information provided at the May 23 hearing and recent soil samples, coupled with the installation of clay-liners and a leachate system, demonstrate that the acceptance of salt-contaminated oilfield waste will not pose a danger to fresh water, human health or the environment.

Testimony from the May 23, 2005, hearing, results from recent soil tests in cells that contain salt-contaminated oilfield waste, and samples taken from two groundwater test wells support the Division's March 25, 2005, finding that the acceptance of the waste does not

adversely impact fresh water supplies. (Exhibit D at 5, ¶16). The depth to groundwater under the GMI facility is greater than 120 feet. (Exhibit E, Monitor Well Pump Test/Fluid Recovery Report, attached hereto). The geology underneath the facility is of low permeability. (Exhibit K, testimony of William Mansker and James A Bonner). The groundwater samples indicate that the groundwater below the GMI landfarm has chloride levels between 4790 mg/l (MW 2) and 4840 mg/l (MW 1) and TDS levels of 8970 mg/l and 8930 mg/l. (Exhibit F, Summary Report for groundwater samples, attached hereto). The regulatory level for chloride for a domestic water supply is 250 mg/l. 20.6.2.3103 NMAC. The background chloride levels in the groundwater are well above the regulatory levels for domestic water supplies. Bill Marley, the surface owner immediately adjacent to the GMI facility, testified that the only use for the groundwater beneath the facility is for livestock. (Exhibit G, Testimony of Bill Marley, attached hereto). He further testified that the water is not suitable for livestock use, either in quantity or quality. (*Id.*)

Soils samples taken on August 9, 2005 indicate that three of the cells that contain salt-contaminated oilfield waste show elevated levels of chloride that are anticipated and not a concern. (Exhibit H, Summary Report and Analytical and Quality Control Report for August, 2005 soil sampling, attached hereto; Exhibit I). The results were not unexpected and, given the depth to groundwater and the levels of chloride in the groundwater, the chloride in the soil samples will not adversely impact fresh water supplies. In addition, GMI is prepared to meet the requirement of the Order that salt-contaminated waste be placed in a cell with a clay-liner and a leachate system, which will further assure that fresh water is not adversely impacted. The Division's conclusion, in the Emergency Order Extension, that the disposal of salt-contaminated waste at the GMI facility will not pose a danger to fresh water, human health or the environment is still valid.

GMI moved forward with its permit modification application with the understanding that it would have a reasonable opportunity to operate during the time that Division was considering its permit modification application. As already discussed, GMI did not have sufficient time to prepare an application and meet the public notice requirements prior to the May 19, 2005 hearing date that was already set at the time the Emergency Order Extension was granted. The Order states that "GMI shall immediately comply with the Division's March 4th letter." (Exhibit A at 20, ¶2). By requiring that GMI immediately comply with the March 4th letter, which means that GMI must immediately cease acceptance of salt-contaminated waste, the Division is putting GMI in exactly the same position it was in at the time it applied for the Emergency Order on March 11, 2005, despite the fact that GMI has spent substantial time and effort to comply with the requirement that it submit a permit modification application. GMI will suffer immediate and irreparable harm if the portion of the Order rescinding the Emergency Order Extension is not stayed.

C. Potential harm to other interested persons and the public interest

The granting of the stay will not harm the public interest. Granting the stay will continue the status quo and will assure that adequate facilities for the disposal of salt-contaminated oilfield waste will be available to the oil and gas industry. In determining whether to grant a stay, the Commission must balance the potential harm to other persons and the public interest. *See Associated Securities Corp. v. Securities and Exchange Commission,* 283 F.2d 773 (10th Cir. 1960). In the Emergency Order Extension, the Division found that the extension of the Emergency Order was in the interests of the oil and gas industry. The Division took the emergency action to "ensure that adequate facilities would continue to be available to receive and treat salt contaminated oil field wastes." (Exhibit D at 4, ¶9. A stay of the rescission of the

Emergency Order Extension will ensure that adequate facilities will continue to be available for the disposal of salt-contaminated waste, which is in the public interest. The benefit to the oil and gas industry of granting the stay outweighs any harm that might ensue to interested or affected persons.

As already discussed above, based on the geology and hydrology underlying the facility and the use of a clay-lined cell and the installation of a leachate system, as set forth in the "Technical Issues" section of the Order, the disposal of salt-contaminated oilfield waste at the GMI facility will not pose a threat to freshwater or the environment.

WHEREFORE, GMI respectfully requests an Order of the Commission that

1) withdraws the rescission of the Emergency Order Extension, Order No. 12306-A; and

2) allows the disposal of salt-contaminated waste at the GMI facility in clay-lined cells with a leachate system as set forth in the Technical Issues section of the Order.

GMI further requests an expedited evidentiary hearing on its request for a stay of the rescission of the Emergency Order Extension.

Respectfully Submitted,

Pete V. Domenici, Jr. Esq.
Attorney for Gandy Marley Inc.
6100 Seagull Street NE, Suite 205
Albuquerque, NM 87109
(505) 883-6250

I hereby certify that a true and correct copy of the foregoing was served on all parties of record on the 25 day of August, 2005.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF GANDY MARLEY, INC. TO MODIFY THEIR EXISTING NMOCD RULE 711 PERMIT NO. NM-01-019 SO THEY MAY ACCEPT SALT-CONTAMINATED OILFIELD WASTES

CASE NO. 13480
ORDER NO. R-12306-B

DECISION AND ORDER OF THE DIVISION

This case came for hearing on May 23, 2005, at Santa Fe, New Mexico, before Hearing Examiner William V. Jones of the Oil Conservation Division ("the Division" or "OCD"). The applicant, Gandy Marley, Inc. ("GMI") appeared through counsel at the hearing and presented evidence in support of its application. Controlled Recovery, Inc. ("CRI") appeared through counsel at the hearing and presented evidence against GMI's application. Dr. Don Neeper appeared *pro se* as spokesperson for New Mexico Citizens for Clean Air and Water and presented evidence against GMI's application. The Division appeared through counsel at the hearing and provided information on GMI's application.

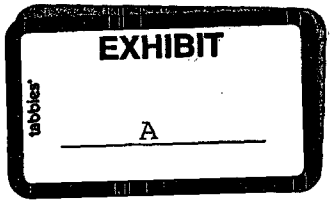
I. DECISION

A. Background.

GMI is the operator of record and surface owner of a commercial surface waste management facility located in Sections 4, 5, 8, and 9, Township 11 South, Range 31 East, in Chaves County, New Mexico, permitted pursuant to 19.15.9.711 NMAC under OCD permit number NM-01-0019. GMI received its original permit from the Division on January 27, 1995, for remediation of hydrocarbon-contaminated soils. The permit has undergone periodic reviews by the Division since that time.

On March 4, 2005, the Division notified surface certain waste disposal facilities in New Mexico previously permitted by the Division, including GMI, to immediately cease accepting salt-contaminated oil field wastes. Salt- contaminated wastes compromise the biodegradation capacity of landfarm operations and threaten groundwater.

Although the Division's rules do not distinguish between the terms, landfarms and landfills and both are considered surface water management facilities under Division rules, in practice, the Division makes such a distinction. The term, "landfarms," is intended to apply to those surface waste management facilities that remediate hydrocarbon contaminated soils. Soils treated in landfarms are intended to be reused. The term, "landfills," is intended to apply to surface waste management facilities that accept oil field contaminated wastes for permanent disposal because they cannot be



remediated. This Decision will distinguish between the two classifications of surface waste management facilities by utilizing those terms.

The Division notified certain waste facilities operating as landfarms to cease accepting salt-contaminated wastes because the public notices given prior to the issuance of those permits, as was the case with GMI, stated the permits were for landfarming to remediate hydrocarbon contaminated soils. In fact, the language of the permits actually approved by the Division was broader and allowed facilities, such as GMI's, to accept oilfield contaminated solids either exempt from the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §§6901, et, seq., Subchapter III (Hazardous Waste Management) requirements or non hazardous by characteristic testing or listing, which included salt- contaminated oil field wastes not subject to remediation. Because the permits were broader in scope than the contents of the notices, they were voidable and required correction by the Division.

Landfarm permits, including GMI's, allow the Division to administratively change permit conditions for good cause shown to protect fresh water, human health, and the environment. The Division's March 4th letter to landfarm operators stated it was necessary to modify their permits to protect fresh water, human health and the environment. The following administrative change was made to the permits by the March 4th letter:

> Effective immediately, the NMOCD permitted landfarm identified above is prohibited from accepting oilfield waste contaminated with salts.

The Division's letter also stated that for a landfarm to accept salts, the permit holder must apply for a modification of the permit pursuant to 19.15.9.711.B(1) NMAC and follow the notice requirements of 19.15.9.711.B(2) NMAC.

Following receipt of the March 4th letter, GMI applied for a modification of its permit to allow it to accept salt-contaminated oil field wastes. Additionally, on March 10, 2005, GMI applied for an emergency order to enable it to accept salt- contaminated oil field waste pending an order on its application for a permit modification.

On March 11, 2005 and March 25, 2005, the Division issued emergency orders R-12306 and R-12306-A, to allow GMI's landfarm to continue accepting salt-contaminated oilfield wastes; provided that,

> [A]ny salt-contaminated oil field waste shall be kept separate from non salt-contaminated waste; and provided, further, that such extension shall only remain in effect until a determination is made by the Division on Gandy Marley's application to amend its current landfarm permit.

On March 29, 2005, the Division requested additional information from

GMI. Thereafter, on April 8, 2005, GMI submitted a revised application for a Waste Management Facility. The Division gave notice of the hearing in this matter, set for May 19, 2005 (later, continued to May 23, 2005, at the request of the parties), to GMI and others interested in the matter. Notice of the hearing was published in the Roswell Daily Record on April 15, 2005, and in the Lovington Daily Leader on April 14, 2005. GMI provided notice to the Chaves County Board of Commissioners, the New Mexico Commissioner of Public Lands, and the United States Bureau of Land Management on April 25, 2005, and provided a correction of public notice to the same entities on May 6, 2004. Notice was also published on the Division's website.

This matter is before the Division for action on GMI's application to amend its current landfarm permit.

B. Procedural Motions Submitted by the Parties.

Prior to the hearing, CRI filed a motion (CRI's Motion to Exclude from Consideration Information Not Contained or Disclosed in Gandy Marley's Amended Application for Waste Management Facility ("the Motion")) to exclude from consideration by the Hearing Examiner information CRI contends was not contained in or disclosed to the public as part of GMI's application. CRI objects to GMI's Pre-Hearing Statement as seeking to supplement GMI's application. The Hearing Examiner took the Motion under advisement.

At the hearing, GMI made a motion to prevent CRI from opposing GMI's application based on lack of standing. GMI contended CRI only had an economic interest in this case and is not otherwise an "affected" party. The Hearing Examiner denied GMI's motion.

At the hearing, CRI also made a motion to dismiss this case claiming GMI failed to file a complete application. CRI maintains GMI had not, and would not; present a specific closure plan for the proposed facility as required by Division rules. This motion was also taken under advisement for consideration in conjunction with the Motion.

C. GMI's Evidence.

1. Summary: GMI presented its case through its application, exhibits, and witness testimony. GMI contends that, until the March 4th letter from the Division, this facility was allowed to take salt-contaminated oil field solid waste into separately segregated bermed areas, called "cells." GMI's application merely seeks modification of its existing permit to restore the previously permitted ability of this facility. GMI's drawings submitted as part of its application are adequate to construct cells capable of safely encapsulating salt- contaminated wastes. The closure plan provides for cells to be closed as they are being filled. No change in the existing financial bond is required because closure of landfill cells is no more complicated than closure of landfarm cells. Groundwater below the facility is poor in quality, cannot be beneficially used, and can only be produced at a low rate. The clays and low permeability silts of the Upper

Dockum group adequately protect the existing groundwater from possible contamination from salts placed in this facility.

2. Testimony:

a. Mr. Robert W. (Bill) Marley – Mr. Marley was qualified as a contractor and owner, but not as a designer of the facility. Mr. Marley is part owner of the waste disposal facility and owns the adjacent ground surrounding the facility – purchased in 1966 – and also owns a 40 square mile cattle ranch surrounding the facility.

All water used by Mr. Marley's ranch is piped in from wells drilled on top of the Caprock into the Ogallala water sands. Mr. Marley made the decision to drill two water wells near (but outside of) the existing facility. The drilling and testing contractor was Mr. Clayton Barnhill of CMB Environmental & Geological Services, Inc. The two wells were drilled in May, just prior to the hearing. The MW#1 is located on the Southside of cell 15. The MW#2 is located south of the outer berm between cells 18 and 20.

The waste facility has taken oil field drill cuttings for many years and placed them into 6-inch lifts and disked every two weeks. Cells 15, 18, 20, and 21 are currently taking salt-contaminated oil field waste consisting mostly of drill cuttings. Facts (such as the depth to ground water and the salinity of that ground water) within the GMI application submitted in March in support of an emergency order to allow GMI to continue taking salt-based oil field wastes were based partially on memory.

The facility boundaries after the permit modification would be the same as the boundaries prior to the permit modification. There is no confirmation on the degree of salinity of the different types of salt-contaminated oilfield wastes being accepted by the facility. Landfarm cells are being sufficiently remediated to grow certain types of plants – especially salt tolerant plants. If the proposed permit modification is approved, then salt-contaminated waste will be placed into the landfill cells in a thick layer and encapsulated with a clay liner on the bottom and an evapotranspiration layer on top. Landfill cells will be closed as they are filled, by placing a cap of remediated soil on top.

b. Mr. Patrick Corser, P.E. – Mr. Corser was qualified as an expert Geotechnical Engineer. Mr. Corser was the project manager for the permitting of GMI's Triassic Park facility and works for MWH Global, Inc. He presented testimony on soil layers and groundwater.

The Upper Dockum consists of claystones, siltstones, and sandstones, while the Lower Dockum is more homogeneous and contains low permeability claystones and mudstones. A perched aquifer originates either from the Ogallala aquifer (underneath the Caprock) or from surface infiltration. Water flows down through the alluvial deposits and is trapped between the Upper and Lower Dockum units. "Perched" means that there is no direct communication between the perched aquifer and any lower aquifer. It is limited in lateral extent and pinches out to the west.

There are three factors that help prevent adverse impact to these perched waters: (1) the arid climate with net evaporation greater than net infiltration, (2) low permeability sediments beneath the facility, and (3) a clay liner will be placed below the wastes. Existing perched water has a very low pump rate and is of very poor quality. The closure plan is different for the landfill cells and landfill closure will take less time than landfarm closure. Operators applying for a permit look to the OCD for guidance on what is required for design, operation, and closure. Because clay covers do not perform well in arid climates, an evapotranspiration layer is best. The existing clay underlying the landfarm has a hydraulic conductivity ranging from 10^{-5} to less than 10^{-7} centimeters per second. Cells will be excavated to a depth of up to 20 feet and the berms placed from 5 to 10 feet above ground level. Cells would be filled to the top of the berms. A change in design would be necessary for a leak detection system to work.

Disposal of some solid debris in the waste may puncture the clay liner and should be avoided. The salt wastes are best deposited at or below ground level, instead of from 5 to 10 feet above ground level as proposed by GMI. A clay cap should be installed with two feet of other soil on top of the clay.

c. Dr. William L. Mansker – Dr. Mansker was qualified as an expert geologist. He became involved with this project about 2 months ago, reviewing the records and gathering additional information. Over the years, he has developed a superior way of measuring salinity in soils while in the field.

He used this method and electric logs to determine that salinity increases with depth in the Upper Dockum. He drilled and sampled drill cuttings from the latest two monitor wells, which were drilled in May. The pump testing of those wells was contracted to another party.

He testified that GMI would be constructing the landfill cells below the alluvium. There exist many feet of almost impervious clays and silts in the Upper Dockum and any groundwater that exists is not useable. Any gradient of the perched, discontinuous aquifer may not exist and is almost impossible to determine. In any case, more than two wells would be required to define any gradient.

d. Mr. Edwin E. Martin – Mr. Martin is an employee of the Division's Environmental Bureau and his duties include reviewing environmental related administrative applications.

The permit as presented so far (prior to hearing Dr. Neeper and the CRI presentations) is "actionable" with the possible addition of conditions such as vadose zone monitoring and possibly a different cap design. The permit as proposed is to convert one of the existing landfarm cells into a landfill cell capable of disposing of salt-contaminated wastes. The closure plan as presented may be sufficient as long as the Division can monitor it.

However, the details of the way the closure would be monitored are missing from the plan, those details are still needed, and the Division does not have enough inspectors

to monitor a closure. The proposed modification to this permit can be considered a major change in the way the facility is operated. The proposed landfill wastes would be considered hazardous wastes, except they originate from oil field operations and are RCRA exempt. An operator's history of reporting compliance to the Division is an important factor to consider prior to granting additional permits.

D. CRI's Evidence.

1. Summary: CRI presented its rebuttal case through cross-examination of GMI witnesses and testimony from its expert witnesses. CRI's position is that converting from a landfarm to a landfill constitutes a major change to the permit due to the dangers from salt-contaminated oil field wastes. The salt cannot be remediated and therefore must be carefully placed into a long term and secure facility. These wastes also will likely contain dangerous chemicals and materials that are a further threat to public health and to the environment. They must be securely encapsulated and prevented from being leached into surrounding soils and eventually into groundwater, which must be protected.

Based upon review of the Division's records, GMI does not have a history of adequate reporting and compliance with existing permits. GMI does not even know which cells in this landfarm already contain salt-contaminated wastes. The application submitted for approval by GMI is brief and inadequate in many critical areas. The Division should not approve this permit modification as it clearly does not ensure that public health and the environment will be protected.

2. Testimony:

a. Mr. Larry Gandy – CRI called Mr. Larry Gandy for questioning as a hostile witness. He is part owner in the facility and was primarily responsible for reporting and monitoring. Even after entering into an agreement with CMB Environmental & Geological Services, Inc., the required quarterly reports were not always submitted to the Division. The agreement with CMB does not specify that CMB submit the reports to the Division – although that is the understanding. GMI has had deficits in reporting to the NMED.

The Division's data concerning GMI's permit is not all in one place. Cells to be converted to landfill status will consist of groups of cells remediated to Division standards. GMI screens the trucked-in waste arriving at the facility for the type of waste by sampling, or by experience, then attempts to keep the salt waste separate from the oily wastes. The salt was not, though, always kept separate and it is not known which cells are salt-contaminated. Cell 22 has never received any salt waste.

GMI is not seeking to expand the footprint of the facility because it is cheaper to use existing cells. The GMI engineer did not provide the wording for the intended closure plan or any actual engineered plans - Mr. Marley developed the closure wording that was submitted in the application. There will be plenty of excavated, new soil to be

used for the berms and the closure – but this is not specified in the plan and has not been required by the Environmental Bureau.

b. Mr. James A. Bonner (Gordon Environmental) – Mr. Bonner is a registered professional geologist. He previously worked with S.M. Stoller Corporation and worked on the pre-siting and the siting of the nearby Triassic Park Facility, which was permitted through NMED, but never constructed. He was qualified as an expert hydrogeologist.

A test hole drilled in 1993 within the Triassic Park facility (PB-14) sampled water from the top of the Lower Dockum and has been considered to be the most representative well for groundwater below the facility. The water sampled from that well was tested at 4,900 TDS. This data was available to GMI and should have been used in the application for an emergency order, but was not. The core holes drilled for the Triassic Park facility showed the Lower Dockum to be a continuous thick clay layer. The Upper Dockum is more discontinuous and can switch from mostly clay and some sand, to mostly sand and some clay within a short lateral distance. Therefore, water could possibly migrate downward by hitting a clay lens and moving laterally until the clay changed to sand, then moving down again.

The GMI proposed landfill should either have numerous core holes drilled to prove the base is protected by natural clay or use an engineered barrier. The Triassic Park permit included a groundwater waiver covering the Santa Rosa waters at the bottom of the Lower Dockum group.

Monitor wells are normally installed upgradient and downgradient, but a water gradient may not even exist here.

The perched water probably moved into buried sandstones over millions of years and is trapped by impermeable barriers from further movement. The alluvium at this facility is approximately 30 feet thick and made of detritus from other formations and recent material. If fluid escapes from this proposed landfill, it likely will first move laterally through the alluvium – so engineered barriers for the cells are necessary. The Upper Dockum originally included fresh water, but the water became salty after millions of years of other water leaching salts into it from younger, overlying deposits that have since eroded.

c. Mr. Ian Keith Gordon P.E. – Mr. Gordon is president, and principal engineer of Gordon Environmental, Inc. He is a geotechnical engineer and was qualified as an expert engineer on land-disposal issues.

The application is grossly deficient – especially since the drawings are not engineering drawings, but simple sketches. No site specific topographic maps were included and are needed to design the drainage. The proposed construction of the engineered barrier is deficient, due to the lack of standards, test methods, and methods of protection. The method of construction used for the site berm is not provided.

Flooding concerns exist primarily because of the switch from landfarm to landfill – and this flooding must be estimated and dealt with. There are no quality assurance documents. There are not enough monitor wells and the application lacks statements about what will be tested in the wells and how the testing will be done.

If this salt waste were not RCRA exempt, some contaminants in the drill cuttings would be considered hazardous. Hazardous wastes must be disposed of into landfills with liners and fluid detection systems. The type of clay to be used in the clay liner or clay cap should be specified because some types of clay are affected by salt and some are affected by petrochemicals.

The standard limit of hydraulic conductivity is 1.0×10^{-7} centimeters per second after a compaction of 90 percent of standard. The applicant provided only one proctor density report (one sample) to determine the types of materials that will be used in the liner. That report stated the sample was compacted and the measured conductivity was 1.7×10^{-7} centimeters per second, which is closer to twice the desired conductivity.

There is no quality control plan to ensure the construction material will meet its performance specifications. There is no quality control on test methods and no planned third party observation during construction.

The application is lacking construction plans or construction quality control standards. A fluid collection system is needed to prevent a buildup of pressure on the liner and eventual liner failure. This requires detailed design, drawings, and construction.

The OCD has no water yield qualifications to meet in order to determine if water is to be protected. The Water Quality Control Commission ("WQCC") uses a yield hurdle in their policy of approximately 14 gallons per day, but it has not been proposed as a rule.

GMI's original application was not sufficiently detailed to verify if it was adequate to protect the public health and the environment. However, the last two weeks before the hearing were spent adding data that came closer to making that determination.

E. Dr. Neeper's Evidence.

1. Summary: Dr. Donald A. Neeper testified on behalf of New Mexico Citizens for Clean Air & Water, Inc. He was qualified as an expert in vadose zone transport and presented exhibits and testimony.

2. Testimony: Since salt cannot be remediated, Dr. Neeper is primarily concerned with containing the salt waste in the landfill – long after the landfill is closed. He is concerned about salt movement - as carried by evaporating waters - upwards towards the surface.

After the salt is "wicked" upwards, the surface soils will become "sodic" and vegetation will be destroyed. With no vegetation, erosion – especially through wind in this area – will spread the contamination. Since vegetation is vital to hold the soil from erosion, the permit requirements should include successful re-vegetation instead of just requiring re-seeding. This re-vegetation should be verified and monitored by the Division.

The methods of monitoring soil for contamination from this landfill should include traditional measurements and should also include the Sodium Adsorption Ratio (SAR) as the best overall index to monitor. To watch for movement of contaminants, the soil should be monitored at a close distance from where the waste is placed, instead of just sampling deeper monitoring wells.

Disposal of some solid debris in the waste may puncture the clay liner and should be avoided. The salt wastes are best deposited at or below ground level, instead of from 5 to 10 feet above ground level, as proposed by GMI. A clay cap should be installed with two feet of other soil on top of the clay.

The Division should not abuse the RCRA exemption and should take landfill permits seriously. His review of the Division's records indicate that OCD permitted waste disposal facilities all have a poor history of reporting, including GMI. Permits should not be routinely issued to companies with a poor reporting or compliance history. Prior to approving this landfill, the Division should convene a panel of experts who have dealt with landfills closed decades ago.

F. Public Notice Requirements.

1. Rule 711: GMI's permit application is governed by 19.15.9.711 NMAC ("Rule 711"), which applies to surface waste management facilities. Subsection B(1) of Rule 711 requires that an application for a permit to modify an existing facility must be filed on Form C –137 with the Division and the appropriate Division District Office. Subsection B(1) lists thirteen categories (a – m) of information that "shall" be included as part of the application. (Emphasis added.) Rule 711 also requires the applicant to "comply with Division guidelines" in submitting any such application.

OCD's Guidelines For Permit Application, Design, and Construction of Surface Waste Management Facilities, Revised 7-97, ("the Guidelines") offer guidance to operators in preparing permit applications for surface waste management facilities. The Guidelines state the applicant "shall submit an 'Application for Surface Waste Management Facility' accompanied by the information necessary to evaluate the application." (Emphasis added.) The Guidelines require applications be sufficiently complete in order for OCD to review them.

Under Rule 711, the applicant must demonstrate in its application that the proposed facility "will not adversely impact public health or the environment and will be in compliance with OCD rules and orders." Rule 711.B(1)(m). Once a complete

application has been filed, Rule 711 requires public notice of the filed application and at least a 30-day comment period for the public, based on the application on file with OCD.

Subsection B(2) of Rule 711 sets forth notice requirements for surface waste management disposal facilities. Those requirements are as follows:

> (a) Prior to public notice, the applicant shall give written notice of application to the surface owners of record within one (1) mile of the facility, the county commission where the facility is located or is proposed to be located, and the appropriate city official(s) if the facility is located or proposed to be located within city limits or within one (1) mile of the city limits. The Director may extend the distance requirements for notice if the Director determines the proposed facility has the potential to adversely impact public health or the environment at a distance greater than one (1) mile. The Director may require additional notice as needed. A copy and proof of such notice will be furnished to the Division.
>
> (b) The applicant will issue public notice in a form approved by the Division in a newspaper of general circulation in the county in which the facility is to be located. For permit modifications, the Division may require the applicant to issue public notice and give written notice as above.
>
> (c) Any person seeking to comment or request a public hearing on such application must file comments or hearing requests with the Division within 30 days of the date of public notice. Requests for a public hearing must be in writing to the Director and shall set forth the reasons why a hearing should be held. A public hearing shall be held if the Director determines there is significant public interest.
>
> (d) The Division will distribute notice of the filing of an application for a new facility or major modifications with the next OCD and OCC hearing docket following receipt of the application.

Rule 711.B(7) states that "[t]he Director may issue a permit upon finding that an acceptable application has been filed and that conditions of paragraphs 2 and 3 above have been met." (Emphasis added.) Paragraph 2 is the notice requirement set forth above; paragraph 3 describes financial assurance requirements.

2. Notice and Due Process Requirements Generally: In a recent opinion (July 18, 2005) of the New Mexico Supreme Court involving a landfill permit issued by the New Mexico Environment Department under the Solid Waste Act; NMSA 1978, Sections 74-9-1 to 43, (1990, as amended); the Court stressed the importance of public participation in the permitting process:

> Our courts have previously emphasized that legislative policy favors the public's ability to participate meaningfully in the landfill permitting process. (citation

omitted) [T]he Department's failure to comply with statutory notice requirements rendered subsequent administrative proceedings invalid. (Emphasis added.)

In The Matter of the Application of Rhino Environmental Services, Colonias Development Council v. Rhino Environmental Services Inc., and New Mexico Department of Environment, Supreme Court Case No. 28,337 at ¶22.

The New Mexico Supreme Court considered the issue of notice in connection with the Oil and Gas Act in Santa Fe Exploration Company v. Oil Conservation Commission, 114 N.M. 103, 835 P.2d 819 (1992). There, competing oil producers claimed denial of due process because they were not given notice the New Mexico Oil Conservation Commission ("the Commission") would consider limiting production from an oil pool. The Court disagreed and held the producers had been "reasonably informed" of the issues the Commission would address because they knew, prior to the hearing, the Commission would be considering production rates from the various wells and the correlative rights of all parties concerned. Unlike this case, Santa Fe involved participants to a correlative rights proceeding, not whether the general public had been given sufficient notice to participate meaningfully in a permit proceeding.

Notably, in Santa Fe, the Court rejected following McCoy v. New Mexico Real Estate Commission, 94 N.M. 602, 614 P.2d 14 (1980), as urged by the parties, a case involving a realtor who was denied an opportunity to address an issue that, for the first time, was raised by the Real Estate Commission on appeal. According to McCoy, if a matter is not within the range of issues or information for which the notice was given, then presenting that issue or information for the first time, after notice has been given, denies due process.

In another notice case, Nesbit v. City of Albuquerque, 91 N.M. 455, 575 P.2d 1340 (1977), the Supreme Court considered whether the public was afforded adequate opportunity to oppose a change in a development plan from 83 condominium units to 287 efficiencies and apartments. That case is important for three reasons.

First, Nesbit makes clear that, while certain types of modifications to a plan, which may be minor, may not warrant full notice, substantial changes to a plan do warrant full notice. Second, it stands for the proposition that notice must be sufficient for a reasonable person to realize the nature of the change in the use of a property. Third, Nesbit makes clear that a defect in the notice procedure will render all subsequent proceedings invalid.

To rule on CRI's Motion, the issue to be decided is whether a reasonable person had a meaningful opportunity to participate in the hearing on this matter, based on the status of GMI's application on file with the Division at the time notice was provided. Even though the notice is not required to lay out every element of the application and its supporting information, the notice must be sufficient so that an average citizen would have been aware, based upon that notice, what GMI was seeking to modify. More importantly, once being so notified, it must be determined whether the average citizen

then had access to information necessary for a meaningful opportunity to participate at the hearing. If the record upon which the citizen must participate lacked essential information on the activity to be permitted, then GMI did not comply with the requirements of Rule 711. W

G. The Public Was Denied Meaningful Participation.

Rule 711B(1) specifies the information that must be filed with the application for a new waste disposal facility, or a modification to an existing facility:

(a) The names and addresses of the applicant and all principal officers of the business if different from the applicant;

(b) A plat and topographic map showing the location of the facility in relation to governmental surveys (1/4 1/4 section, township, and range), highways or roads giving access to the facility site, watercourses, water sources, and dwellings within one (1) mile of the site;

(c) The names and addresses of the surface owners of the real property on which the management facility is sited and surface owners of the real property of record within one (1) mile of the site;

(d) A description of the facility with a diagram indicating location of fences and cattle guards, and detailed construction/installation diagrams of any pits, liners, dikes, piping, sprayers, and tanks on the facility;

(e) A plan for management of approved wastes.

(f) A contingency plan for reporting and cleanup of spills or releases;

(g) A routine inspection and maintenance plan to ensure permit compliance;

(h) A Hydrogen Sulfide Prevention and Contingency Plan to protect public health;

(i) A closure plan including a cost estimate sufficient to close the facility to protect public health and the environment; said estimate to be based upon the use of equipment normally available to a third party contractor;

(j) Geological/hydrological evidence, including depth to and quality of groundwater beneath the site, demonstrating that disposal of oilfield wastes will not adversely impact fresh water;

(k) Proof that the notice requirements of Section 19.15.9.711 NMAC have been met;

(l) Certification by an authorized representative of the applicant that information submitted in the application is true, accurate, and complete to the best of the applicant's knowledge.

(m) Such other information as is necessary to demonstrate that the operation of the facility will not adversely impact public health or the environment and that the facility will be in compliance with OCD rules and orders.

Both the Rule and the Guidelines state an application must contain information sufficient to evaluate it on its own merits. Only after a complete application has been filed, may the Division issue a Rule 711 permit.

In the instance of GMI's application, GMI was still in the process of collecting essential information necessary to support its application after filing it. Among the items required by Rule 711 to be part of the application, which GMI either failed to include with its application or provided in such sparse detail as to be non-responsive to Rule 711's requirements, were the following: (1) detailed construction/installation diagrams, as required by Rule 711.B(1)(d); (2) waste management plan, as required by Rule 711.B(1)(e); (3) closure plan including a cost estimate sufficient to close the facility, as required by Rule 711.B(1)(i); (4) hydrogen sulfide prevention and contingency plan to protect public health, as required by Rule 711.B(1)(h); (5) complete contingency plan for reporting and cleanup of spills and releases, as required by Rule 711.B(1)(f); (6) complete inspection and maintenance plan to ensure permit compliance, as required by Rule 711.B(1)(g); (7) diagram of the proposed facility, as required by Rule 711.B(1)(d); and (8) plat and topographic map showing the location of the facility, as required by Rule 711.B(1)(b).

In its Response In Opposition to CRI's Motion To Exclude From Consideration Information Not Contained Or Disclosed In Gandy Marley's Amended Application For Waste Management Facility, GMI maintains that its Prehearing Statement did not identify any new or additional information that was not consistent with its application and the public notice.

GMI wrongly assumes that simply because it provided information right up to the day of the hearing that related *in a general sense* to its application, it complied with Rule 711. GMI fails to explain, however, why information that should have been filed as part of the application package, and that was necessary for the public to meaningful participate at the hearing, was not made available with the application, or at least available at the time the application was noticed to the public, much less made available sufficiently in advance of the hearing.

Critical information pertaining to geological/hydrological evidence demonstrating that disposal of oilfield wastes would not adversely impact fresh water supplies, and

required to be filed with the application pursuant to Rule 711.B(1)(j), was not available until well after public notice was provided of the application.

Results from two monitor wells in the form of driller's logs of samples on MW#1 and MW#2, were not available before May 12, 2005, eleven days before the hearing. Results on trace fluid analysis and pump tests on MW#1 and MW#2 were not available until May 20, 2005, three days before the hearing. And not until the very day of the hearing, May 23, 2005, were results made available on compaction permeability tests on clay from MW#1 and MW#2. These events conflict with GMI's position that no new information came in after the application was filed and notice of it was provided.

It appears GMI first attempted to present a bare, minimum application, and then, as opposition surfaced, began expanding and supporting its application with more and more data. Although GMI ultimately presented an improved amended application, even after doing so it continued to add critical data, such as well data near the facility. The two wells drilled near (but not on) the facility were drilled, sampled, and pump tested, only a few days prior to the hearing, and none of this data was ever available for public inspection at the time notice was given.

OCD routinely continues cases where inadequate notice has been given to affected parties. Because only CRI and Dr. Neeper appeared to contest GMI's application, it might be argued no others were sufficiently concerned about the application or would have benefited from GMI's compliance with Rule 711. That is not the issue.

Notice requirements in general, and in this matter, Rule 711 in particular, are intended to afford the public a meaningful opportunity to participate. The waste GMI requests permission to receive at its facility is a potential threat to health and the environment and the public deserves an opportunity to meaningfully participate in such proceedings on an informed basis. That opportunity did not exist under the circumstances of this case.

H. <u>OCD Rules Require A Properly Noticed Public Hearing To Determine No Beneficial Use For Fresh Water Exists And That Did Not Occur</u>.

A further deficiency in the public notice for this matter arises in connection with an important part of GMI's case. Although GMI maintained the perched aquifer was protected, GMI also sought to establish that that source of groundwater below its landfarm is not entitled to protection as fresh water.

The data obtained from GMI's monitor wells indicates groundwater is at a depth of approximately 122 feet and contains less than 9,000 mg/l of total dissolved solids. Mr. Marley testified that the water is too saline for cattle to drink and, further, the aquifer may not be capable of a sufficient sustained yield for cattle or other uses.

OCD defines "Fresh Water (to be protected)" as "all underground waters containing 10,000 milligrams per liter (mg/l) or less of total dissolved solids (TDS) except for which, after notice and hearing, it is found there is no present or reasonably foreseeable beneficial use which would be impaired by contamination of such waters." 19.15.1.7.F(3) NMAC.

The notice provided for GMI's application stated it was seeking "a modification to their surface waste management facility to allow the facility to accept oilfield waste, exempt from RCRA Subtitle C, including chloride impacted debris...and certain non-exempt non-hazardous oilfield waste." The notice also stated "Gandy Marley, Inc. has provided information describing the construction of the cells and conditions at the site that make it suitable for the acceptance of such wastes."

There is no mention anywhere in the notice for the hearing that a fresh water supply (the perched aquifer) would be subject to a determination and a finding by the Hearing Examiner that it offered no present or reasonably foreseeable beneficial use which may be impacted by salt contamination in connection with approving GMI's permit. It is hard to imagine the average citizen would glean that possibility from the notice given for the hearing.

The notice of hearing given for GMI's application did not comply with 19.15.1.7.F(3) NMAC because it did not provide adequate notice that a non-beneficial use for fresh water would be made as part of granting GMI's application. A properly advertised notice of hearing that the perched aquifer is a fresh water supply for which GMI would request a finding of no present or foreseeable beneficial use in connection with requested approval of its application by the Division was required.

I. Technical Issues.

The proposed permit modification represents a fundamental and substantial change from GMI's existing landfarm operation to a landfill facility and would entail permanent disposal of salt-contaminated waste that can never be re-mediated, as well as the likely occasional disposal of materials that would be considered hazardous, in the absence of the RCRA oil field exemption.

To ensure protection of the public health and the environment, both today and in the future, such applications should strictly adhere to all Division permitting rules and guidelines and follow all industry best practices available for the design, construction, operation, closure, and post closure of landfills. The permit application should be sufficiently detailed and the operator's compliance record with the Division should be of a sufficient quality to reasonably ensure the facility will protect public health and the environment. Based upon these standards, the following issues are of concern in GMI's application.

The GMI facility has taken salt-contaminated wastes for many years. The facility owners testified, however, they could not recall which of the cells have taken salt waste. The Division's Environmental Bureau should instruct the operator on a method to

determine the location of salt wastes within its facility and then formulate a recommendation for what should be done about those wastes. A records search and a detailed soils sampling project may be necessary.

Testimony was provided that the alluvium is 30 feet thick in the area of GMI's facility. In addition, the testimony related that any exposure of salts to the surface would be damaging to the surface environment. For those two reasons, the cells should be installed deeper than the 20 feet proposed by GMI and the top of any salt waste placed within the cells should be near or below ground level and then permanently capped with adequate clay and soil to reduce the likelihood of salt wastes ever being exposed or wicked to the surface. The final cover to the cells should be as proposed by the Division – clay plus normal dirt for evapotranspiration. In addition, the successful growth of vegetation to stabilize and hold the soil should be required. This vegetation should be maintained and monitored for several years.

The type of clay to be used in the liner and cap of landfill cells should be determined and the compatibility checked with the types of materials to be placed into landfill cells. Additional testing of samples should be performed to ensure the compacted hydraulic conductivity of the clays to be used in the liner and cap is adequate. If not, thicker clay layers should be installed. To ensure the integrity of the cell liner, the cells should be appropriately graded and a permanent leachate detection and removal system should be installed.

As an example, the leachate system proposed by Dr. Neeper is suitable for this purpose without any pipes extending through the liner. GMI's proposal to remove water from the cells with a portable pump truck is not a preferred option.

Potentially, the biggest danger to the environment is if salt-contaminated waste is not buried deep enough and vegetation does not cover the closed facility. If this were to happen, then active dunes of salty soil might destroy large areas beyond this facility and the salt could find its way into whatever stream waters exist and spread even further.

Little testimony was provided on protecting surface water (drainages). The landfill will breach eventually and salts will spread laterally. Then, the affected lands will expand, but this may take decades to occur. A berm on the Caprock side of the landfarm will help delay this. This is yet another reason for GMI to install deeper cells than it proposes or is doing at this time. It may be more costly to do so, but it will delay the spreading of wastes.

For periodic monitoring, the sampling depth should be very close to the bottom of the facility and reports should include the Sodium Adsorption Ratio. The closure plan and post closure plan should include considerably more detail.

In the record in this case are numerous letters submitted to the Division by operators and others in Lea and Chaves counties. Most of these letters expressed the need for additional facilities to be permitted to dispose of solid oil field wastes. The

Division understands the need for an adequate number of permitted facilities located close enough to current drilling. However, one Division mandate is to regulate the oil and gas industry to protect the environment. Landfills are facilities that permanently store oil field wastes that cannot be remediated. The permitting process for these facilities must be appropriately thorough – and all landfills should be held to the same high standards.

Because the technical issues do not need to be resolved to act upon the Motion and CRI's motion to dismiss, those matters will not be discussed further.

J. The Status of the Emergency Order.

The Emergency Order Extension (Order No. 12306-A extending Order No. 12306) issued to GMI to allow it to continue to operate under OCD Permit Number NM-01-002 without being subject to the Division's March 4th letter provided it would remain in effect only until such time a determination was made by the Division on GMI's application to amend its current landfarm permit.

This Decision will conclude with an Order directing GMI to submit a revised application that conforms with Rule 711 to seek its requested permit modification. The Order will require that any such revised application must be readvertised and notice thereof given as required by Rule 711. Although not a final order on GMI's application, the Order nonetheless constitutes a determination by the Division on GMI's application.

The Division is concerned that data in the application for the Emergency Order, and relied upon by the Division to support the Emergency Order and its extension, was not consistent with the facts available to GMI at the time GMI filed its application with the Division. The depth to ground water and the total dissolved solids for ground water numbers were both incorrect compared with 1994 sampling at Triassic Park.

While information relied upon by the Division to support the Emergency Order and the extension were identified as preliminary, now, in light of evidence presented at the hearing, it is clear that information can no longer be relied upon to support the Emergency Order Extension.

Testimony of Mr. Bill Marley at the hearing on GMI's application established that GMI's March 10, 2005 application to take salt-contaminated wastes on a temporary basis was drafted from "memory" without GMI investigating its records. Two glaring examples demonstrate why the Emergency Order Extension should no longer remain in effect.

GMI's emergency application represented to the Division that groundwater 150 feet below the landfarm contained total dissolved solids in excess of 15,000 ppm when, in fact, information available to GMI when it filed its emergency application indicated groundwater 150 feet below its landfarm contained total dissolved solids of less than 5,000 ppm.

Additionally, GMI's emergency application represented that an impermeable redbed clay barrier of approximately 150 feet existed between GMI's landfarm and groundwater below it. In fact, such a barrier does not exist below GMI's landfarm.

While the emergency application may have been hastily prepared by GMI resulting in errors, the Division now knows, as does GMI, that key findings relied upon to issue the Emergency Order and the extension are no longer valid. For that reason, and, because this Order constitutes a determination on GMI's application, the Emergency Order Extension is no longer in effect and GMI must immediately comply with the Division's March 4th letter.

K. GMI's Failure To Comply With Quarterly Reporting Requirements Under Its Existing Permit.

GMI has a sketchy history of complying with Division reporting requirements. In fairness to GMI, many landfarm operators also have a poor history of meeting reporting obligations. GMI's hiring of CMB Environmental & Geological Services, Inc. to conduct sampling and analysis at its landfarm operation is a positive move. However, GMI's record of non compliance merits consideration in connection with any approval of its permit request to expand its landfarm operation to a landfill facility.

Rule 711.B(1)(m) requires an application shall contain "such other information as is necessary to demonstrate that the operation of the facility will not adversely impact public health or the environment and that the facility will be in compliance with OCD rules and orders." (Emphasis added.) Given GMI's past history of non compliance with OCD rules and orders in meeting its reporting requirements to the Division, GMI surprisingly did not include any information as part of its application demonstrating that its proposed landfill facility will, in fact, be operated in compliance with OCD rules and orders.

One of the statutory duties of the Division is "to regulate the disposition of nondomestic wastes resulting from the oil field service industry...to protect the public health and the environment including administering the Water Quality Act [Chapter 74, Article 6 NMSA 1978] as provided in Subsection E of Section 74-6-4 NMSA 1978." NMSA 1978, § 70-2-13 B(22) (1978, as amended). In evaluating whether GMI's application will protect the public health and the environment, and in administering the Water Quality Act as provided by NMSA 1978, § 74-6-4, GMI's past record of performance, or in this instance non performance, is a relevant consideration in acting upon GMI's application. Although the Order in this matter will not dispose of GMI's application in its entirety, if GMI's application is ultimately granted, or granted with conditions, a period of time (possibly, six months to one year) should be required for GMI to first demonstrate that it can comply with Division reporting requirements before it should be allowed to operate a landfill facility.

II. ORDER

THE DIVISION FINDS AND CONCLUDES AS FOLLOWS:

1. The Division has jurisdiction over this case and its subject matter.

2. Notice of the hearing in this matter was provided to the Chaves County Commissioners, the New Mexico Commissioner of Public Lands, the United States Bureau of Land Management, and was published in the Lovington Daily Leader on April 14, 2005, and in the Roswell Daily Record on April 15, 2005.

3. By the date of the hearing, May 23, 2005, the Division received 16 letters, each expressing opinions concerning this case. The names of the authors of those letters were read into the record at the hearing.

4. Notice of the hearing was posted on the Division's website and sent by e-mail to those entities who had requested notice of Division hearings.

5. GMI's initial and revised applications to amend its permit for a surface waste management facility to allow it to accept salt-contaminated oil field waste, failed to include all the information required by Rule 711 and did not comply with the notice requirements of Rule 711.

6. The Emergency Order Extension (Order No. 12306-A extending Order No. 12306) issued to GMI to allow it to continue to operate under OCD Permit Number NM-01-002 without being subject to the Division's March 4th letter should no longer be in effect.

7. GMI should immediately comply with the Division's March 4th letter.

8. GMI should have an opportunity to submit a revised application in conformity with Rule 711.

9. Any revised application filed by GMI should be readvertised and notice thereof given as required by Rule 711.

10. After GMI files a revised application in conformity with Rule 711, and after proper notice thereof is provided, the Director should exercise his discretion, pursuant to NMSA 1978, § 70-2-6 B (1935, as amended), to refer this matter directly to the Commission rather than have this matter return to the Hearing Examiner in the interests of administrative efficiency and to facilitate a speedy resolution of this matter.

IT IS THEREFORE ORDERED THAT:

1. The Emergency Order Extension (Order No. 12306-A extending Order No. 12306) issued to GMI to allow it to continue to operate under OCD Permit Number NM-01-002 without being subject to the Division's March 4th letter is hereby rescinded.

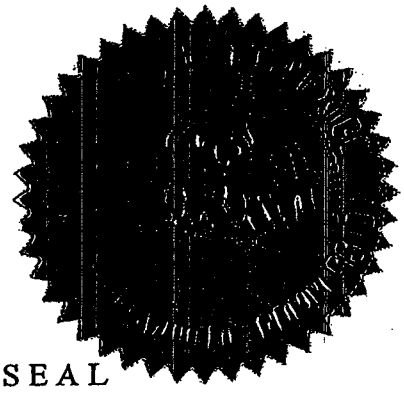
2. GMI shall immediately comply with the Division's March 4th letter.

3. GMI may submit a revised application in conformity with Rule 711.

4. Any revised application filed by GMI shall be readvertised and notice thereof shall be given as required by Rule 711.

5. Following filing by GMI of a revised application in conformity with Rule 711, and after proper notice thereof is provided, the Director hereby refers this matter directly to the Commission for further proceedings thereon.

DONE at Santa Fe, New Mexico, this 5th day of August, 2005.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.
Director

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

7001 1940 0004 7920 7553

March 4, 2005

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

Artesia Aeration, LLC
P.O. Box 310
Hobbs, NM 88240

Permit Number: NM-1-0030

Re: Administrative Modification of Landfarm Permits

The Oil Conservation Division (OCD) issued the landfarm permit identified above under OCD Rule 711. As explained in the public notice given prior to the issuance of the permit, the permit was for landfarming to remediate hydrocarbon-contaminated soils. The language of the permit, however, is broader, allowing the facility to accept oilfield contaminated solids which are either exempt from the Federal RCRA Subtitle C (hazardous waste) regulations or are "nonhazardous" by characteristic testing. If this language were interpreted to allow the landfarm to accept oilfield waste contaminated with salts, the salts could compromise the biodegradation capacity of the landfarm. And because salts leach more easily than hydrocarbons, the landfarm may pose a greater threat to groundwater.

According to the terms of the permit identified above, the OCD may change the permit conditions administratively for good cause shown as necessary to protect fresh water, human health and the environment. The OCD has determined that it is necessary to protect fresh water, human health and the environment to modify the permit as follows:

> **Effective immediately, the NMOCD permitted landfarm identified above is prohibited from accepting oilfield waste contaminated with salts.**

If the landfarm identified above wishes to accept oilfield waste contaminated with salts, you will need to file an application to modify the permit pursuant to OCD Rule 711.B(1) and follow the notice requirements of OCD Rule 711.B(2). If you have already filed a complete application for permit modification with this office and complied with the notice requirements, the OCD will process the application promptly.

Landfarms that wish to accept oilfield wastes contaminated with salts while their application for permit modification is pending may apply to the Division Director for an emergency order under OCD Rule 1202. Applications for emergency orders will be considered on a case-by-case basis.

This notice is being sent to all entities operating landfarm facilities in New Mexico permitted pursuant to OCD Rule 711, as shown on the attached list.

If you have any questions, please contact Ed Martin at (505) 476-3492 or emartin@state.nm.us.

Very truly yours,

Mark E. Fesmire, P.E

EXHIBIT
tabbies
B

DISTRIBUTION LIST

DD Landfarm, Inc. NM-1-0034
317 W. Blanco
Hobbs, NM 88242

C & C Landfarm, Inc. NM-1-0012
P.O. Box 55
Monument, NM 88265

Doom Landfarm NM-1-0033
Box 168
Jal, NM 88252

South Monument Waste
Management Facility, LLC NM-1-0032
P.O. Box 18
Hobbs, NM 88241

Lazy Ace Landfarm, LLC NM 1-0041
P.O. Box 160
Eunice, NM 88231

Lea Land, Inc. NM-1-0035
5644 Westheimer, #153
Houston, TX 77056

Gandy Marley, Inc. NM-1-0019
P.O. Box 1658
Roswell, NM 88202

Saunders Landfarm, LLC NM-1-0038
394 State Highwy. 206
Lovington, NM 88260

Rhino Oilfield Disposal, Inc. NM-1-0021
c/o Diamondback Disposal Services, Inc.
P.O. Box 2491
Hobbs, NM 88241

J & L Landfarm, Inc. NM-1-0023
P.O. Box 356
Hobbs, NM 88241-0356

Artesia Aeration, LLC NM-1-0030
P.O. Box 310
Hobbs, NM 88240

Sid Richardson Energy Services Co.; NM-2-0019
610 Commerce
Jal, NM 88252

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE PROCEEDING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF CONSIDERING:

REQUEST OF GANDY MARLEY INC.
FOR AN EMERGENCY ORDER TO OPERATE

CASE NO. 13454
ORDER NO. R-12306

ORDER

BY THE DIVISION:

This matter came on for decision before the Director of the Oil Conservation Division on March 10, 2005, upon the request of Gandy Marley Inc. for an emergency order pursuant to NMSA 1978, § 70-2-23 allowing its commercial landfarm, located in Sections 4, 5, 8, and 9, Township 11 South, Range 31 East, in Chaves County, New Mexico, to accept salt-contaminated oilfield waste until a determination is made by the Hearing Examiner on Gandy Marley Inc's application to amend its current landfarm permit.

NOW, on this 11 day of March 2005, the Division Director, having considered the request,

FINDS THAT:

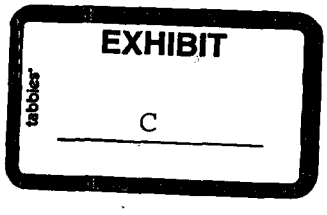
(1) The Oil Conservation Division ("Division") has jurisdiction over this case and its subject matter.

(2) Gandy Marley Inc. ("Operator") is the operator of record of a commercial landfarm located in Sections 4, 5, 8, and 9, Township 11 South, Range 31 East, in Chaves County, New Mexico (hereinafter "landfarm").

(3) The landfarm is permitted pursuant to 19.15.9.711 NMAC under permit number NM-01-0019.

(4) The public notice given prior to issuance of landfarm permits stated that the permits were for landfarming to remediate hydrocarbon-contaminated soils.

(5) The language of the landfarm permits, however, was broader than the language in the public notice, allowing the facilities to accept oilfield contaminated solids that are either exempt from the Federal RCRA Subtitle C (hazardous waste) regulations or are "nonhazardous" by characteristic testing or listing.



(6) If the language of the landfarm permits is interpreted to allow landfarms to accept oilfield waste contaminated with salts, the salts could compromise the biodegradation capacity of the landfarms. And because salts leach more easily than hydrocarbons, unless the site is appropriate, a landfarm accepting salt-contaminated oilfield wastes could pose a threat to groundwater.

(7) According to the terms of the landfarm permits, the Division may change the permit conditions administratively for good cause shown as necessary to protect fresh water, human health and the environment.

(8) By letter dated March 4, 2005, Division Director Mark Fesmire notified the holders of landfarm permits that the Division had determined that it was necessary to modify the landfarm permits as follows, in order to protect fresh water, human health and the environment:

> "Effective immediately, the NMOCD permitted landfarm identified above is prohibited from accepting oilfield waste contaminated with salts."

The letter stated that for a landfarm to accept salts, the operator would need to apply for a modification of the permit pursuant to 19.15.9.711.B(1) NMAC and follow the notice requirements of 19.15.9.711.B(2).

(9) Operator has applied for a modification of its permit to allow it to accept salt-contaminated oilfield wastes.

(10) On March 10, 2005, Operator applied for an emergency order allowing it to accept salt-contaminated oilfield waste pending a decision on its application for a permit modification. In support of its request, Operator asserts the following:

a. The depth to groundwater at the location of the landfarm is 150 feet.

b. The TDS level of the groundwater at the location of the landfarm is in excess of 15,000 PPM.

c. There are no fresh water wells or watercourses (wet or dry) within 1,000 feet of the landfarm.

d. There is an impermeable redbed clay barrier of approximately 150 feet between the surface and the groundwater.

e. The groundwater at the site is nonproduceable in both volume and quality.

f. An emergency order is necessary because there is a critical need in the area of the landfarm for a facility that can accept salt-contaminated soils due to extensive drilling programs and remediation programs in the area.

(11) The records of the Oil Conservation Division confirm Operator's description of conditions at the site of the landfarm.

(12) Conditions at the site of the landfarm are such that the landfarm may accept salt-contaminated oilfield wastes without posing a hazard to groundwater.

(13) Division staff has confirmed that the Operator will keep salt-contaminated oilfield waste separate from hydrocarbon-contaminated oilfield waste.

(14) Operator has demonstrated an emergency requiring the issuance of an order without a hearing allowing Operator to accept salt-contaminated oilfield waste at the landfarm pending a determination by the Hearing Examiner on Operator's application to amend the current permit.

IT IS THEREFORE ORDERED THAT:

(1) Gandy Marley Inc.'s request for an emergency order allowing it to accept salt-contaminated oilfield wastes pending a decision on its application for a permit modification is granted.

(2) This order shall remain effective as provided in NMSA 1978, § 70-2-23.

(3) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

for MARK E. FESMIRE, P.E.
Director

SEAL

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

CONSOLIDATED

APPLICATION OF THE OIL CONSERVATION DIVISION TO EXTEND THE EFFECTIVE DURATION OF AN EMERGENCY ORDER TO OPERATE ISSUED TO GANDY MARLEY, INC.

CASE NO. 13454
ORDER NO. 12306-A

AND

APPLICATION OF THE OIL CONSERVATION DIVISION TO EXTEND THE EFFECTIVE DURATION OF AN EMERGENCY ORDER TO OPERATE ISSUED TO ARTESIA AERATION, LLC.

CASE NO. 13455
ORDER NO. 12307-A

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 10:00 a.m. on March 25, 2005, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 25th day of March 2005, the Division Director, having considered the requests,

FINDS THAT:

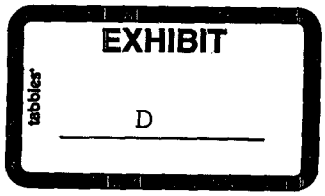
(1) Due public notice has been given, and the Oil Conservation Division ("Division") has jurisdiction over these cases and their subject matter.

(2) The Division seeks an order extending the effective duration of Emergency Order R-12306 issued to Gandy Marley Inc. and Emergency Order R-12307 issued to Artesia Aeration, LLC, until a determination is made on the applications of those operators to amend their landfarm permits.

(3) These cases were consolidated for purpose of the hearing.

(4) Notice of this hearing was provided to Gandy Marley Inc. and to Artesia Aeration, LLC ("Operators"). Notice of the hearing was also published in the Lovington Daily Leader on March 15, 2005, and in the Roswell Daily Record on March 17, 2005. Additionally, notice was posted on the Division's website and sent by e-mail to those parties who had requested notice of Division hearings.

(5) Gandy Marley, Inc. was present at the hearing and represented by counsel.



(6) Artesia Aeration, Inc. was not represented by counsel.

(7) Dr. Don Neeper appeared and provided testimony at the hearing.

(8) Controlled Recovery, Inc. ("CRI") was represented by counsel and appeared at the hearing in opposition to the Division's applications and presented testimony from one witness.

(9) The Division presented the following testimony and evidence:

a) Gandy Marley, Inc. ("Gandy Marley") is the operator of record and surface owner of a commercial landfarm located in Sections 4, 5, 8, and 9, Township 11 South, Range 31 East, in Chaves County, New Mexico. This landfarm is permitted pursuant to 19.15.9.711 NMAC under permit number NM-01-0019.

b) Artesia Aeration, L.L.C. ("Artesia Aeration") is the operator of record and surface owner of a commercial landfarm located in the N/2 of Section 7, Township 17 South, Range 32 East, in Lea County, New Mexico. This landfarm is permitted pursuant to 19.15.9.711 NMAC under permit number NM-01-0030.

c) The public notice given prior to issuance of a majority of landfarm permits in New Mexico stated: "Hydrocarbon contaminated soils associated with oil and gas production will be remediated...."

d) The language of those landfarm permits, however, was broader than the language in the public notice, allowing the facilities to accept oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Materials regulated pursuant to 20 NMAC 3.1 Subpart 1403 (NORM) and "Non-hazardous" non-exempt oilfield wastes.

e) Salt contamination decreases the biodegradation capacity of the landfarms and because salts leach more easily than hydrocarbons, a landfarm accepting salt-contaminated oilfield wastes could pose a threat to groundwater.

f) According to the terms of the landfarm permits referred to in "c" above, the Division may change the permit conditions administratively for good cause shown as necessary to protect fresh water, human health, and the environment.

g) Division Director Mark Fesmire notified the holders of the aforementioned landfarm permits by letter dated March 4, 2005, that the Division had determined that it was necessary to modify the landfarm permits in order to protect fresh water, human health and the environment. The permits were modified to add the following conditions: "Effective immediately, the NMOCD permitted landfarm ... is prohibited from accepting oilfield waste contaminated with salts."

The March 4th letter stated that for a landfarm to accept salts, the operator was required to apply for a modification of the permit pursuant to 19.15.9.711.B(1) NMAC and follow the notice requirements of 19.15.9.711.B(2).

h) The Operators have each applied for a modification of their permits to allow them to accept salt-contaminated oilfield wastes. The applications to modify those permits are set for hearing on May 19, 2005, before the Division.

i) On March 10, 2005, Gandy Marley applied for an emergency order allowing it to accept salt-contaminated oilfield waste pending a decision on its application for a permit modification. In support of this request, Gandy Marley asserted the following:

i. The depth to groundwater at the location of the landfarm is 150 feet.

ii. The TDS level of the groundwater at the location of the landfarm is in excess of 15,000 PPM.

iii. There are no fresh water wells or watercourses (wet or dry) within 1,000 feet of the landfarm.

iv. There is an impermeable redbed clay barrier of approximately 150 feet between the surface and the groundwater.

v. The groundwater at the site is nonproduceable in both volume and quality.

vi. An emergency order is necessary because there is a critical need in the area of the landfarm for a facility that can accept salt contaminated soils due to extensive drilling programs and remediation programs in the area.

j) On March 11, 2005, Artesia Aeration applied for an emergency order allowing it to accept salt contaminated oilfield waste pending a decision on its application for a permit modification. In support of this request, Artesia Aeration asserted the following:

i. There is no groundwater at the site as evidenced by a 120 feet deep monitor well.

ii. There are no fresh water wells or watercourses (wet or dry) within 1,000 feet of the landfarm.

iii. An emergency order is necessary because there is a critical need in the area of the landfarm for a facility that can accept salt-contaminated soils due to extensive drilling and remediation programs in the area by oil and gas operators.

k) The records of the Division confirm both Operators' descriptions of conditions at their landfarms.

l) Division staff confirmed that both Operators intend to keep salt contaminated oilfield waste separate from hydrocarbon contaminated oilfield waste.

m) By Emergency Order R-12306, issued on March 11, 2005, the Division Director determined that Gandy Marley had demonstrated an emergency need for the issuance of an order without hearing. This order allows Gandy Marley to accept salt contaminated oilfield wastes pending a decision on its application for a permit modification.

n) By Emergency Order R-12307, issued on March 11, 2005, the Division Director determined that Artesia Aeration had demonstrated an emergency need for the issuance of an order without hearing. This order allows Artesia Aeration to accept salt contaminated oilfield wastes pending a decision on its application for a permit modification.

o) In Emergency order R-12307, issued on March 11, 2005, the Division Director determined that Artesia Aeration had demonstrated an emergency requiring the issuance of an order without a hearing allowing Artesia Aeration to accept salt contaminated oilfield wastes pending a decision on its application for a permit modification.

p) Pursuant to NMSA 1978, § 70-2-23, an emergency order shall expire fifteen days from its effective date.

q) Division Orders R-12306 and R-12307 will expire after March 26, 2005.

CONCLUDES THAT:

(1) Prior to the March 4, 2005 letter, the original permits allowed the Operators to accept salt-contaminated oilfield wastes.

(2) The public notices for the permits issued to the Operators did not include acceptance of salt-contaminated oil field wastes as a requested term or condition of the permits.

(3) The public notices given for the permit applications were inadequate, rendering the permits voidable.

(4) The public did not receive proper notice of pending applications before the Division in order to have an adequate opportunity to comment upon the permit applications.

(5) The Division's March 4, 2005 administrative action, which notified all operators of landfarms who had received the voidable permits, that effective immediately, their permits were administratively modified. This modification prohibited them from accepting oilfield waste contaminated with salts, and was permissible and necessary to protect fresh water, human health and the environment.

(6) The Division's action administratively amending previously approved permits resulted in a majority of the landfarms no longer being able to received salt contaminated oil field wastes.

(7) The recent adoption of the Pit Rule (19.15.2.50 NMAC) has increased the need for remediation and disposal of drill cuttings within New Mexico.

(8) Removing the capability of a majority of landfarms to accept salt contaminated oil field wastes represented to the Division an unforeseen combination of circumstances calling for immediate action by the Division. This constituted an emergency. See definition of "Emergency," Blacks Law Dictionary, 5th ed.

(9) It was necessary for the Division to take appropriate action to ensure that adequate facilities would continue to be available to receive and treat salt contaminated oil field wastes.

(10) It was reasonable for the Division not to wait until a crisis in the disposal of contaminated soil exists, but to take action quickly to protect fresh water, human health and the environment.

(11) Preliminary evidence indicates that the hydrologic and geologic characteristics associated with the Gandy Marley and Artesia Aeration disposal sites are sufficient to prevent water contamination and to protect human health and the environment.

(12) Division Rule 1202.A allows emergency orders to be issued without a hearing and to have the same validity as if a hearing had been held, provided that the order may remain in effect for a period no longer than 15 days.

(13) The purpose of Division Rule 1202 is to allow an emergency order to be extended beyond the 15 day period, provided a hearing is held thereon, and provided further that notice of such hearing may be given within a lesser period than 20 days, as the Division may order. See also NMSA 1978, § 70-2-23.

(14) Adequate notice in compliance with OCD Rule 1202.B of the Division's application to extend the emergency order was provided.

(15) Any extensions of the two emergency orders at issue will be temporary, until final determination concerning the Operator's applications for permit modifications is made by the Division.

(16) Preliminary evidence indicates that allowing Gandy Marley and Artesia Aeration to accept salt-contaminated oilfield wastes at their landfarm facilities will not pose a danger to fresh water, human health or the environment.

(17) The decisions on the applications of Gandy Marley and Artesia Aeration for permit modification should be acted upon with dispatch and not be allowed to pend before the Division for an extended period of time.

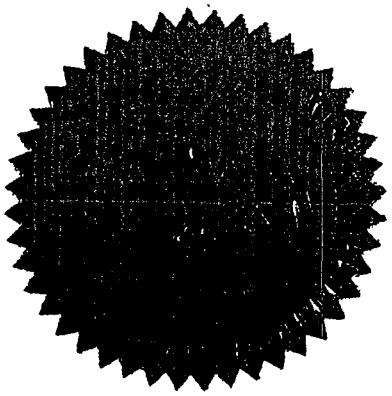
IT IS THEREFORE ORDERED THAT:

(1) The Division's application to extend Emergency Order R-12306 to allow Gandy Marley, Inc. to continue to operate under permit number NM-01-0020 without being subject to the Division's March 4, 2005 letter, is hereby approved; provided that any salt contaminated oil field waste shall be kept separate from non salt contaminated waste; and provided, further, that such extention shall only remain in effect until a determination is made by the Division on Gandy Marley's application to amend its current landfarm permit.

(2) The Division's application to extend Emergency Order R-12307 to allow Artesia Aeration, LLC to continue to operate under permit number NM-01-0030 without being subject to the Division's March 4, 2005 letter, is hereby approved; provided that any salt contaminated oil field waste shall be kept separate from non salt contaminated waste; and provided, further, that such extention shall only remain in effect until a determination is made by the Division on Artesia Aeration's application to amend its current landfarm permit.

(3) Jurisdiction of these cases is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.
Director

CMB

)vironmental & Geological Services, Inc.

Clayton M. Barnhill
CMB
Environmental & Geological
P.O. Box 2304
Roswell, NM 88202-2304
Tel (505) 622-2012
Fax (505) 622-2012
E-mail: cmbenviro@dfn.com

MR. BILL MARLEY
GANDY MARLEY INC.
PO BOX 1658
ROSWELL, NM 88202-1658

MAY 18, 2005

RE: SUBMITTAL OF MONITOR WELL PUMP TEST / FLUID RECOVERY REPORT
MONITOR WELLS # 1 & 2
GANDY MARLEY COMMERCIAL LANDFARM
SW/4 SEC.4, SE/4 SEC.5., NE/4 SEC.8, NW/4 SEC.9
T.11 S. R. 31 E.
CHAVES COUNTY,NEW MEXICO

DEAR MR. MARLEY:

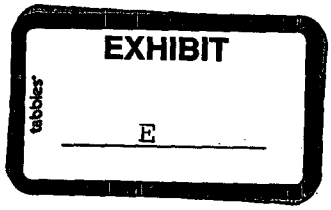
CLAYTON M. BARNHILL PG, DBA / CMB ENVIRONMENTAL AND GEOLOGICAL SERVICES, INC.ON BEHALF OF THE OWNER / OPWERATOR, GANDY MARLEY INC. SUBMITS THE ATTACHED MONITOR WELL PUMP TEST / FLUID RECOVERY TEST REPORT FOR THE ABOVE MENTIONED SITE.

IF YOU HAVE ANY QUESTIONS ABOUT THE CONTENTS OF THE REPORT, PLEASE DO NOT HESITATE TO CALL ME. THANK YOU.

SINCERELY,

CLAYTON M. BARNHILL, PG
CMB ENVIRONMENTAL & GEOLOGICAL SERVICES. INC.
PO BOX 2304
ROSWELL, NEW MEXICO 88202-2304
(505) 622-2012 PHONE FAX: (505) 625-0538
CMBENVIRO@DFN.COM

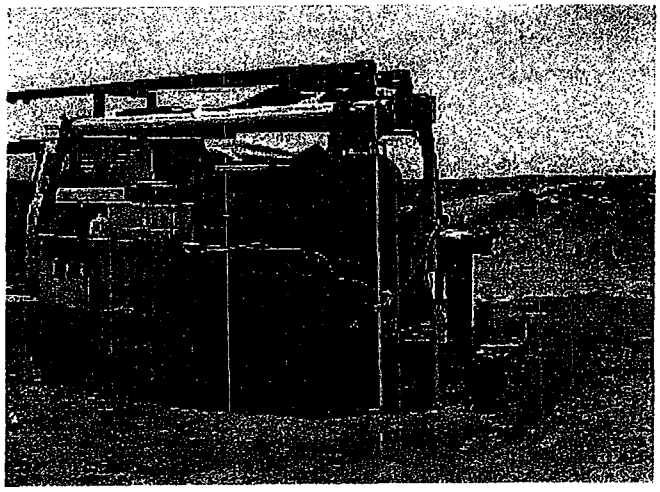
CC: GANDY MARLEY, INC.



Site Information:

Gandy Marley Inc.
Commercial Landfarm
SW/4 Section 4, SE/4 Section 5, NE/4 Section 8, NW/4 Section 9
Township 11 South Range 31 E
Chaves County, New Mexico

Monitor Well # 1: **N 33°23' 11.7"**
W 103° 50' 20.7"



Monitor Well # 2: **N 33°23' 05.0"**
W 103° 50' 12.3"

Work Performed:

CMB Environmental and Geological Services, Inc. performed a pump test / fluid recovery test of Monitor Wells # 1 & 2, on 05/12/05,05/16/ 05 and 05/17/05 to evaluate the permeability (or hydraulic conductivity) of the confined perched aquifer underlying the Gandy Marley Inc. Landfarm located in Chaves Co., N.M.

In this pump test/ fluid recovery test, the pre-test water levels and total depths of the wells were measured and noted. The same water level reference measuring point (top of casing) was used throughout the testing. A Grundfos Redi-flo2 1.8 "inch submersible pump was submersed into the wells to rapidly lower the water levels. The pump was set at total depth in the monitor wells or near total depth, and the wells were pumped at a constant rate until dry. Field water parameters of pH, conductivity, dissolved oxygen, and temperature were measured at various gallon intervals while the wells were being pumped dry. The exact time the pump quit pumping was noted, and the pump quickly removed. Periodic water levels (rising head) were collected with a Solonist water level meter to track the rate of water level recovery. After the pump test, water samples were collected from both wells and sent to Trace Analysis Inc., laboratory located in Lubbock Texas for chemical analysis. The pump was de-contaminated between pump tests by pumping a solution of alconox soap and water through the pump and rinsing with potable water.

Results of the pump tests / fluid recovery tests are as follows:

On May 12, 2005 a pump test / fluid recovery test of monitor well # 1 was performed by CMB Environmental and Geological Services, inc.

Initial water level monitor well # 1 was 133.72' feet. The total depth of Monitor Well # 1 was 203.40' At sixty gallons purged from the well the water level in the well was 194.65' and after the 1.8" Grundfos submersible pump was removed the water level was 189.0' and the recovery test was begun.

Fluid recovery rates were recorded every minute for 41 minutes and then at 10-minute increments until 181 minutes of fluid recovery were completed. The initial gallon per minute recovery rate was 0.16 gpm(230 gallons per day) and the final fluid recovery rate was 0.08 gpm (115.20 gallons per day). A significant 50% drop in the fluid recovery rate at the end of the test.

All data was plotted graphically, with time in minutes on the x –axis of the graph and gallons of water recovered in the monitor well on the y-axis of the graphs.

On May 16th and 17th 2005, similar pump tests / fluid recovery tests were conducted on monitor well # 1.

On May 16th, 2005 the initial water level in MW-1 was 130.32' and the pump was removed at 70 gallons purged from the well. Fluid recovery rates were recorded every minute for 17 minutes and then at 10-minute increments until 78 minutes of fluid recovery were completed. The initial gallon per minute fluid recovery rate was 0.098 gpm(141 gallons per day) and the final per minute fluid recovery rate was 0.094 gpm (135.36 gallons per day).

May 17th 2005, the initial water level was 131.32' and the pump was removed at 80 gallons purged from the well. Fluid recovery rates were recorded every minute for 20 minutes and then at 10-minute increments until 80 minutes of fluid recovery were completed. The initial gallon per minute fluid recovery rate was 0.1306 gpm(188 gallons per day) and the final per minute fluid recovery rate was 0.1045 gpm (150.48 gallons per day).

On May 16th, 2005 the initial water level in MW-2 was 122.62' and the total depth was 180.0' The pump was removed at 95 gallons purged from the well. Fluid recovery rates were recorded every minute for 47 minutes and then at 10-minute increments until 107 minutes of fluid recovery were completed. The initial gallon per minute fluid recovery rate was 0.4310 gpm(620.64 gallons per day) and the final per minute fluid recovery rate was 0.1471 gpm (211.82 gallons per day). A significant 66 % drop in the fluid recovery rate.

On May 17th, 2005 the initial water level in MW-2 was 124.70' and the pump was removed at 80 gallons purged from the well. Fluid recovery rates were recorded every minute for 12 minutes and then at 10-minute increments until 72 minutes of fluid recovery were completed. The initial gallon per minute fluid recovery rate was 0.1306 gpm(188 gallons per day) and the final per minute fluid recovery rate was 0.1515 gpm (218.16 gallons per day)
All field notes and graphs are attached.

Conclusions:

- The aquifer appears to be poorly transmissive, confined, perched aquifer.
- Fluid recovery rates are slow and the monitor wells take many hours to recover. The wells quickly pump dry. The wells could never sustain domestic, livestock, or commercial usage, but will make excellent monitor wells. MW-1 may produce an estimated sustained rate on the average of 154 gallons per day. MW-2 could possibly produce an estimated sustained rate 206 gallons per day. The wells are properly screened across the water bearing formations.
- Fluid recovery trends in monitor wells were at least 75% of the full recovery of the initial water levels indicating that a good percentage of total fluid recovery was obtained during the test.
- Water quality in the area is poor and not suitable for domestic or livestock use.(See attached Trace Analysis Summary Report)

Summary Report

Larry Gandy
Gandy Marley Inc
Box 1658
Roswell, NM 88202

Report Date: May 20, 2005

Work Order: 5051704

Project Location: Sec4,Sec5,Sec8,Sec9 T.11S R.31E
Project Name: Gandy Marley Landfarm
Project Number: Background (NM-711-1-0020)

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
62903	MW-2	water	2005-05-16	12:10	2005-05-16
62904	MW-1	water	2005-05-16	12:45	2005-05-16
62905	Trip Blank	water	2005-05-16	11:45	2005-05-16

Sample - Field Code		TPH DRO DRO (mg/L)		TPH GRO GRO (mg/L)
62903 - MW-2		<5.00		<0.500
62904 - MW-1		<5.00		<0.500

Sample: 62903 - 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		88.0	mg/L as CaCo3	4.00
Total Alkalinity		88.0	mg/L as CaCo3	4.00
Dissolved Calcium		172	mg/L	0.500
Dissolved Potassium		19.5	mg/L	0.500
Dissolved Magnesium		32.7	mg/L	0.500
Dissolved Sodium		3130	mg/L	0.500
Chloride		4790	mg/L	0.500
Specific Conductance		14200	uMHOS/cm	0.00
Nitrite-N		<0.0100	mg/L	0.0100
Nitrate-N		<1.00	mg/L	0.200
pH		8.15	s.u	0.00
Pyridine		<0.00500	mg/L	0.00500
n-Nitrosodimethylamine		<0.00500	mg/L	0.00500
2-Picoline		<0.00500	mg/L	0.00500
Methyl methanesulfonate		<0.00500	mg/L	0.00500
Ethyl methanesulfonate		<0.00500	mg/L	0.00500
Phenol		<0.00500	mg/L	0.00500
Aniline		<0.00500	mg/L	0.00500
bis(2-chloroethyl)ether		<0.00500	mg/L	0.00500

continued ...

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sample 68903 continued ...

Param	Flag	Result	Units	RL
2-Chlorophenol		<0.00500	mg/L	0.00500
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.00500
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.00500
Benzyl alcohol		<0.00500	mg/L	0.00500
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.00500
2-Methylphenol		<0.00500	mg/L	0.00500
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.00500
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.00500
n-Nitrosodi-n-propylamine		<0.00500	mg/L	0.00500
Hexachloroethane		<0.00500	mg/L	0.00500
Acetophenone		<0.00500	mg/L	0.00500
Nitrobenzene		<0.00500	mg/L	0.00500
n-Nitrosopiperidine		<0.00500	mg/L	0.00500
Isophorone		<0.00500	mg/L	0.00500
2-Nitrophenol		<0.00500	mg/L	0.00500
2,4-Dimethylphenol		<0.00500	mg/L	0.00500
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.00500
2,4-Dichlorophenol		<0.00500	mg/L	0.00500
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.00500
Benzoic acid		<0.00500	mg/L	0.00500
Naphthalene		<0.00500	mg/L	0.00500
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.00500
4-Chloroaniline		<0.00500	mg/L	0.00500
2,6-Dichlorophenol		<0.00500	mg/L	0.00500
Hexachlorobutadiene		<0.00500	mg/L	0.00500
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.00500
4-Chloro-3-methylphenol		<0.00500	mg/L	0.00500
2-Methylnaphthalene		<0.00500	mg/L	0.00500
1-Methylnaphthalene		<0.00500	mg/L	0.00500
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.00500
Hexachlorocyclopentadiene		<0.00500	mg/L	0.00500
2,4,6-Trichlorophenol		<0.00500	mg/L	0.00500
2,4,5-Trichlorophenol		<0.00500	mg/L	0.00500
2-Chloronaphthalene		<0.00500	mg/L	0.00500
1-Chloronaphthalene		<0.00500	mg/L	0.00500
2-Nitroaniline		<0.00500	mg/L	0.00500
Dimethylphthalate		<0.00500	mg/L	0.00500
Acenaphthylene		<0.00500	mg/L	0.00500
2,6-Dinitrotoluene		<0.00500	mg/L	0.00500
3-Nitroaniline		<0.00500	mg/L	0.00500
Acenaphthene		<0.00500	mg/L	0.00500
2,4-Dinitrophenol		<0.00500	mg/L	0.00500
Dibenzofuran		<0.00500	mg/L	0.00500
Pentachlorobenzene		<0.00500	mg/L	0.00500
4-Nitrophenol		<0.0250	mg/L	0.0250
2,4-Dinitrotoluene		<0.00500	mg/L	0.00500
1-Naphthylamine		<0.00500	mg/L	0.00500
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.00500
2-Naphthylamine		<0.00500	mg/L	0.00500
Fluorene		<0.00500	mg/L	0.00500
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.00500
Diethylphthalate		<0.00500	mg/L	0.00500
4-Nitroaniline		<0.00500	mg/L	0.00500

continued ...

sample 62903 continued . . .

Param	Flag	Result	Units	RL
Diphenylhydrazine		<0.00500	mg/L	0.00500
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.00500
Diphenylamine		<0.00500	mg/L	0.00500
4-Bromophenyl-phenylether		<0.00500	mg/L	0.00500
Phenacetin		<0.00500	mg/L	0.00500
Hexachlorobenzene		<0.00500	mg/L	0.00500
4-Aminobiphenyl		<0.00500	mg/L	0.00500
Pentachlorophenol		<0.00500	mg/L	0.00500
Anthracene		<0.00500	mg/L	0.00500
Pentachloronitrobenzene		<0.00500	mg/L	0.00500
Pronamide		<0.00500	mg/L	0.00500
Phenanthrene		<0.00500	mg/L	0.00500
Di-n-butylphthalate		<0.00500	mg/L	0.00500
Fluoranthene		<0.00500	mg/L	0.00500
Benzidine		<0.0100	mg/L	0.0100
Pyrene		<0.00500	mg/L	0.00500
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.00500
Butylbenzylphthalate		<0.00500	mg/L	0.00500
Benzo(a)anthracene		<0.00500	mg/L	0.00500
3,3-Dichlorobenzidine		<0.00500	mg/L	0.00500
Chrysene		<0.00500	mg/L	0.00500
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.0100
Di-n-octylphthalate		<0.00500	mg/L	0.00500
Benzo(b)fluoranthene		<0.00500	mg/L	0.00500
Benzo(k)fluoranthene		<0.00500	mg/L	0.00500
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.00500
Benzo(a)pyrene		<0.00500	mg/L	0.00500
3-Methylcholanthrene		<0.00500	mg/L	0.00500
Dibenzo(a,j)acridine		<0.00500	mg/L	0.00500
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.00500
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.00500
Benzo(g,h,i)perylene		<0.00500	mg/L	0.00500
Sulfate		2180	mg/L	0.500
Total Dissolved Solids		8970	mg/L	10.00
Total Silver		<0.00200	mg/L	0.00200
Total Arsenic		<0.0100	mg/L	0.0100
Total Barium		0.0160	mg/L	0.0100
Total Cadmium		<0.00100	mg/L	0.00100
Total Chromium		<0.0100	mg/L	0.0100
Total Mercury		<0.000200	mg/L	0.000200
Total Lead		<0.00500	mg/L	0.00500
Total Selenium		<0.0100	mg/L	0.0100
Bromochloromethane		<1.00	µg/L	1.00
Dichlorodifluoromethane		<1.00	µg/L	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1.00
Vinyl Chloride		<1.00	µg/L	1.00
Bromomethane (methyl bromide)		<1.00	µg/L	1.00
Chloroethane		<1.00	µg/L	1.00
Trichlorofluoromethane		<1.00	µg/L	1.00
Acetone		<10.0	µg/L	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	5.00
Carbon Disulfide		<1.00	µg/L	1.00
Acrylonitrile		<1.00	µg/L	1.00

continued . . .

sample 02953 continued ...

Param	Flag	Result	Units	RL
2-Butanone (MEK)		<5.00	µg/L	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	5.00
2-Hexanone		<1.00	µg/L	1.00
trans-1,4-Dichloro-2-butene		<10.0	µg/L	10.0
1,1-Dichloroethene		<1.00	µg/L	1.00
Methylene chloride		<5.00	µg/L	5.00
MTBE		<1.00	µg/L	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1.00
1,1-Dichloroethane		<1.00	µg/L	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1.00
2,2-Dichloropropane		<1.00	µg/L	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1.00
Chloroform		<1.00	µg/L	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1.00
1,1-Dichloropropene		<1.00	µg/L	1.00
Benzene		<1.00	µg/L	1.00
Carbon Tetrachloride		<1.00	µg/L	1.00
1,2-Dichloropropane		<1.00	µg/L	1.00
Trichloroethene (TCE)		<1.00	µg/L	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1.00
Bromodichloromethane		<1.00	µg/L	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1.00
Toluene		<1.00	µg/L	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1.00
1,3-Dichloropropane		<1.00	µg/L	1.00
Dibromochloromethane		<1.00	µg/L	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1.00
Chlorobenzene		<1.00	µg/L	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1.00
Ethylbenzene		<1.00	µg/L	1.00
m,p-Xylene		<1.00	µg/L	1.00
Bromoform		<1.00	µg/L	1.00
Styrene		<1.00	µg/L	1.00
o-Xylene		<1.00	µg/L	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1.00
2-Chlorotoluene		<1.00	µg/L	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1.00
Isopropylbenzene		<1.00	µg/L	1.00
Bromobenzene		<1.00	µg/L	1.00
n-Propylbenzene		<1.00	µg/L	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1.00
tert-Butylbenzene		<1.00	µg/L	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1.00
sec-Butylbenzene		<1.00	µg/L	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1.00
p-Isopropyltoluene		<1.00	µg/L	1.00
4-Chlorotoluene		<1.00	µg/L	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1.00
n-Butylbenzene		<1.00	µg/L	1.00

continued ...

sample 62905 continued

Param	Flag	Result	Units	RL
1,2-Dibromo-3-chloropropane		<2.00	µg/L	2.00
1,2,3-Trichlorobenzene		<5.00	µg/L	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	5.00
Naphthalene		<5.00	µg/L	5.00
Hexachlorobutadiene		<5.00	µg/L	5.00

Sample: 62904 - 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		90.0	mg/L as CaCo3	1.00
Total Alkalinity		90.0	mg/L as CaCo3	1.00
Dissolved Calcium		168	mg/L	0.500
Dissolved Potassium		21.5	mg/L	0.500
Dissolved Magnesium		37.4	mg/L	0.500
Dissolved Sodium		3340	mg/L	0.500
Chloride		4840	mg/L	0.500
Specific Conductance		14500	µMHOS/cm	0.00
Nitrite-N		<0.0100	mg/L	0.0100
Nitrate-N		<1.00	mg/L	0.200
pH		8.14	s.u.	0.00
Pyridine		<0.00500	mg/L	0.00500
n-Nitrosodimethylamine		<0.00500	mg/L	0.00500
2-Picoline		<0.00500	mg/L	0.00500
Methyl methanesulfonate		<0.00500	mg/L	0.00500
Ethyl methanesulfonate		<0.00500	mg/L	0.00500
Phenol		<0.00500	mg/L	0.00500
Aniline		<0.00500	mg/L	0.00500
bis(2-chloroethyl)ether		<0.00500	mg/L	0.00500
2-Chlorophenol		<0.00500	mg/L	0.00500
1,3-Dichlorobenzene (meta)		<0.00500	mg/L	0.00500
1,4-Dichlorobenzene (para)		<0.00500	mg/L	0.00500
Benzyl alcohol		<0.00500	mg/L	0.00500
1,2-Dichlorobenzene (ortho)		<0.00500	mg/L	0.00500
2-Methylphenol		<0.00500	mg/L	0.00500
bis(2-chloroisopropyl)ether		<0.00500	mg/L	0.00500
4-Methylphenol / 3-Methylphenol		<0.00500	mg/L	0.00500
n-Nitroso-di-n-propylamine		<0.00500	mg/L	0.00500
Hexachloroethane		<0.00500	mg/L	0.00500
Acetophenone		<0.00500	mg/L	0.00500
Nitrobenzene		<0.00500	mg/L	0.00500
n-Nitrosopiperidine		<0.00500	mg/L	0.00500
Isophorone		<0.00500	mg/L	0.00500
2-Nitrophenol		<0.00500	mg/L	0.00500
2,4-Dimethylphenol		<0.00500	mg/L	0.00500
bis(2-chloroethoxy)methane		<0.00500	mg/L	0.00500
2,4-Dichlorophenol		<0.00500	mg/L	0.00500
1,2,4-Trichlorobenzene		<0.00500	mg/L	0.00500
Benzoic acid		<0.00500	mg/L	0.00500
Naphthalene		<0.00500	mg/L	0.00500
a,a-Dimethylphenethylamine		<0.00500	mg/L	0.00500

continued ...

sample 62904 continued . .

Param	Flag	Result	Units	RL
1-Chloroaniline		<0.00500	mg/L	0.00500
2,6-Dichlorophenol		<0.00500	mg/L	0.00500
Hexachlorobutadiene		<0.00500	mg/L	0.00500
n-Nitroso-di-n-butylamine		<0.00500	mg/L	0.00500
4-Chloro-3-methylphenol		<0.00500	mg/L	0.00500
2-Methylnaphthalene		<0.00500	mg/L	0.00500
1-Methylnaphthalene		<0.00500	mg/L	0.00500
1,2,4,5-Tetrachlorobenzene		<0.00500	mg/L	0.00500
Hexachlorocyclopentadiene		<0.00500	mg/L	0.00500
2,4,6-Trichlorophenol		<0.00500	mg/L	0.00500
2,4,5-Trichlorophenol		<0.00500	mg/L	0.00500
2-Chloronaphthalene		<0.00500	mg/L	0.00500
1-Chloronaphthalene		<0.00500	mg/L	0.00500
2-Nitroaniline		<0.00500	mg/L	0.00500
Dimethylphthalate		<0.00500	mg/L	0.00500
Acenaphthylene		<0.00500	mg/L	0.00500
2,6-Dinitrotoluene		<0.00500	mg/L	0.00500
3-Nitroaniline		<0.00500	mg/L	0.00500
Acenaphthene		<0.00500	mg/L	0.00500
2,4-Dinitrophenol		<0.00500	mg/L	0.00500
Dibenzofuran		<0.00500	mg/L	0.00500
Pentachlorobenzene		<0.00500	mg/L	0.00500
4-Nitrophenol		<0.0250	mg/L	0.0250
2,4-Dinitrotoluene		<0.00500	mg/L	0.00500
1-Naphthylamine		<0.00500	mg/L	0.00500
2,3,4,6-Tetrachlorophenol		<0.00500	mg/L	0.00500
2-Naphthylamine		<0.00500	mg/L	0.00500
Fluorene		<0.00500	mg/L	0.00500
4-Chlorophenyl-phenylether		<0.00500	mg/L	0.00500
Diethylphthalate		<0.00500	mg/L	0.00500
4-Nitroaniline		<0.00500	mg/L	0.00500
Diphenylhydrazine		<0.00500	mg/L	0.00500
4,6-Dinitro-2-methylphenol		<0.00500	mg/L	0.00500
Diphenylamine		<0.00500	mg/L	0.00500
4-Bromophenyl-phenylether		<0.00500	mg/L	0.00500
Phenacetin		<0.00500	mg/L	0.00500
Hexachlorobenzene		<0.00500	mg/L	0.00500
4-Aminobiphenyl		<0.00500	mg/L	0.00500
Pentachlorophenol		<0.00500	mg/L	0.00500
Anthracene		<0.00500	mg/L	0.00500
Pentachloronitrobenzene		<0.00500	mg/L	0.00500
Pronamide		<0.00500	mg/L	0.00500
Phenanthrene		<0.00500	mg/L	0.00500
Di-n-butylphthalate		<0.00500	mg/L	0.00500
Fluoranthene		<0.00500	mg/L	0.00500
Benzidine		<0.0100	mg/L	0.0100
Pyrene		<0.00500	mg/L	0.00500
p-Dimethylaminoazobenzene		<0.00500	mg/L	0.00500
Butylbenzylphthalate		<0.00500	mg/L	0.00500
Benzo(a)anthracene		<0.00500	mg/L	0.00500
3,3-Dichlorobenzidine		<0.00500	mg/L	0.00500
Chrysene		<0.00500	mg/L	0.00500
bis(2-ethylhexyl)phthalate		<0.0100	mg/L	0.0100

continued . .

sample: 68904 continued . .

Param	Flag	Result	Units	RL
Di-n-octylphthalate		<0.00500	mg/L	0.00500
Benzo(b)fluoranthene		<0.00500	mg/L	0.00500
Benzo(k)fluoranthene		<0.00500	mg/L	0.00500
7,12-Dimethylbenz(a)anthracene		<0.00500	mg/L	0.00500
Benzo(a)pyrene		<0.00500	mg/L	0.00500
3-Methylcholanthrene		<0.00500	mg/L	0.00500
Dibenzo(a,j)acridine		<0.00500	mg/L	0.00500
Indeno(1,2,3-cd)pyrene		<0.00500	mg/L	0.00500
Dibenzo(a,h)anthracene		<0.00500	mg/L	0.00500
Benzo(g,h,i)perylene		<0.00500	mg/L	0.00500
Sulfate		1760	mg/L	0.500
Total Dissolved Solids		8930	mg/L	10.00
Total Silver		<0.00200	mg/L	0.00200
Total Arsenic		<0.0100	mg/L	0.0100
Total Barium		0.0380	mg/L	0.0100
Total Cadmium		<0.00100	mg/L	0.00100
Total Chromium		<0.0100	mg/L	0.0100
Total Mercury		<0.000200	mg/L	0.000200
Total Lead		<0.00500	mg/L	0.00500
Total Selenium		<0.0100	mg/L	0.0100
Bromodichloromethane		<1.00	µg/L	1.00
Dichlorodifluoromethane		<1.00	µg/L	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1.00
Vinyl Chloride		<1.00	µg/L	1.00
Bromomethane (methyl bromide)		<1.00	µg/L	1.00
Chloroethane		<1.00	µg/L	1.00
Trichlorofluoromethane		<1.00	µg/L	1.00
Acetone		<10.0	µg/L	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	5.00
Carbon Disulfide		<1.00	µg/L	1.00
Acrylonitrile		<1.00	µg/L	1.00
2-Butanone (MEK)		<5.00	µg/L	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	5.00
2-Hexanone		<1.00	µg/L	1.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10.0
1,1-Dichloroethene		<1.00	µg/L	1.00
Methylene chloride		<5.00	µg/L	5.00
MTBE		<1.00	µg/L	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1.00
1,1-Dichloroethane		<1.00	µg/L	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1.00
2,2-Dichloropropane		<1.00	µg/L	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1.00
Chloroform		<1.00	µg/L	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1.00
1,1-Dichloropropene		<1.00	µg/L	1.00
Benzene		<1.00	µg/L	1.00
Carbon Tetrachloride		<1.00	µg/L	1.00
1,2-Dichloropropane		<1.00	µg/L	1.00
Trichloroethene (TCE)		<1.00	µg/L	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1.00
Bromodichloromethane		<1.00	µg/L	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	5.00

continued . . .

sample 62904 continued ...

Param	Flag	Result	Units	RL
cis-1,3-Dichloropropene		<1.00	µg/L	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1.00
Toluene		<1.00	µg/L	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1.00
1,3-Dichloropropane		<1.00	µg/L	1.00
Dibromochloromethane		<1.00	µg/L	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1.00
Chlorobenzene		<1.00	µg/L	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1.00
Ethylbenzene		<1.00	µg/L	1.00
m,p-Xylene		<1.00	µg/L	1.00
Bromoform		<1.00	µg/L	1.00
Styrene		<1.00	µg/L	1.00
o-Xylene		<1.00	µg/L	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1.00
2-Chlorotoluene		<1.00	µg/L	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1.00
Isopropylbenzene		<1.00	µg/L	1.00
Bromobenzene		<1.00	µg/L	1.00
n-Propylbenzene		<1.00	µg/L	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1.00
tert-Butylbenzene		<1.00	µg/L	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1.00
sec-Butylbenzene		<1.00	µg/L	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1.00
p-Isopropyltoluene		<1.00	µg/L	1.00
4-Chlorotoluene		<1.00	µg/L	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1.00
n-Butylbenzene		<1.00	µg/L	1.00
1,2-Dibromo-3-chloropropane		<2.00	µg/L	2.00
1,2,3-Trichlorobenzene		<5.00	µg/L	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	5.00
Naphthalene		<5.00	µg/L	5.00
Hexachlorobutadiene		<5.00	µg/L	5.00

Sample: 62905 - Trip Blank

Param	Flag	Result	Units	RL
Bromochloromethane		<1.00	µg/L	1.00
Dichlorodifluoromethane		<1.00	µg/L	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1.00
Vinyl Chloride		<1.00	µg/L	1.00
Bromomethane (methyl bromide)		<1.00	µg/L	1.00
Chloroethane		<1.00	µg/L	1.00
Trichlorofluoromethane		<1.00	µg/L	1.00
Acetone		53.7	µg/L	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	5.00
Carbon Disulfide		<1.00	µg/L	1.00
Acrylonitrile		<1.00	µg/L	1.00
2-Butanone (MEK)		<5.00	µg/L	5.00

continued ...

sample 62907 continued ...

Param	Flag	Result	Units	RL
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	5.00
2-Hexanone		<1.00	µg/L	1.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10.0
1,1-Dichloroethene		<1.00	µg/L	1.00
Methylene chloride		<5.00	µg/L	5.00
MTBE		<1.00	µg/L	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1.00
1,1-Dichloroethane		<1.00	µg/L	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1.00
2,2-Dichloropropane		<1.00	µg/L	1.00
1,2-Dichloroethene (EDC)		<1.00	µg/L	1.00
Chloroform		<1.00	µg/L	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1.00
1,1-Dichloropropene		<1.00	µg/L	1.00
Benzene		<1.00	µg/L	1.00
Carbon Tetrachloride		<1.00	µg/L	1.00
1,2-Dichloropropane		<1.00	µg/L	1.00
Trichloroethene (TCE)		<1.00	µg/L	1.00
Dibromomethane (methylene bromide)		<1.00	µg/L	1.00
Bromodichloromethane		<1.00	µg/L	1.00
2-Chloroethyl vinyl ether		<5.00	µg/L	5.00
cis-1,3-Dichloropropene		<1.00	µg/L	1.00
trans-1,3-Dichloropropene		<1.00	µg/L	1.00
Toluene		<1.00	µg/L	1.00
1,1,2-Trichloroethane		<1.00	µg/L	1.00
1,3-Dichloropropane		<1.00	µg/L	1.00
Dibromochloromethane		<1.00	µg/L	1.00
1,2-Dibromoethane (EDB)		<1.00	µg/L	1.00
Tetrachloroethene (PCE)		<1.00	µg/L	1.00
Chlorobenzene		<1.00	µg/L	1.00
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1.00
Ethylbenzene		<1.00	µg/L	1.00
m,p-Xylene		<1.00	µg/L	1.00
Bromoform		<1.00	µg/L	1.00
Styrene		<1.00	µg/L	1.00
o-Xylene		<1.00	µg/L	1.00
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1.00
2-Chlorotoluene		<1.00	µg/L	1.00
1,2,3-Trichloropropane		<1.00	µg/L	1.00
Isopropylbenzene		<1.00	µg/L	1.00
Bromobenzene		<1.00	µg/L	1.00
n-Propylbenzene		<1.00	µg/L	1.00
1,3,5-Trimethylbenzene		<1.00	µg/L	1.00
tert-Butylbenzene		<1.00	µg/L	1.00
1,2,4-Trimethylbenzene		<1.00	µg/L	1.00
1,4-Dichlorobenzene (para)		<1.00	µg/L	1.00
sec-Butylbenzene		<1.00	µg/L	1.00
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1.00
p-isopropyltoluene		<1.00	µg/L	1.00
4-Chlorotoluene		<1.00	µg/L	1.00
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1.00
n-Butylbenzene		<1.00	µg/L	1.00
1,2-Dibromo-3-chloropropane		<2.00	µg/L	2.00

continued ...

sample 52903 continued ...

Param	Flag	Result	Units	RL
1,2,3-Trichlorobenzene		<5.00	µg/L	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	5.00
Naphthalene		<5.00	µg/L	5.00
Hexachlorobutadiene		<5.00	µg/L	5.00

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: 5051704

Company Name: Gandy Marley Inc
Phone #: 505-347-0434
Address: (Street, City, Zip) PO Box 1658 Roswell NM 88202
Fax #: 505-347-0435
e-mail: gandy2@leaco.net
Contact Person: Mike Marley or Larry Gandy
Invoice to: (If different from above)
Project #: Quarterly Sampling (NM-711-1-0020) Chaves Co, NM
Project Name: Gandy Marley OCD Landfarm
Project Location: SW/4 Sec. 4, SE/4 Sec. 5, NE/4 Sec 8, NW/4 Sec. 9 T11S R31E
Sampler Signature: [signature]

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602; BTEX 8021B/602; TPH 418.1/TX1005; TX 1005 Extended (C35); 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 (GRO DRO); GC/MS Vol. 8260B/624; GC/MS Semi. Vol. 8270C/625; PCB's 8082/608; Pesticides 8081A/608; BOD, TSS, pH; Moisture Content; NO3, NO2, TDS; Na, Ca, Mg, K, Conductivity, Total Alkalinity; Cl, SO4, CO3, HCO3, pH; Turn Around Time if different from standard (48 Hr); Hold

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	Matrix	Preservative Method	Sampling Date	Sampling Time	Analyses marked
62897	OCD Cell #15	2	4oz	Soil	None	5/16/05	10:18	BTEX, TPH, TCLP Metals, Na/Ca/Mg/K, Cl/SO4, 48 Hr
98	OCD Cell #16	↓	↓	↓	↓	↓	10:25	↓
99	OCD Cell #17	↓	↓	↓	↓	↓	11:00	↓
900	OCD Cell #18	↓	↓	↓	↓	↓	11:10	↓
901	OCD Cell #19	↓	↓	↓	↓	↓	11:25	↓
902	OCD Cell #20	↓	↓	↓	↓	↓	11:35	↓
903	MW-2	10		Water	HCl 6/4, HNO3 1/4, H2SO4 1/4, None 1/6	5/16/05	12:10	Total Metals, TCLP Pesticides/RCI, 8260B, 8270C, NO3/NO2/TDS, Na/Ca/Mg/K, Cl/SO4, 48 Hr
04	MW-1	10		Water	HCl 4/6, HNO3 1/4, H2SO4 1/4, None 1/6	5/16/05	12:45	Total Metals, TCLP Pesticides/RCI, 8260B, 8270C, NO3/NO2/TDS, Na/Ca/Mg/K, Cl/SO4, 48 Hr
05	TRIP Blank	2		Water	None	5/16/05	11:45	8260B

Relinquished by	Date	Time	Received by	Date	Time
[signature]	5/16/05	13:00	[signature]	5/16/5	13:00 MST
[signature]	5/16/5	4:25			
			Received at Laboratory by: [signature]	5-16-05	4:25

LAB USE ONLY
Intact: Y / N
Headspace: Y / N
Temp: 4°
Log-in Review: MC

REMARKS: Send Copy of Results to: cmbenviro@hn.com

☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

4C/p 62903-04 5/19/05

Carrier #: [signature]

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

ORIGINAL COPY

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:	
APPLICATION OF GANDY MARLEY, INC., TO MODIFY THEIR EXISTING NMOCD RULE 711 PERMIT NO. NM-01-019 SO THAT THEY MAY ACCEPT SALT-CONTAMINATED OILFIELD WASTES	CASE NO. 13,480

ORIGINAL

2005 JUN 2 PM 2 47

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

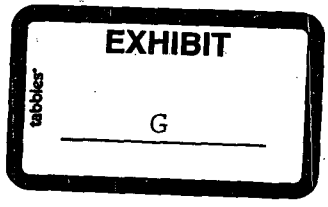
Volume I, May 23rd, 2005

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Monday, May 23rd, 2005, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
(505) 989-9317



Q. Down -- What are the notations where it says "pb"? It looks like it's along the road. pb-27, pb-26, pb-1. Do you see those?

A. Yes, sir.

Q. What does that signify?

A. Those are borings that were drilled in 1993 for the 1994 study done by Jim Bonner.

Q. And were those completed as monitor wells?

A. No, sir.

Q. What were -- If you know, what were they used for?

A. Just to verify geology.

Q. And so you wanted to have actual completed wells at the location you were proposing for the landfill cells; is that correct?

A. Yes, sir.

Q. And have you received results from that drilling?

A. Yes, sir.

Q. Have those results indicated the volume of water --

A. Yes, sir.

Q. -- that could be obtained from those two wells?

A. Yes, sir.

Q. Is that volume sufficient for you to use in any ranching or cattle raising operations?

A. No, sir.

Q. And why is that?

A. It would take between 20 and 30 wells of that size to sustain. There's not enough volume to even run a windmill.

Q. And so do you intend to continue to use the well -- the water from on top of the caprock?

A. Yes, sir.

Q. Are there any other anticipated uses of the property on top of those wells, other than for either grazing or landfill/landfarm operations?

A. No, sir. The water quality is very unsatisfactory for livestock.

Q. And explain that, please.

A. Sulfates are extremely high. I can't remember exactly the range. If you could let me look at the analysis. Sulfates over 500 parts per million are not suitable for livestock. TDS's over 7000 parts per million are not suitable for pregnant or lactating cows, which if a cow is not pregnant she's lactating. If she's not one or the other, she's not on my ranch.

Q. I'm handing you Exhibit 8. Are those the -- those are the results you were referring to?

A. Yes, sir.

Q. Okay, I want you to go through again what you

just testified, looking at those results.

A. Okay, these wells came up in sulfates on -- page numbers -- fourth page -- no, that's not sulfates, that's sodium. Where -- Give me a minute.

Okay, on the seventh page back, total dissolved solids, 8930 --

MR. APODACA: I'm sorry, which page are you on, sir?

THE WITNESS: The seventh page from the front.

MS. HOLLINGSWORTH: The page numbers are on it.

THE WITNESS: I can't read it on this copy. Oh, page number 7 of 10, excuse me.

Q. (By Mr. Domenici) And it's down about 10 items or so?

A. Yes, sir, it's highlighted -- or bolder print. Total dissolved solids, 8930. Anything over 7000 parts per million TDS is considered unsuitable for livestock. Sulfates over 500, which in this one it's 1760; it's unsuitable for livestock.

Q. Let me stop you for a second. You're stating that -- I'm marking -- I hand you what I've marked as Exhibit 9. Is that your reference for stating that certain levels are unsuitable for livestock?

A. Yes, sir, it's one of my references.

Q. And that would be which page of that exhibit, if

you could?

A. Actually, this one shows sulfate at 100 and 300, so 400. It's behind the "Beef Briefs".

Q. Is it the section called "Salinity"?

A. Where are you at? This section? Yes, sir, that section. And then --

Q. Okay, let's go through them one at a time. So --

A. Okay.

Q. -- on the TDS section, the category that concerns you is which one?

A. The -- anything over 7000 "should be avoided if possible. Pregnant, lactating, stressed or young animals can be affected. Very saline."

Q. Okay, and repeat again for the record how your cattle operations generate or produce pregnant or lactating cows.

A. We start calving the first of February, so they're pregnant for the nine months proceeding that. As soon as they are not pregnant, they've lactating, they've got a calf on their side. Late April, bulls are placed with the cows for re-breeding. So before the calves are -- while the calves are still lactating, the cows are re-breeding.

Q. So all of your cows, or virtually all of them, are always in this category of pregnant or lactating?

A. Yes, sir, if -- in the fall, if she did not raise a calf and is not pregnant, she goes to the sale barn.

Q. Okay, on the next pages they have other items, if you look at Exhibit 9. What other constituents concern you about with respect to utilizing this water for your cattle operations?

A. At the bottom of the page, the "Water Quality Guidelines", over to the next page, it shows sulfates at -- you add the two together to 400 parts per million.

Q. And what does the well -- What do the wells' data show?

A. The well data showed 1760 on one, 2180 on the other. Calcium shows to be 150 on this table, the upper range. We have calcium at 172 on one well and 168 on the other.

Q. Are these the type of tables that you rely on in your cattle operation, the type of documents?

A. Yes, sir.

MR. DOMENICI: I'll move admission of Exhibit 9.

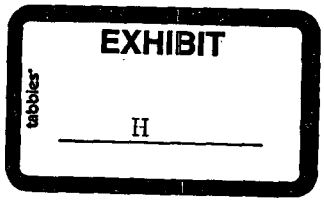
EXAMINER JONES: Any objection?

MR. FELDEWERT: No objection.

MR. DOMENICI: And I'll move admission of Exhibit 8.

MR. FELDEWERT: No objection.

EXAMINER JONES: Exhibits 8 and 9 --



Summary Report

Larry Gandy
Gandy Marley Inc.
Box 1658
Roswell, NM 88202

Report Date: August 16, 2005

Work Order: 5081214

Project Location: Sec 8,Sec 9,Sec 5,Sec 9,/Chaves ,NM
Project Name: GMI Landfarm
Project Number: 3rd Quarter Soil Sampling 2005

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
70628	Cell 20 Sample 1	soil	2005-08-09	13:40	2005-08-12
70629	Cell 20 Sample 2	soil	2005-08-09	14:00	2005-08-12
70630	Cell 20 Sample 3	soil	2005-08-09	14:20	2005-08-12
70631	Cell 20 Sample 4	soil	2005-08-09	14:45	2005-08-12
70632	Cell 20 Sample 5	soil	2005-08-09	15:00	2005-08-12
70633	Cell 17 Sample 1	soil	2005-08-09	09:45	2005-08-12
70634	Cell 17 Sample 2	soil	2005-08-09	10:00	2005-08-12
70635	Cell 17 Sample 3	soil	2005-08-09	10:20	2005-08-12
70636	Cell 17 Sample 4	soil	2005-08-09	10:40	2005-08-12
70637	Cell 17 Sample 5	soil	2005-08-09	11:10	2005-08-12
70638	Cell 18 Sample 1	soil	2005-08-09	11:50	2005-08-12
70639	Cell 18 Sample 2	soil	2005-08-09	12:15	2005-08-12
70640	Cell 18 Sample 3	soil	2005-08-09	12:35	2005-08-12
70641	Cell 18 Sample 4	soil	2005-08-09	13:00	2005-08-12
70642	Cell 18 Sample 5	soil	2005-08-09	13:15	2005-08-12
70643	Cell 19 Sample 1	soil	2005-08-10	10:47	2005-08-12
70644	Cell 19 Sample 2	soil	2005-08-10	11:02	2005-08-12
70645	Cell 19 Sample 3	soil	2005-08-10	11:10	2005-08-12
70646	Cell 19 Sample 4	soil	2005-08-10	11:20	2005-08-12
70647	Cell 19 Sample 5	soil	2005-08-10	11:30	2005-08-12
70648	Cell 22 Sample 1	soil	2005-08-10	12:53	2005-08-12
70649	Cell 22 Sample 2	soil	2005-08-10	13:00	2005-08-12
70650	Cell 22 Sample 3	soil	2005-08-10	13:25	2005-08-12
70651	Cell 22 Sample 4	soil	2005-08-10	13:32	2005-08-12
70652	Cell 22 Sample 5	soil	2005-08-10	13:40	2005-08-12
70653	Cell 21 Sample 1	soil	2005-08-10	11:50	2005-08-12
70654	Cell 21 Sample 2	soil	2005-08-10	12:00	2005-08-12
70655	Cell 21 Sample 3	soil	2005-08-10	12:16	2005-08-12
70656	Cell 21 Sample 4	soil	2005-08-10	12:30	2005-08-12
70657	Cell 21 Sample 5	soil	2005-08-10	12:40	2005-08-12
70658	Cell 16 Sample 1	soil	2005-08-10	14:12	2005-08-12
70659	Cell 16 Sample 2	soil	2005-08-10	14:20	2005-08-12
70660	Cell 16 Sample 3	soil	2005-08-10	14:30	2005-08-12
70661	Cell 16 Sample 4	soil	2005-08-10	14:37	2005-08-12
70662	Cell 16 Sample 5	soil	2005-08-10	14:45	2005-08-12
70663	Cell 15 Sample 1	soil	2005-08-10	14:55	2005-08-12
70664	Cell 15 Sample 2	soil	2005-08-10	15:02	2005-08-12

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
70665	Cell 15 Sample 3	soil	2005-08-10	15:12	2005-08-12
70666	Cell 15 Sample 4	soil	2005-08-10	15:20	2005-08-12
70667	Cell 15 Sample 5	soil	2005-08-10	15:32	2005-08-12
70668	Cell 14 Sample 1	soil	2005-08-10	15:45	2005-08-12
70669	Cell 14 Sample 2	soil	2005-08-10	15:55	2005-08-12
70670	Cell 14 Sample 3	soil	2005-08-10	16:05	2005-08-12
70671	Cell 14 Sample 4	soil	2005-08-10	16:14	2005-08-12
70672	Cell 14 Sample 5	soil	2005-08-10	16:20	2005-08-12

	BTEX				MTBE	TPH 418.1
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TRPHC
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
70628 - Cell 20 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70629 - Cell 20 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		**20.9**
70630 - Cell 20 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70631 - Cell 20 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70632 - Cell 20 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		**59.4**
70633 - Cell 17 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		**23.7**
70634 - Cell 17 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		**30.9**
70635 - Cell 17 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		**46.3**
70636 - Cell 17 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		**37.3**
70637 - Cell 17 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		**29.9**
70638 - Cell 18 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		**20.1**
70639 - Cell 18 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		**23.3**
70640 - Cell 18 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		**24.4**
70641 - Cell 18 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		**24.3**
70642 - Cell 18 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		**28.6**
70643 - Cell 19 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		**30.8**
70644 - Cell 19 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		**37.6**
70645 - Cell 19 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		**44.2**
70646 - Cell 19 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70647 - Cell 19 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70648 - Cell 22 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70649 - Cell 22 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70650 - Cell 22 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70651 - Cell 22 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70652 - Cell 22 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70653 - Cell 21 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70654 - Cell 21 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70655 - Cell 21 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70656 - Cell 21 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70657 - Cell 21 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70658 - Cell 16 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70659 - Cell 16 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70660 - Cell 16 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70661 - Cell 16 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70662 - Cell 16 Sample 5	<0.0100	<0.0100	<0.0100	**0.0114**		<10.0
70663 - Cell 15 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70664 - Cell 15 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70665 - Cell 15 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70666 - Cell 15 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70667 - Cell 15 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70668 - Cell 14 Sample 1	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70669 - Cell 14 Sample 2	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70670 - Cell 14 Sample 3	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70671 - Cell 14 Sample 4	<0.0100	<0.0100	<0.0100	<0.0100		<10.0
70672 - Cell 14 Sample 5	<0.0100	<0.0100	<0.0100	<0.0100		<10.0

Sample: 70628 - Cell 20 Sample 1

Param	Flag	Result	Units	RL
Chloride		**111**	mg/Kg	1.00

Sample: 70629 - Cell 20 Sample 2

Param	Flag	Result	Units	RL
Chloride		**580**	mg/Kg	1.00

Sample: 70630 - Cell 20 Sample 3

Param	Flag	Result	Units	RL
Chloride		**130**	mg/Kg	1.00

Sample: 70631 - Cell 20 Sample 4

Param	Flag	Result	Units	RL
Chloride		**999**	mg/Kg	1.00

Sample: 70632 - Cell 20 Sample 5

Param	Flag	Result	Units	RL
Chloride		**663**	mg/Kg	1.00

Sample: 70638 - Cell 18 Sample 1

Param	Flag	Result	Units	RL
Chloride		**13.1**	mg/Kg	1.00

Sample: 70639 - Cell 18 Sample 2

Param	Flag	Result	Units	RL
Chloride		**70.1**	mg/Kg	1.00

Sample: 70640 - Cell 18 Sample 3

Param	Flag	Result	Units	RL
Chloride		**824**	mg/Kg	1.00

Sample: 70641 - Cell 18 Sample 4

Param	Flag	Result	Units	RL
Chloride		**446**	mg/Kg	1.00

Sample: 70642 - Cell 18 Sample 5

Param	Flag	Result	Units	RL
Chloride		**929**	mg/Kg	1.00

Sample: 70648 - Cell 22 Sample 1

Param	Flag	Result	Units	RL
Chloride		**9.50**	mg/Kg	1.00

Sample: 70649 - Cell 22 Sample 2

Param	Flag	Result	Units	RL
Chloride		**14.0**	mg/Kg	1.00

Sample: 70650 - Cell 22 Sample 3

Param	Flag	Result	Units	RL
Chloride		**12.4**	mg/Kg	1.00

Sample: 70651 - Cell 22 Sample 4

Param	Flag	Result	Units	RL
Chloride		**16.1**	mg/Kg	1.00

Sample: 70652 - Cell 22 Sample 5

Param	Flag	Result	Units	RL
Chloride		**20.8**	mg/Kg	1.00

Sample: 70653 - Cell 21 Sample 1

Param	Flag	Result	Units	RL
Chloride		**10.4**	mg/Kg	1.00

Sample: 70654 - Cell 21 Sample 2

Param	Flag	Result	Units	RL
Chloride		**120**	mg/Kg	1.00

Sample: 70655 - Cell 21 Sample 3

Param	Flag	Result	Units	RL
Chloride		**54.8**	mg/Kg	1.00

Sample: 70656 - Cell 21 Sample 4

Param	Flag	Result	Units	RL
Chloride		**27.3**	mg/Kg	1.00

Sample: 70657 - Cell 21 Sample 5

Param	Flag	Result	Units	RL
Chloride		**33.9**	mg/Kg	1.00

Sample: 70663 - Cell 15 Sample 1

Param	Flag	Result	Units	RL
Chloride		**9.78**	mg/Kg	1.00

Sample: 70664 - Cell 15 Sample 2

Param	Flag	Result	Units	RL
Chloride		**20.9**	mg/Kg	1.00

Sample: 70665 - Cell 15 Sample 3

Param	Flag	Result	Units	RL
Chloride		**643**	mg/Kg	1.00

Sample: 70666 - Cell 15 Sample 4

Param	Flag	Result	Units	RL
Chloride		**671**	mg/Kg	1.00

Sample: 70667 - Cell 15 Sample 5

Param	Flag	Result	Units	RL
Chloride		**35.9**	mg/Kg	1.00

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail lab@traceanalysis.com

Analytical and Quality Control Report

Larry Gandy
Gandy Marley Inc.
Box 1658
Roswell, NM 88202

Report Date: August 18, 2005

Work Order: 5081625

Project Location: GMI Landfarm,Chaves Co.,NM
Project Name: GMI Landfarm
Project Number: 3rd Quarter Soil Sampling 2005

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
70938	Cell 13 Sample 1	soil	2005-08-11	10:45	2005-08-16
70939	Cell 13 Sample 2	soil	2005-08-11	11:02	2005-08-16
70940	Cell 13 Sample 3	soil	2005-08-11	11:12	2005-08-16
70941	Cell 13 Sample 4	soil	2005-08-11	11:23	2005-08-16
70942	Cell 13 Sample 5	soil	2005-08-11	11:38	2005-08-16
70943	Cell 12 Sample 1	soil	2005-08-11	11:59	2005-08-16
70944	Cell 12 Sample 2	soil	2005-08-11	12:08	2005-08-16
70945	Cell 12 Sample 3	soil	2005-08-11	12:18	2005-08-16
70946	Cell 12 Sample 4	soil	2005-08-11	12:28	2005-08-16
70947	Cell 12 Sample 5	soil	2005-08-11	12:36	2005-08-16
70948	Cell 11 Sample 1	soil	2005-08-11	13:30	2005-08-16
70949	Cell 11 Sample 2	soil	2005-08-11	13:38	2005-08-16
70950	Cell 11 Sample 3	soil	2005-08-11	13:49	2005-08-16
70951	Cell 11 Sample 4	soil	2005-08-11	14:00	2005-08-16
70952	Cell 11 Sample 5	soil	2005-08-11	14:10	2005-08-16
70953	Cell 10 Sample 1	soil	2005-08-11	14:25	2005-08-16
70954	Cell 10 Sample 2	soil	2005-08-11	14:34	2005-08-16
70955	Cell 10 Sample 3	soil	2005-08-11	14:44	2005-08-16
70956	Cell 10 Sample 4	soil	2005-08-11	14:52	2005-08-16
70957	Cell 10 Sample 5	soil	2005-08-11	15:02	2005-08-16
70958	Cell 9 Sample 1	soil	2005-08-11	15:47	2005-08-16
70959	Cell 9 Sample 2	soil	2005-08-11	15:56	2005-08-16
70960	Cell 9 Sample 3	soil	2005-08-11	16:02	2005-08-16
70961	Cell 9 Sample 4	soil	2005-08-11	16:12	2005-08-16
70962	Cell 9 Sample 5	soil	2005-08-11	16:18	2005-08-16

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
70963	Cell 8 Sample 1	soil	2005-08-12	11:29	2005-08-16
70964	Cell 8 Sample 2	soil	2005-08-12	11:37	2005-08-16
70965	Cell 8 Sample 3	soil	2005-08-12	11:44	2005-08-16
70966	Cell 8 Sample 4	soil	2005-08-12	11:52	2005-08-16
70967	Cell 8 Sample 5	soil	2005-08-12	11:57	2005-08-16
70968	Cell 7 Sample 1	soil	2005-08-12	12:10	2005-08-16
70969	Cell 7 Sample 2	soil	2005-08-12	12:16	2005-08-16
70970	Cell 7 Sample 3	soil	2005-08-12	12:13	2005-08-16
70971	Cell 7 Sample 4	soil	2005-08-12	12:29	2005-08-16
70972	Cell 7 Sample 5	soil	2005-08-12	12:35	2005-08-16
70973	Cell 6 Sample 1	soil	2005-08-12	00:00	2005-08-16
70974	Cell 6 Sample 2	soil	2005-08-12	00:00	2005-08-16
70975	Cell 6 Sample 3	soil	2005-08-12	00:00	2005-08-16
70976	Cell 6 Sample 4	soil	2005-08-12	00:00	2005-08-16
70977	Cell 6 Sample 5	soil	2005-08-12	00:00	2005-08-16
70978	Cell 5 Sample 1	soil	2005-08-12	13:19	2005-08-16
70979	Cell 5 Sample 2	soil	2005-08-12	13:24	2005-08-16
70980	Cell 5 Sample 3	soil	2005-08-12	13:30	2005-08-16
70981	Cell 5 Sample 4	soil	2005-08-12	13:37	2005-08-16
70982	Cell 5 Sample 5	soil	2005-08-12	13:43	2005-08-16
70983	Cell 4 Sample 1	soil	2005-08-12	13:56	2005-08-16
70984	Cell 4 Sample 2	soil	2005-08-12	14:01	2005-08-16
70985	Cell 4 Sample 3	soil	2005-08-12	14:07	2005-08-16
70986	Cell 4 Sample 4	soil	2005-08-12	14:13	2005-08-16
70987	Cell 4 Sample 5	soil	2005-08-12	14:19	2005-08-16

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.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 70938 - Cell 13 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70938 - Cell 13 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70939 - Cell 13 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.996	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70939 - Cell 13 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70940 - Cell 13 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70940 - Cell 13 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70941 - Cell 13 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70941 - Cell 13 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70942 - Cell 13 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70942 - Cell 13 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70943 - Cell 12 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	10	0.100	103	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70943 - Cell 12 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70944 - Cell 12 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	10	0.100	103	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70944 - Cell 12 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70945 - Cell 12 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	10	0.100	103	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70945 - Cell 12 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70946 - Cell 12 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70946 - Cell 12 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70947 - Cell 12 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70947 - Cell 12 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70948 - Cell 11 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70948 - Cell 11 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70949 - Cell 11 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70949 - Cell 11 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70950 - Cell 11 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70950 - Cell 11 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70951 - Cell 11 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70951 - Cell 11 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70952 - Cell 11 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	10	0.100	103	51.7 - 123

Sample: 70952 - Cell 11 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70953 - Cell 10 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70953 - Cell 10 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70954 - Cell 10 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70954 - Cell 10 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70955 - Cell 10 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	10	0.100	103	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70955 - Cell 10 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70956 - Cell 10 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70956 - Cell 10 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70957 - Cell 10 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20519	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18024	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70957 - Cell 10 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70958 - Cell 9 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70958 - Cell 9 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70959 - Cell 9 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.986	mg/Kg	10	0.100	98	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	10	0.100	101	51.7 - 123

Sample: 70959 - Cell 9 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70960 - Cell 9 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.995	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70960 - Cell 9 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70961 - Cell 9 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.996	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70961 - Cell 9 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70962 - Cell 9 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70962 - Cell 9 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70963 - Cell 8 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	10	0.00100
Toluene		<0.0100		mg/Kg	10	0.00100
Ethylbenzene		<0.0100		mg/Kg	10	0.00100
Xylene		<0.0100		mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.995	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70963 - Cell 8 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
TRPHC		<10.0		mg/Kg	1	10.0

Sample: 70964 - Cell 8 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	10	0.00100
Toluene		<0.0100		mg/Kg	10	0.00100
Ethylbenzene		<0.0100		mg/Kg	10	0.00100
Xylene		<0.0100		mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.987	mg/Kg	10	0.100	99	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	10	0.100	101	51.7 - 123

Sample: 70964 - Cell 8 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70965 - Cell 8 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	10	0.100	103	51.7 - 123

Sample: 70965 - Cell 8 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70966 - Cell 8 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.999	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70966 - Cell 8 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70967 - Cell 8 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70967 - Cell 8 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70968 - Cell 7 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	10	0.100	102	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	10	0.100	103	51.7 - 123

Sample: 70968 - Cell 7 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70969 - Cell 7 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70969 - Cell 7 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70970 - Cell 7 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70970 - Cell 7 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70971 - Cell 7 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.03	mg/Kg	10	0.100	103	51.7 - 123

Sample: 70971 - Cell 7 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70972 - Cell 7 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.996	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70972 - Cell 7 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70973 - Cell 6 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	51.7 - 123

Sample: 70973 - Cell 6 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70974 - Cell 6 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.993	mg/Kg	10	0.100	99	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70974 - Cell 6 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70975 - Cell 6 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	10	0.100	105	51.7 - 123

Sample: 70975 - Cell 6 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70976 - Cell 6 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70976 - Cell 6 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70977 - Cell 6 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20520	Date Analyzed:	2005-08-16	Analyzed By:	MT
Prep Batch:	18025	Sample Preparation:	2005-08-16	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.00	mg/Kg	10	0.100	100	47.1 - 124
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	51.7 - 123

Sample: 70977 - Cell 6 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70978 - Cell 5 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		**0.0252**	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.920	mg/Kg	10	0.100	92	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.942	mg/Kg	10	0.100	94	75.8 - 111

Sample: 70978 - Cell 5 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70979 - Cell 5 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		**0.0152**	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.917	mg/Kg	10	0.100	92	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.931	mg/Kg	10	0.100	93	75.8 - 111

Sample: 70979 - Cell 5 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70980 - Cell 5 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.921	mg/Kg	10	0.100	92	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.942	mg/Kg	10	0.100	94	75.8 - 111

Sample: 70980 - Cell 5 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70981 - Cell 5 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.910	mg/Kg	10	0.100	91	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.950	mg/Kg	10	0.100	95	75.8 - 111

Sample: 70981 - Cell 5 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70982 - Cell 5 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.926	mg/Kg	10	0.100	93	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.940	mg/Kg	10	0.100	94	75.8 - 111

Sample: 70982 - Cell 5 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70983 - Cell 4 Sample 1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.923	mg/Kg	10	0.100	92	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.945	mg/Kg	10	0.100	94	75.8 - 111

Sample: 70983 - Cell 4 Sample 1

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70984 - Cell 4 Sample 2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.918	mg/Kg	10	0.100	92	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.958	mg/Kg	10	0.100	96	75.8 - 111

Sample: 70984 - Cell 4 Sample 2

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70985 - Cell 4 Sample 3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.925	mg/Kg	10	0.100	92	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.937	mg/Kg	10	0.100	94	75.8 - 111

Sample: 70985 - Cell 4 Sample 3

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70986 - Cell 4 Sample 4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.926	mg/Kg	10	0.100	93	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.937	mg/Kg	10	0.100	94	75.8 - 111

Sample: 70986 - Cell 4 Sample 4

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Sample: 70987 - Cell 4 Sample 5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	20518	Date Analyzed:	2005-08-16	Analyzed By:	KB
Prep Batch:	18023	Sample Preparation:	2005-08-16	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.928	mg/Kg	10	0.100	93	61.8 - 113
4-Bromofluorobenzene (4-BFB)		0.940	mg/Kg	10	0.100	94	75.8 - 111

Sample: 70987 - Cell 4 Sample 5

Analysis:	TPH 418.1	Analytical Method:	E 418.1	Prep Method:	N/A
QC Batch:	20531	Date Analyzed:	2005-08-17	Analyzed By:	DS
Prep Batch:	18034	Sample Preparation:	2005-08-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		<10.0	mg/Kg	1	10.0

Method Blank (1) QC Batch: 20518

continued ...

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000690	mg/Kg	0.001
Toluene		<0.00100	mg/Kg	0.001
Ethylbenzene		<0.00235	mg/Kg	0.001
Xylene		<0.00251	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.905	mg/Kg	10	0.100	90	45.3 - 112
4-Bromofluorobenzene (4-BFB)		0.934	mg/Kg	10	0.100	93	40.1 - 107

Method Blank (1) QC Batch: 20519

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00153	mg/Kg	0.001
Toluene		<0.000954	mg/Kg	0.001
Ethylbenzene		<0.000954	mg/Kg	0.001
Xylene		<0.00300	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.936	mg/Kg	10	0.100	94	47.1 - 124
4-Bromofluorobenzene (4-BFB)		0.918	mg/Kg	10	0.100	92	51.7 - 123

Method Blank (1) QC Batch: 20520

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00153	mg/Kg	0.001
Toluene		<0.000954	mg/Kg	0.001
Ethylbenzene		<0.000954	mg/Kg	0.001
Xylene		<0.00300	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.940	mg/Kg	10	0.100	94	47.1 - 124
4-Bromofluorobenzene (4-BFB)		0.916	mg/Kg	10	0.100	92	51.7 - 123

Method Blank (1) QC Batch: 20531

Parameter	Flag	MDL Result	Units	RL
TRPHC		9.98	mg/Kg	10

Method Blank (2) QC Batch: 20531

Parameter	Flag	MDL Result	Units	RL
TRPHC		<5.91	mg/Kg	10

Method Blank (3) QC Batch: 20531

Parameter	Flag	MDL Result	Units	RL
TRPHC		<5.91	mg/Kg	10

Laboratory Control Spike (LCS-1) QC Batch: 20518

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.943	0.922	mg/Kg	10	0.100	<0.000690	94	2	74.8 - 116	20
Toluene	0.945	0.926	mg/Kg	10	0.100	<0.00100	94	2	78.9 - 112	20
Ethylbenzene	0.944	0.927	mg/Kg	10	0.100	<0.00235	94	2	77.6 - 114	20
Xylene	2.85	2.80	mg/Kg	10	0.300	<0.00251	95	2	81.1 - 113	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)	0.905	0.896	mg/Kg	10	0.100	90	90	61.8 - 113
4-Bromofluorobenzene (4-BFB)	0.947	0.944	mg/Kg	10	0.100	95	94	75.8 - 111

Laboratory Control Spike (LCS-1) QC Batch: 20519

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.896	0.892	mg/Kg	10	0.100	<0.0153	90	0	71.9 - 117	20
Toluene	0.884	0.898	mg/Kg	10	0.100	<0.00954	88	2	74.1 - 115	20
Ethylbenzene	0.939	0.947	mg/Kg	10	0.100	<0.00954	94	1	77.8 - 115	20
Xylene	3.06	3.08	mg/Kg	10	0.300	<0.0300	102	1	80.6 - 119	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)	0.962	0.960	mg/Kg	10	0.100	96	96	60.7 - 130
4-Bromofluorobenzene (4-BFB)	1.00	0.996	mg/Kg	10	0.100	100	100	75.3 - 114

Laboratory Control Spike (LCS-1) QC Batch: 20520

continued ...

control spikes continued . . .

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.877	0.898	mg/Kg	10	0.100	<0.0153	88	2	71.9 - 117	20
Toluene	0.863	0.884	mg/Kg	10	0.100	<0.00954	86	2	74.1 - 115	20
Ethylbenzene	0.920	0.940	mg/Kg	10	0.100	<0.00954	92	2	77.8 - 115	20
Xylene	3.00	3.07	mg/Kg	10	0.300	<0.0300	100	2	80.6 - 119	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)	0.952	0.953	mg/Kg	10	0.100	95	95	60.7 - 130
4-Bromofluorobenzene (4-BFB)	0.993	0.990	mg/Kg	10	0.100	99	99	75.3 - 114

Laboratory Control Spike (LCS-1) QC Batch: 20531

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TRPHC	257	258	mg/Kg	1	250	<5.91	103	0	91.2 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-2) QC Batch: 20531

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TRPHC	255	251	mg/Kg	1	250	<5.91	102	2	91.2 - 113	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-3) QC Batch: 20531

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TRPHC	259	261	mg/Kg	1	250	<5.91	104	1	91.2 - 113	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: 20518 Spiked Sample: 70978

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.915	0.857	mg/Kg	10	0.100	<0.000690	92	6	55.8 - 102	20
Toluene	0.929	0.871	mg/Kg	10	0.100	<0.00100	93	6	56.2 - 110	20
Ethylbenzene	0.942	0.883	mg/Kg	10	0.100	0.0079	94	6	60.1 - 104	20
Xylene	2.86	2.68	mg/Kg	10	0.300	0.0252	95	6	57.9 - 108	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)	0.918	0.908	mg/Kg	10	0.1	92	91	39.9 - 109
4-Bromofluorobenzene (4-BFB)	0.938	0.933	mg/Kg	10	0.1	94	93	49.2 - 118

Matrix Spike (MS-1) QC Batch: 20519 Spiked Sample: 70938

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.834	0.854	mg/Kg	10	0.100	<0.0153	83	2	45.5 - 124	20
Toluene	0.859	0.890	mg/Kg	10	0.100	<0.00954	86	4	50.2 - 119	20
Ethylbenzene	0.922	0.956	mg/Kg	10	0.100	<0.00954	92	4	51.9 - 115	20
Xylene	3.01	3.12	mg/Kg	10	0.300	<0.0300	100	4	49.2 - 125	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)	1.03	1.03	mg/Kg	10	0.1	103	103	47.1 - 124
4-Bromofluorobenzene (4-BFB)	1.07	1.08	mg/Kg	10	0.1	107	108	51.7 - 123

Matrix Spike (MS-1) QC Batch: 20520 Spiked Sample: 70958

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.798	0.793	mg/Kg	10	0.100	<0.0153	80	1	45.5 - 124	20
Toluene	0.823	0.808	mg/Kg	10	0.100	<0.00954	82	2	50.2 - 119	20
Ethylbenzene	0.896	0.876	mg/Kg	10	0.100	<0.00954	90	2	51.9 - 115	20
Xylene	2.94	2.89	mg/Kg	10	0.300	<0.0300	98	2	49.2 - 125	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)	1.00	0.983	mg/Kg	10	0.1	100	98	47.1 - 124
4-Bromofluorobenzene (4-BFB)	1.07	1.04	mg/Kg	10	0.1	107	104	51.7 - 123

Matrix Spike (MS-1) QC Batch: 20531 Spiked Sample: 70943

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TRPHC	259	253	mg/Kg	1	250	<5.91	104	2	9.9 - 146	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: 20531 Spiked Sample: 70963

continued ...

matrix spikes continued ...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TRPHC	255	258	mg/Kg	1	250	<5.91	102	1	9.9 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-3) QC Batch: 20531 Spiked Sample: 70979

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
TRPHC	269	248	mg/Kg	1	250	<5.91	108	8	9.9 - 146	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 20518

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0960	96	85 - 115	2005-08-16
Toluene		mg/Kg	0.100	0.0963	96	85 - 115	2005-08-16
Ethylbenzene		mg/Kg	0.100	0.0960	96	85 - 115	2005-08-16
Xylene		mg/Kg	0.300	0.290	97	85 - 115	2005-08-16

Standard (CCV-1) QC Batch: 20518

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0927	93	85 - 115	2005-08-16
Toluene		mg/Kg	0.100	0.0934	93	85 - 115	2005-08-16
Ethylbenzene		mg/Kg	0.100	0.0933	93	85 - 115	2005-08-16
Xylene		mg/Kg	0.300	0.281	94	85 - 115	2005-08-16

Standard (ICV-1) QC Batch: 20519

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0903	90	85 - 115	2005-08-16
Toluene		mg/Kg	0.100	0.0925	92	85 - 115	2005-08-16
Ethylbenzene		mg/Kg	0.100	0.0967	97	85 - 115	2005-08-16
Xylene		mg/Kg	0.300	0.315	105	85 - 115	2005-08-16

Standard (CCV-1) QC Batch: 20519

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0914	91	85 - 115	2005-08-16
Toluene		mg/Kg	0.100	0.0913	91	85 - 115	2005-08-16
Ethylbenzene		mg/Kg	0.100	0.0963	96	85 - 115	2005-08-16
Xylene		mg/Kg	0.300	0.313	104	85 - 115	2005-08-16

Standard (ICV-1) QC Batch: 20520

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0904	90	85 - 115	2005-08-16
Toluene		mg/Kg	0.100	0.0901	90	85 - 115	2005-08-16
Ethylbenzene		mg/Kg	0.100	0.0949	95	85 - 115	2005-08-16
Xylene		mg/Kg	0.300	0.310	103	85 - 115	2005-08-16

Standard (CCV-1) QC Batch: 20520

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0896	90	85 - 115	2005-08-16
Toluene		mg/Kg	0.100	0.0881	88	85 - 115	2005-08-16
Ethylbenzene		mg/Kg	0.100	0.0934	93	85 - 115	2005-08-16
Xylene		mg/Kg	0.300	0.305	102	85 - 115	2005-08-16

Standard (ICV-1) QC Batch: 20531

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	113	113	80 - 120	2005-08-17

Standard (CCV-1) QC Batch: 20531

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	100	100	80 - 120	2005-08-17

Standard (CCV-2) QC Batch: 20531

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	97.6	98	80 - 120	2005-08-17

Standard (CCV-3) QC Batch: 20531

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	97.6	98	80 - 120	2005-08-17

Standard (ICV-2) QC Batch: 20531

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	98.0	98	80 - 120	2005-08-17

Standard (CCV-4) QC Batch: 20531

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	98.8	99	80 - 120	2005-08-17

Standard (CCV-5) QC Batch: 20531

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	103	103	80 - 120	2005-08-17

Standard (ICV-3) QC Batch: 20531

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	103	103	80 - 120	2005-08-17

Standard (CCV-6) QC Batch: 20531

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	103	103	80 - 120	2005-08-17

Standard (CCV-7) QC Batch: 20531

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	105	105	80 - 120	2005-08-17

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon,Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5081625

Company Name: Cindy Marley Inc.
Phone #: 505 347-0434
Address: (Street, City, Zip) PO Box 1658 Roswell, NM 88202
Fax #: 505-347-0425
e-mail: gindy2@plateau.net
Contact Person: Mike Marley or Larry Gindy
Invoice to: (If different from above)
Project #: 3rd Quarter Soil Sampling 2005
Project Name: GMI Landfarm
Project Location: GMI Landfarm Chaves Co, NM
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
70938	Cell 13 Sample 1	2	4oz		X								X	08/11/05	1045
39	Cell 13 Sample 2														1102
40	Cell 13 Sample 3														1112
41	Cell 13 Sample 4														1123
42	Cell 13 Sample 5														1138
43	Cell 12 Sample 1													08/11/05	1154
44	Cell 12 Sample 2														1208
45	Cell 12 Sample 3														1216
46	Cell 12 Sample 4														1226
47	Cell 12 Sample 5														1236

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TX 1005 Extended (C35)	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	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content				Turn Around Time if different from standard	Hold
X	X	X																		Standard	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	08/15/05	1545			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Brenda Ward	8/16/05	9:45

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review

REMARKS: Send Copy of Results to Emberwine dkn.com

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Grey Hound Bus 168266.5061

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Fax (806) 794-1298
1 (800) 378-1296
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TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5081625

Company Name: Gandy Marley Inc. Phone #: 505-347-0434
Address: (Street, City, Zip) PO Box 1658 Roswell NM 88202 Fax #: 505-347-0435
e-mail: gandy2@valornet.
Contact Person: Mike Marley or Larry Gandy
Invoice to: (If different from above)
Project #: 3rd Quarter Soil Sampling 2005 Project Name: GMI Landfarm
Project Location: GMI Landfarm Chaves Co, NM Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TX 1005 Extended (C35)	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	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content	Turn Around Time if different from standard 7 Day	Hold
70948	Cell 11 Sample 1	2	4oz	X									X	08/11/05	1330	X	X															X	
49	Cell 11 Sample 2	↓	↓	↓									↓	↓	1338	↓	↓															↓	
50	Cell 11 Sample 3														1349																		
51	Cell 11 Sample 4														1400																		
52	Cell 11 Sample 5	↓	↓	↓									↓	↓	1410	↓	↓															↓	
53	Cell 10 Sample 1	X	X	X									X	08/11/05	1425	X	X															X	
54	Cell 10 Sample 2	↓	↓	↓									↓	↓	1434	↓	↓															↓	
55	Cell 10 Sample 3														1444																		
56	Cell 10 Sample 4														1452																		
57	Cell 10 Sample 5	↓	↓	↓									↓	↓	1502	↓	↓															↓	

Relinquished by:	Date: 08/15/05	Time: 1545	Received by:	Date: Time:
Relinquished by:	Date:	Time:	Received by:	Date: Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Brenda Ward	Date: 8/16/05 Time: 9:45

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review

REMARKS: Send Copy of Results To cmbenvi@qtn.com
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☐ TRRP Report Required
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5081625

Company Name: Gandy Marley Inc. Phone #: 505-347-0434
Address: (Street, City, Zip) PO Box 1658 Roswell NM 88202 Fax #: 505-347-0435
e-mail: gandy2@leaco.net
Contact Person: Mike Marley or Larry Gandy
Invoice to: (If different from above)
Project #: 3rd Quarter Soil Sampling 2005 Project Name: GMI Landfarm
Project Location: GMI Landfarm Chaves Co, NM Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
70958	Cell 9 Sample 1	2	4oz		X								X	08/11/05	1547
59	Cell 9 Sample 2	↓	↓		↓								↓	↓	1556
60	Cell 9 Sample 3														1602
61	Cell 9 Sample 4														1612
62	Cell 9 Sample 5	↓	↓		↓								↓	↓	1618
63	Cell 8 Sample 1	2	4oz		X								X	08/12/05	1129
64	Cell 8 Sample 2	↓	↓		↓								↓	↓	1137
65	Cell 8 Sample 3														1144
66	Cell 8 Sample 4														1152
67	Cell 8 Sample 5	↓	↓		↓								↓	↓	1157

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	CHC 418.1/TX1005	TX 1005 Extended (C35)	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	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content				Turn Around Time # different from standard	Hold
	X	X																		X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	08/15/05	1545			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Brenda Ward	8/16/05	9:45

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review TSP

REMARKS:
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5081625

Company Name: Gandy Marley Inc. Phone #: 505-347-0434
Address: (Street, City, Zip) PO Box 1658 Roswell NM 88202 Fax #: 505-347-0435
e-mail: gandy2c@leaco.net
Contact Person: Mike Marley or Larry Gandy
Invoice to: (If different from above)
Project #: 3rd Quarter Soil Sampling 2005 Project Name: GMI Landfarm
Project Location: GMI Landfarm Chaves Co, NM Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
70968	Cell 7 Sample 1	2	4oz		X								X	08/12/05	1210
69	Cell 7 Sample 2														1216
70	Cell 7 Sample 3														1223
71	Cell 7 Sample 4														1229
72	Cell 7 Sample 5														1235
73	Cell 6 Sample 1	2	4oz		X								X	08/12/05	
74	Cell 6 Sample 2														
75	Cell 6 Sample 3														
76	Cell 6 Sample 4														
77	Cell 6 Sample 5														

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 8015B 1/TX1005	TX 1005 Extended (C35)	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	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content				Turn Around Time if different from standard	Hold
X	X	X																		X	
X	X																			X	

Relinquished by: Date: 08/15/05 Time: 1545 Received by: Date: Time:
Relinquished by: Date: Time: Received by: Date: Time:
Relinquished by: Date: Time: Received at Laboratory by: Brenda Ward Date: 8/16/05 Time: 9:45

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review TB

REMARKS: Send Copy of Results to cmbeavis@dtn.com
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email: lab@traceanalysis.com

TraceAnalysis, Inc.

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El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5081625

Company Name: Gandy Marley Inc. Phone #: 505-347-0434
Address: (Street, City, Zip) PO Box 1658 Roswell NM 88202 Fax #: 505-347-0435
Contact Persop: Mike Marley or Larry Gandy - e-mail: gandy2@leaco.net
Invoice to: (If different from above)
Project #: 3rd Quarter 2005 Soil Sampling Project Name: GMI Landfarm
Project Location: GMI Landfarm Chaves Co, NM. Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
70978	Cell 5 Sample 1	2	40z		X								X	08/11/05	1319
79	Cell 5 Sample 2														1324
80	Cell 5 Sample 3														1330
81	Cell 5 Sample 4														1337
82	Cell 5 Sample 5														1343
83	Cell 4 Sample 1	2	40z		X								X	08/11/05	1356
84	Cell 4 Sample 2														1401
85	Cell 4 Sample 3														1407
86	Cell 4 Sample 4														1413
87	Cell 4 Sample 5														1419

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TX 1005 Extended (C35)	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	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content				Turn Around Time if different from standard 72hr *	Hold
X	X	X																		X	
X	X	X																		X	

Relinquished by: Date: 08/15/05 Time: 1545
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Brenda Ward Date: 8/16/05 Time: 9:45

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review

REMARKS: Send Copy of Results to Cmbenv@dfn.com.
☐ Dry Weight Basis Required
☐ TRRP Report Required
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AFFIDAVIT

I, William L. Mansker, Ph.D., have examined quarterly soil sampling data and Quarterly Sampling Reports submitted by Gandy-Marley, Inc. to the New Mexico Oil Conservation Division (OCD). The Quarterly Reports include the 4th Quarter 2004 (submitted January 27, 2005), the 1st Quarter 2005 (submitted June 23, 2005), and the 2nd Quarter 2005 (submitted July 20, 2005). I have also reviewed soil analytical data for the 3rd Quarter 2005, which is currently being prepared for submittal to OCD. Submittal of the Quarterly Reports to OCD is consistent with the timely reporting requirements of the Gandy-Marley Commercial Landfarm Permit # NM-711-1-0020.

Soil analytical data presented in the Quarterly Reports are for samples of the landfarm Treatment Zone collected 3 feet below the landfarm native ground surface. Collection and analysis of multiple samples (5 samples) from each landfarm cell exceed the Treatment Zone Monitoring requirement of the Gandy-Marley permit, which requires a minimum of one (1) random soil sample per landfarm cell. The samples were analyzed for total petroleum hydrocarbons (TPH), Benzene, Toluene, Ethylbenzene and total Xylenes (BTEX), and for the inorganic constituents: major cations and anions, and RCRA-8 metals.

The analytical data presented in the Quarterly Reports are consistent with previous sample data and indicate that the landfarm treatment process is adequately remediating organic hydrocarbon constituents to regulatory acceptable levels. Inorganic constituents (cations, anions, metals) are also within acceptable regulatory limits. Chloride levels detected in landfarm cell soils that have received salt-contaminated wastes (Cell 15, Cell 18 and Cell 20) soils are consistent with background chloride levels (e.g., 160 - 1520 ppm) in native surface and subsurface soils located outside the landfarm footprint.

William L. Mansker, Ph.D.
NM Certified Scientist No. 067
August 24, 2005

EXHIBIT
tabbies
I

January 27, 2005

New Mexico Energy, Minerals, & Natural Resources Dept.
Oil Conservation Division Environmental Bureau
Attn: Mr. Wayne Price
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: **Submittal of Fourth Quarterly Monitoring Report for Year 2004**
Gandy Marley Inc., Commercial Landfarm
Gandy Marley Inc., Operator / PRP
SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9,
T. 11 S., R.31 E., NMPM
Chaves County, New Mexico
Commercial Landfarm Permit (NM-711-1-0020)

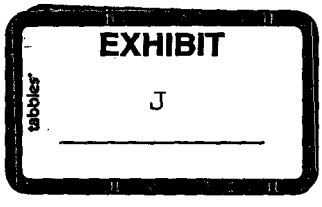
Dear Mr. Price:

Clayton M. Barnhill, CMB Environmental and Geological Services Inc., on behalf of the owner/operator, Gandy Marley Inc., submits the attached Quarterly Monitoring Report for the above-mentioned site.

If you have any questions about the contents of the report, please do not hesitate to call me. Thank you.

Sincerely,

Clayton M. Barnhill, PG
NMED PTB Certified Scientist # 246
CMB Environmental & Geological Services, Inc.
PO Box 2304
Roswell, NM 88202-2304
(505) 622-2012 Phone and Fax
Cellular: (505) 626-1615
cmbenviro@dfn.com



June 23, 2005

New Mexico Energy, Minerals, & Natural Resources Dept.
Oil Conservation Division Environmental Bureau
Attn: Mr. Ed Martin
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Submittal of First Quarterly Monitoring Report for Year 2005
Gandy Marley Inc., Commercial Landfarm
Gandy Marley Inc., Operator / PRP
SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9,
T. 11 S., R.31 E., NMPM
Chaves County, New Mexico
Commercial Landfarm Permit (NM-711-1-0020) 0019

Dear Mr. Martin:

Clayton M. Barnhill, CMB Environmental and Geological Services Inc., on behalf of the owner/operator, Gandy Marley Inc., submit the attached Quarterly Monitoring Report for the above-mentioned site.

If you have any questions about the contents of the report, please do not hesitate to call me. Thank you.

Sincerely,

Clayton M. Barnhill, PG
NMED PTB Certified Scientist # 246
CMB Environmental & Geological Services, Inc.
PO Box 2304
Roswell, NM 88202-2304
Phone: (505) 622-2012 Phone Fax: (505) 625-0538
Cellular: (505) 626-1615
cmbenviro@dfn.com

Cc: Gandy Marley Inc.
NMOCD District II Office, Artesia, NM

July 20, 2005

New Mexico Energy, Minerals, & Natural Resources Dept.
Oil Conservation Division Environmental Bureau
Attn: Mr. Ed Martin
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Submittal of Second Quarterly Monitoring Report for Year 2005
Gandy Marley Inc., Commercial Landfarm
Gandy Marley Inc., Operator / PRP
SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9, T. 11 S., R.31 E., NMPM
Chaves County, New Mexico
Commercial Landfarm Permit (NM-711-1-0020)

Dear Mr. Martin:

Clayton M. Barnhill, CMB Environmental and Geological Services Inc., on behalf of the owner/operator, Gandy Marley Inc., submit the attached Quarterly Monitoring Report for the above-mentioned site.

If you have any questions about the contents of the report, please do not hesitate to call me. Thank you.

Sincerely,

Clayton M. Barnhill, PG
NMED PTB Certified Scientist # 246
CMB Environmental & Geological Services, Inc.
PO Box 2304
Roswell, NM 88202-2304
Phone: (505) 622-2012 Phone Fax: (505) 625-0538
Cellular: (505) 626-1615
cmbenviro@dfn.com

Cc: Gandy Marley Inc.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:	)	
APPLICATION OF GANDY MARLEY, INC., TO MODIFY THEIR EXISTING NMOCD RULE 711 PERMIT NO. NM-01-019 SO THAT THEY MAY ACCEPT SALT-CONTAMINATED OILFIELD WASTES	)	CASE NO. 13,480

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2005 JUN 2 PM 2 47

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

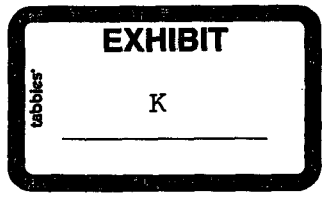
Volume I, May 23rd, 2005

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Monday, May 23rd, 2005, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
(505) 989-9317



sands that are encountered at times, and it's mostly silts and clays and -- that's kind of in the environmental terminology, silts and clays. In the production-type world, those would be siltstones and mudstones, would probably be equivalent to those, so -- the stone being an indurated part, means that they're cemented together a little bit.

Q. Did you review the Exhibit 3 that we've talked about, which is the preliminary geologic investigation report prepared by Stoller?

A. Yes, I did.

Q. And in addition to reviewing that narrative report, did you review logs that were taken around that same time?

A. Yes, I've reviewed all of the geologic logs or lithologic logs that were created or generated by Mr. Bonner, from Stoller, as these borings were put in, these proposed borings. And I also reviewed, to some extent, the geophysical logs for most of those same holes that were conducted by a third party.

Q. And based on that review, did you develop a general understanding as to what the subsurface geology was on the area around where the landfarm is?

A. Yes, I discovered that all of the logs are more or less consistent with what is known about the Dockum

groups that I just described to you, that there's a lower unit that is a much tighter formation, finer-grain formation.

And then the upper group is a series of thinner-layered to medium thicker-layered units of silts and clays and a few sands, fine sands.

Q. When you say two medium thicker layers, do you mean two layers running through the upper Dockum? Is that what you were talking about?

A. "Two" meaning --

Q. You said -- I think you said two medium thick layers through the --

A. No, no, I didn't mean "two" as a number.

Q. Okay.

A. I just meant it ranged from -- to -- from thicker, tighter clay -- more clay-rich units in the lower Dockum than at the upper Dockum as distinguished by it being more of a fluvial-type environment where you had more stream-flow-type rather than lake-type deposits, so...

Q. Did you develop an understanding from looking at the studies and the logs about whether there was perched aquifer -- perched water beneath the landfarm location?

A. Yes, I did, it's evident in the geophysical logs, and it's also hinted at in some of the lithologic logs where you talk about the dampness or the moisture content

it's again alluding to the perched, somewhat discontinuous nature of the sediments and the perched water, and the little bit coarser zones.

Q. So what is your conclusion, as far as the subsurface geology beneath the landfarm?

A. Beneath the landfarm -- the alluvium aside, because I believe they're constructing actually below that, because there's a very thin veneer on the top of the upper Dockum. Then you run into the upper Dockum for probably to 100 feet of that, and then you get into the lower Dockum sediments where they're a little more -- like I say, a little tighter formations. The upper Dockum is characterized by variability within a range and thin, laminated layers that are variable from clays to silts to occasionally a silty sand-type formation, but they're very thin.

Q. And what information did you develop as -- or did you develop as far as the quality and quantity of the water in these perched, discontinuous areas?

A. I believe in the bottom of Monitor Well-2 was the only place that we actually saw water in the drill hole, because we lost circulation on the drill bit, and usually that happens when -- and we were in silty clays or clays, I don't remember which -- but we lost circulation, and that's usually an indication that there's moisture getting in

Q. Okay. You said that this facility would not adversely impact this groundwater underneath the proposed landfarm site; is that your testimony?

A. That's my testimony.

Q. Is it your testimony that the sands that you -- Or let me ask you this. Is that based one -- When you say it would not adversely impact the groundwater, what is the basis for that statement? Is it the clay liner?

A. It's the composite of relatively impervious rocks in the upper Dockum in which the small amounts of water that we found occur, and there are unsaturated rocks above those perched zones, or what I interpret as perched zones in my opinion, and there's also unsaturated ground -- media, subsurface media, below those perched zones.

Q. Okay. Would you -- now you were -- and that was based on -- the soil samples that you took out was based on the two holes that were drilled around the facility, and what did you call them?

A. MW-1 and MW-2 --

Q. MW-1 and MW-2.

A. -- were the -- was the data that I collected in the field, the field data. But I also relied on Mr. Bonner's well logs, because he's equally a professional, so I believe that his lithologic logs are at least as correct as mine are.

Q. Is it correct that the upper Dockum is approximately 65 million years old?

A. 65 million? I think it's a little older than that.

Q. Okay. And has it been in -- How long has that perched water been leaking from the Ogallala to establish these trapped sandstone lenses? All of that 65-million-plus.

A. That would be eroded back, so it's -- it's been a long time. I -- you know, the Ogallala is not -- is probably younger than 65 million years, but it's -- this has probably evolved over millions of years.

Q. So it's taken millions of years to have these trapped sandstone lenses in parts of the upper Dockum?

A. That's reasonable.

Q. And they don't extend under the Triassic property. Are you comfortable with that conclusion?

A. That's correct.

Q. And -- The porosity of the clay layers that are in the upper Dockum, would you agree with Dr. Mansker's testimony yesterday as to what those porosity values are, or permeability?

A. Yes, we did some coring during the site evaluation and took some split-spoon samples for permeability analysis and had some very -- very tight --

very low permeabilities within those upper Dockum clays, yes.

Q. So you're not challenging --

A. Absolutely not.

Q. -- his testimony?

Can you describe the gradiation [*sic*] of the sandstones?

A. The which of the sandstones?

Q. Gradation of the sandstone lenses.

A. The gradation? Usually it's -- In a typical channel sandstone you will see a fining-upward sequence, if this is what we're talking about, gradation. You will see the coarsest amount of -- the coarsest material in the base of the channel sandstone, and as you progress up through its thickness it will get thinner and thinner, as opposed to a deltaic sandstone, for instance, where you'll see just the reverse of that. And that's a reflection of the depositional environment.

Q. You're not prepared to offer any opinions other than what you've already testified today; is that correct?

A. That's correct.

Q. And you haven't prepared any testimony other than what you've testified to today?

A. No.

Q. Now, you were asked to compare the suitability of

your testimony in Triassic, showing the characteristics of the upper Dockum?

A. I'm sure I did.

Q. Have you reviewed what you did in the Triassic --

A. I did not review Triassic -- I don't have a copy of the Triassic Park Application, so...

Q. Did you review your testimony from Triassic for today?

A. I did not.

Q. Is it accurate to characterize the upper Dockum as red-brown mudstone, interbedded with siltstone and silty sands?

A. Uh-huh.

Q. Is that your testimony today, as to what -- as to a characterization of the upper Dockum?

A. Yes, yeah, my testimony today was, you're looking at interbedded sands, silts and mudstones, correct.

Q. And when you state as a geologist that's -- on a drill log, you characterize a cross-section as red-brown mudstone interbedded with siltstone and silty sands, you are saying it's predominantly red-brown mudstone?

A. In that spot, absolutely.

Q. Looking at your Exhibit 8 -- Do you have that in front of you?

A. Yes, I do.

siltstones. Those would also provide a barrier to migration?

A. This is a -- This is a low-energy environment. These are not real high-permeability sands. But they -- the sands themselves will -- fluid will move through it, and the silts will provide some sort of retardation of movement.

Q. And the clays, I think you've already testified, those will retard movement?

A. Yes.

Q. And you've colored -- in your diagram you've colored the bottom of the lower Dockum red, and the upper part is kind of brown. Are you trying to indicate some difference in the --

A. Just indicate the difference between the lower and the upper. If you looked at the character of the clays, they're probably very similar.

MR. DOMENICI: That's all I have.

EXAMINER JONES: Ms. MacQuesten?

MS. MacQUESTEN: No questions.

EXAMINER JONES: Mr. Feldewert?

MR. FELDEWERT: I have a couple.

REDIRECT EXAMINATION

BY MR. FELDEWERT:

Q. Mr. Bonner, you referenced -- or I'm sorry, not

Q. So it happened over millions of years, the change?

A. It happened over some time. Now, when we did some detailed work in the Triassic Park, we did some structure contour on top of that, and so there is -- there appears to be a little bit of surface like this on top of the lower Dockum. There may have been a little hiatus in there. It is not mapped as an unconformity.

Q. A little bit of erosion between the two?

A. Yeah.

Q. What kind of clays are in the upper Dockum?

A. Mineralogically, we didn't take any samples like that. We did -- we took geotechnical samples to find out, you know, permeabilities. And so we have geotechnical results that showed that the upper Dockum clays or the Chinle clays were in the area of 10^{-6}, 10^{-7} for permeability, so very, very tight clays. But we did not get any mineralogical evaluations.

Q. How did you take those samples?

A. We did it with a hollow-stem augur and taking split-spoon samples.

Q. Okay, the permeability -- were they air permeabilities you measured?

A. No, then we took them back to a lab, and they did a falling-head permeability on those.

A. Yes, I did.

Q. And you heard his description of the soil characteristics in the upper Dockum beneath the facility?

A. Yes, I did.

Q. Do you agree with his interpretation?

A. To the extent that the factual data supports, I believe we're pretty much in agreement. On the subsurface stratigraphy we disagree on interpretation of some of that factual data.

Q. What -- describe to the Hearing Officer what you think the -- what kind of barrier the clay in the upper Dockum provides?

A. I believe it will provide a substantial barrier to any downward movement and, to a lesser extent but also a sufficient extent, to any lateral migration, the clays will be a relatively impervious barrier to any fluid movements.

Q. And what -- how -- You heard him testify. What is the basis for your different interpretation?

MR. FELDEWERT: Let me object. I -- it sounds -- what he's testified to so far is exactly what he testified to on direct.

I don't think rebuttal is for the purposes of re-offering the witness and having him, in essence, regurgitate the same opinions, so I would ask that the examination be limited to any new opinions that he has, or