

**CERTIFICATION REPORT
FOR FINAL CLOSURE OF
Y-12 CENTRALIZED
SANITARY LANDFILL II
OAK RIDGE, TENNESSEE**

NOVEMBER 16, 1995

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To Whom It May Concern:

Re: Closure of the Y-12 Centralized Sanitary Landfill II

The attached report represents Geotek Engineering Company, Inc.'s, (Geotek's) record of activities to support certification of final closure for the referenced site. Phase I closure activities were completed on March 25, 1995, and Geotek submitted a Certification Report of Partial Closure of Y-12 Centralized Sanitary Landfill II on March 28, 1995. Except as herein indicated, final closure activities were also completed in accordance with the document entitled Y-12 Centralized Sanitary Landfill II Closure/Post Closure Plan, Revision 2, submitted by the U.S. Department of Energy (DOE) to the Tennessee Department of Environment and Conservation (TDEC) on April 14, 1992, and approved by TDEC on May 27, 1994.

The contents of this report and accompanying certification are based on observations by Geotek engineers, geologists and technicians during closure activities and on review of reports, records, laboratory test results, and other information furnished by Lockheed Martin Energy Systems, Inc., (LMES).

A statement of certification follows. In that statement, "certify" means to state or declare a professional opinion of conditions whose true properties cannot be completely known at the time such certification was made, despite appropriate professional evaluation. An engineer's certification of conditions in no way relieves any other party from meeting requirements imposed by contract or other means, including commonly accepted industry practices.

CLOSURE CERTIFICATION

I, Kenneth L. McCurdy, a Registered Professional Engineer in the State of Tennessee, hereby certify that closure activities, performed to date for the Final Closure portion of the Y-12 Centralized Sanitary Landfill II at the U.S. Department of Energy (DOE) Y-12 site in Oak Ridge, Tennessee, have been performed, to the best of my knowledge and belief, in accordance with the procedures described in the Y-12 Centralized Sanitary Landfill II Closure/Post Closure Plan, Revision 2, submitted by DOE to the Tennessee Department of Environment and Conservation (TDEC) on April 14, 1992, and approved by TDEC on May 27, 1994 (the "Closure Plan") - except for one minor variance noted in the attached report.

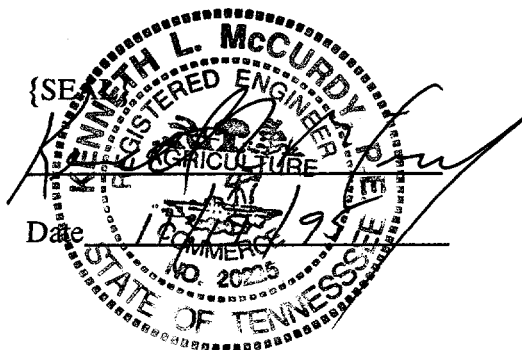
The Final Closure portion of the Y-12 Centralized Sanitary Landfill II closure was initiated on July 10, 1995, and was completed on November 16, 1995.

This certification conclusion is based on my observations, observations of Geotek employees under my direct supervision, and various items of supporting documentation provided by others.

Kenneth L. McCurdy, P.E.

Tennessee Registration No. 20225

(423) 690-0128



MARTIN MARIETTA ENERGY SYSTEMS, INC.POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831

November 30, 1995

Mr. Larry L. Radcliffe
Waste Management and Technology Development Division
Department of Energy
Oak Ridge Operations Office
Post Office Box 2001
Oak Ridge, Tennessee 37831-8620

JAN 04 1995

Dear Mr. Radcliffe:

OSTI**Centralized Sanitary Landfill II Certification of Final Closure (Program Manager: B. C. Demonio)**

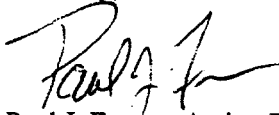
Centralized Sanitary Landfill II (SLF II) has been closed in accordance with the approved closure plan within the prescribed schedule. The Tennessee Department of Environment and Conservation requires written notification upon completion of closure activities. Such notification must include certification that the disposal parcel has been closed in accordance with the approved closure/post closure care plan. The information provided herein containing the independent professional engineering certification satisfies that requirement.

The following information is also being supplied as required in the approved closure/post closure care plan. The estimated quantity of asbestos containing waste disposed of within the facility is 18,780 cubic yards. The requirement for a notation on the deed to the property that will perpetually notify any person conducting a title search that the area associated with the Y-12 Centralized Sanitary Landfill II has been used as a disposal facility is being handled by Ms. Katie Kates, the Realty Officer in the Procurement and Contracts Division of the Department of Energy. It should be noted that the notation should be placed on the deed within 60 days of completing the closure.

The attached Certification Report along with the other information provided in this letter should be submitted to Mr. Rick Brown of the Tennessee Department of Environment and Conservation, 2700 Middlebrook Pike, Suite 220, Knoxville, Tennessee 37921.

If you have any questions, please contact Paul Waldschlager at 576-0602 or Mickey Willoughby at 576-8166.

Sincerely,



Paul J. Franco, Acting Director
Energy Systems Waste Management Organization

PJF:MLW:mp

Attachments: As stated

Mr. Larry L. Radcliffe

Page 2

November 30, 1995

cc: T. R. Butz
K. Kates, DOE-ORO
R. J. Spence, DOE-ORO

cc/enc: D. G. Ailey
K. E. Craft
K. D. Delius
A. K. Lee, DOE-OSTI (2 copies)
J. E. Powell/D. E. Bohrman
J. R. Newman
P. F. Waldschlager - RC
M. L. Willoughby
Y-12 Central Files
File - PJF

**FINAL CLOSURE CERTIFICATION REPORT
FOR
Y-12 CENTRALIZED SANITARY LANDFILL II
AT THE
U.S. DEPARTMENT OF ENERGY Y-12 PLANT
OAK RIDGE, TENNESSEE**

November 16, 1995

Geotek Engineering Company, Inc.

8321 Oak Ridge Highway

Knoxville, Tennessee 37931

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LIST OF ACRONYMS AND ABBREVIATED FORMS

ASTM	American Society for Testing and Materials
Closure Plan	Y-12 Centralized Sanitary Landfill II Closure/Post Closure Plan, Revision 2, Submitted to the Tennessee Department of Environment and Conservation (TDEC) on April 14, 1992, and approved by TDEC on May 27, 1994.
CQA Plan	Y-12 Centralized Sanitary Landfill II, Construction Quality Assurance Plan, dated February 12, 1992.
DOE	U.S. Department of Energy
The Facility	Y-12 Centralized Sanitary Landfill II
Geotek	Geotek Engineering Company, Inc.
LMES	Lockheed Martin Energy Systems, Inc. (Formerly Martin Marietta Energy Systems, Inc.)
MMES	Martin Marietta Energy Systems, Inc.
ORNL	Oak Ridge National Laboratory
RCRA	Resource Conservation and Recovery Act
TDEC	Tennessee Department of Environment and Conservation

INTRODUCTION

This report represents the Geotek Engineering Company, Inc., (Geotek) record of activities to support certification of final closure of the subject Y-12 Centralized Sanitary Landfill II. Except as noted herein, final closure of the landfill was completed in accordance with the Y-12 Centralized Sanitary Landfill II Closure/Post Closure Plan, Revision 2, submitted by the U.S. Department of Energy (DOE) to the Tennessee Department of Environment and Conservation (TDEC) on April 14, 1992, and approved by TDEC on May 27, 1994 (the "Closure Plan"). A minor modification to the Closure Plan allowing partial closure of the Y-12 Centralized Sanitary Landfill II (Phase I) was approved by TDEC on August 3, 1994. The Phase I portion of the closure for the subject landfill was completed on March 25, 1995. A closure certification report entitled Certification Report for Partial Closure of Y-12 Centralized Sanitary Landfill II was submitted to Lockheed Martin Energy Systems, Inc., (LMES) on March 28, 1995. The final closure represents the completion of the closure activities for the entire Y-12 Centralized Sanitary Landfill II Site.

The contents of this report and accompanying certification are based on observations by Geotek engineers and geologists during closure activities and on review of reports, records, laboratory test results, and other information furnished to Geotek by LMES.

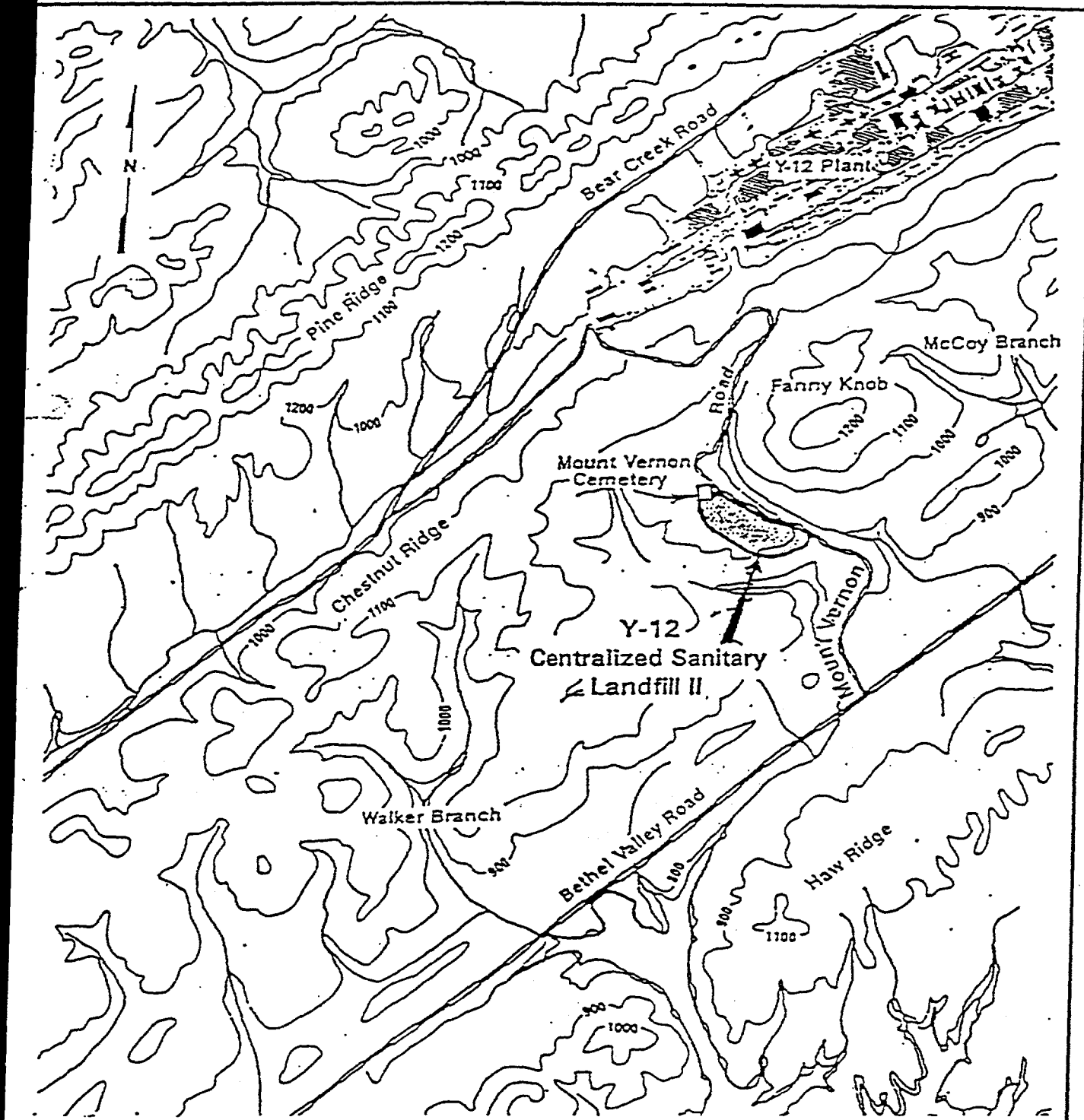
FACILITY DESCRIPTION AND OPERATIONAL HISTORY

The Y-12 Centralized Sanitary Landfill II, herein referred to as the facility, is located within the DOE Oak Ridge Reservation in Anderson County, Tennessee, approximately 24 miles west of Knoxville. The landfill site is located in a controlled access area on Chestnut Ridge, about 3/4 of a mile south of the Y-12 Plant. The site is a 20-acre tract of land bounded on the east by Mt. Vernon Road, on the north by Mt. Vernon Cemetery, and on the south and west by a heavily wooded watershed which is a tributary to the Melton Hill Reservoir. A site location map is provided as Figure No. 1.

The facility contains 12 acres used for waste disposal. The initial operation method at the facility was trench excavation and fill. In order to prolong landfill activities, the operation method was changed (with TDEC approval) to area-fill. Placement of the landfill material was generally from east to west.

The operating permit for the facility was issued on December 29, 1982. Waste disposal operations were initiated on April 25, 1983. The operating permit was modified from trench method to an area-fill operation in 1986. The modification increased the fill capacity volume from 550,000 cubic yards to 640,000 cubic yards.

The original permit for the facility was issued prior to the development of the Class I and Class II designations in TDEC's solid waste regulations; therefore, the facility was initially classified as a "sanitary" waste facility. Under conditions specified in the TDEC Solid Waste Landfill Permit, the facility was established to receive industrial wastes. The TDEC indicated the facility was a



GEOTEK

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Project: Y-12 Centralized Sanitary Landfill II

Geotek No. 94-3832 (FY94-20)

Date: October 10, 1995

Scale: 1" = 2,000'

Location Map for
Y-12 Centralized
Sanitary Landfill II

Figure Number: 1

Class I disposal facility following the March 1990 regulatory revisions. On October 23, 1991, TDEC reclassified the facility as a Class II industrial landfill. The facility was allowed to receive (nonhazardous) industrial waste, as well as some beryllium oxide (BeO), asbestos, and other special wastes for disposal. No liquids, radioactive wastes, or Resource Conservation and Recovery Act of 1976 (RCRA) hazardous wastes were allowed to be disposed of at the facility. The facility received wastes from the DOE Y-12 Plant, Oak Ridge National Laboratory (ORNL), the K-25 Site and from other DOE activities on the Oak Ridge Reservation.

SUMMARY OF CLOSURE CERTIFICATION ACTIVITIES

This report section provides a summary of activities performed by the Geotek engineers, geologists and technicians, in the course of closure activities at the Y-12 Centralized Sanitary Landfill II. Presented first is a listing of closure certification tasks performed by Geotek. Presented next is a chronological summary of certification activities performed in the course of closure.

Functional Descriptions of Tasks

A. Observations during Closure Activities

1. Observed borrow soils and evaluated suitability for use in respective soil layers for the cap.
2. Observed surface preparation prior to low-permeability layer being applied.
3. Observed placement of the 24-inch low permeability layer and verified that the required procedures for placing the fill were followed and that the compaction specifications were achieved.
4. Observed placement of the 12-inch vegetative layer.
5. Observed construction of drainage control swales, conveyance ditches and diversion ditch.
6. Observed placement of seed, mulch and sod.

B. Field Testing and Measurements

1. Moisture/density testing by the nuclear gauge method (ASTM D-3017 and D-2922) on low permeability soil.
2. Grab samples for laboratory moisture content determination (ASTM D-2216) and 1-point proctor test to verify nuclear gauge method.

3. Measurements of thickness of loose lifts in low-permeability soil.
4. Inspection of low permeability soil for size of solid aggregates.
5. Qualitative and quantitative monitoring of borrowed fill material.
6. Verification of thickness of both low-permeability soil layer and vegetative layer by reviewing surveys from before and after placement of the respective layers.

The inspection and testing activities completed in support of the closure of the facility were conducted in accordance with the requirements of the Closure Plan and the Y-12 Centralized Sanitary Landfill II, Construction Quality Assurance Plan, dated February 12, 1992 (the CQA Plan). Submitted in appendices to this Closure Certification Report are the following items of documentation:

Appendix A - Daily Summary Reports

Appendix B - Inspection Data Sheets

Appendix C - Laboratory Test Results Reports

Appendix D - As-Built Partial Closure of Sanitary Landfill II, prepared by Adams Craft Herz Walker, dated November 16, 1995

A statement of certification accompanies this closure certification report. In that statement, "certify" means to state or declare a professional opinion of conditions whose true properties cannot be known at the time such certification was made, despite appropriate professional evaluation. An engineer's certification of conditions in no way relieves any other party from meeting requirements imposed by contract or other means, including commonly accepted industry practices. Further, Geotek's closure certification services consisted only of certifying that closure activities at the subject site were effected in accordance with the aforementioned Closure Plan.

Chronological Summary of Closure Certification Activities

June 1995: On June 30, 1995, Geotek personnel attended a kick-off meeting for the final closure of the Y-12 Centralized Sanitary Landfill II. The meeting was held so that members of the project team could discuss and verify the activities to take place and a tentative schedule for same.

July 1995: On July 10, 1995, the low permeability soil layer application began, and the associated field and laboratory testing also began at that time. Borrow soils consistent with the soils identified as Type A Soils by Dr. David E. Daniel in his evaluation of soils from the West End Borrow Area and East Chestnut Ridge landfills were imported to the project site for use in constructing the low permeability soil layer. The procedure observed for placing the compacted, low permeability soils layer consisted of first proofrolling the surface of the exposed subgrade and then scarifying the surface of the existing landfill cover soil to a relatively shallow depth (1 to 2 inches) and pre-wetting the surface of the very dry, scarified soils. The borrow soils were then spread over the prepared area in 6 to 8-inch-thick lifts which were then scarified to breakdown clods of soil in the fill, raked with an automated Harley rock rake to separate rock fragments larger than 3 inches in diameter, and picked by an automated Dagelman rock picker and by laborers to remove the rock fragments observed to be larger than 3 inches. After the over-sized rock fragments were removed, water was applied to the fill material to adjust the moisture content to an acceptable range. Water had to be added to the fill because the fill was arriving at the site too dry and the hot and dry weather conditions were drying the fill even more. After the water was added to the fill, the lift of fill was scarified again to promote mixing of the soil and water, and then the lift of fill was compacted with a self-propelled sheepsfoot roller. Each lift of fill was compacted until an acceptable combination of moisture content and dry density was attained. If the field test results indicated that the lift of fill

was still too dry, the fill was scarified, wetted, scarified for mixing purposes and recompactd until an acceptable combination of moisture content and dry density was attained. In no case were fewer than six passes made by the sheepsfoot roller. In addition to adding water to the borrow soils to attain adequate moisture contents, water was applied to the surface of the compacted, low permeability soil layers until the overlying layer of soil for vegetative support was in place to prevent drying and desiccation of the surface in the hot, dry conditions that were present throughout this period.

On July 26, 1995, a survey of the surface of the low permeability soil layer, within portions designated as Rows 1 through 4 of the final closure area, was reviewed by Geotek and compared to a survey of the surface of the final closure area made prior to the placement of the low permeability soil layer. Based on the comparison between these two surveys, a minimum thickness of two feet of low permeability soil was confirmed over the area surveyed. Placement of the 12-inch-thick vegetative cover began in areas where the 24-inch thick low permeability soil layer had been completed and verified by a survey. Throughout the month of July, Geotek personnel were on-site at all times during work conducted by LMES and LMES subcontractors.

August 1995: Placement and compaction of the low permeability soil layer continued throughout the month in the same manner as was described for the month of July. On August 7, 14, and 25, 1995, surveys of the surface of the low permeability soil layer, within areas designated as Rows 5 through 12, were reviewed by Geotek, and a minimum thickness of two feet of low permeability soil was confirmed over the areas surveyed. On August 29, 1995, placement of the 24-inch-thick low permeability soil layer was completed for all of the final closure portion of the landfill, and placement of the 12-inch-thick vegetative cover continued.

On August 30, 1995, a final survey of the surface of the low permeability soil layer, within the areas designated as Rows 13 through 15, was reviewed by Geotek, and a minimum thickness of two feet of low permeability soil was confirmed over the area surveyed. This survey together with the previous surveys of the surface of the low permeability soil layer in Rows 1 through 12 confirmed a minimum thickness of two feet of the required low permeability soil layer over the entire final closure area. All surveys were completed by Adams Craft Herz Walker. Geotek personnel verified that all soil placement met the criteria set forth in the Closure Plan.

September 1995: Placement of the vegetative cover continued in September. On September 7, 1995, construction of the west and south Perimeter Drainage Control Swales began as surveyors set location stakes for the alignment of the berms which form the swales. On September 8, 1995, placement of the berm material began for the construction of the Drainage Control Swale (S-1) contained within the final closure portion of the landfill closure. On September 20, 1995, geotextile filter fabric was placed in Conveyance Ditches No. 1 and No. 2 and, on September 21, 1995, placement of riprap was begun in the Conveyance Ditches. On September 28, 1995, hydroseeding began on the north end of the final closure portion of the surface of the landfill.

On September 26, 1995, a survey of the surface of the vegetative layer was reviewed by Geotek, and a minimum thickness of 12 inches of protective soil was confirmed over the low permeability soil layer. The survey was completed by Adams Craft Herz Walker.

October 1995: Construction of the drainage control swales and conveyance ditches continued in October. On October 3, 1995, placement of filter fabric and riprap was begun at the dissipator locations in the drainage control swales. On October 9, 1995, the placement of sod was begun in the drainage control swales. On October 11, 1995, the conveyance ditches were in place.

On October 25, 1995, all seed, mulch, sod, and riprap had been placed. The final contour map of the site was being developed by the surveyors during the remainder of the month of October.

November 1995: On November 16, 1995, Geotek received the final contour map of the site as required by the Closure Plan. The final contour map was prepared by Adams Craft Herz Walker at a scale of 1" = 100' with 2-foot contour intervals. The final contour map was designated Drawing Number CP-2, was titled As-Built Closure of Sanitary Landfill II, and was dated November 16, 1995. The final contour map is presented in Appendix D of this report. After review of the final contour map, the final closure of the Y-12 Centralized Sanitary Landfill II was determined to be complete on November 16, 1995.

CONCLUSION

Basis for the Closure Certification

Pursuant to an agreement between Geotek and LMES (formerly Martin Marietta Energy Systems, Inc.), final closure activities at the Y-12 Centralized Sanitary Landfill II were monitored for conformance with the document entitled Y-12 Centralized Sanitary Landfill II Closure/Post Closure Plan, Revision 2, submitted by DOE to TDEC on April 14, 1992, approved by TDEC on May 27, 1994, and hereafter referred to as the "Closure Plan".

Closure Certification

Based upon closure certification activities summarized in a foregoing section of this report and upon supporting documentation listed in a following section, Geotek has concluded that final closure activities at the Y-12 Centralized Sanitary Landfill II, were performed in conformance with the procedures prescribed in the Closure Plan - with the exception of one minor variance. In the opinion of the Independent Registered Professional Engineer certifying closure, the variance observed does not compromise the closure of the Y-12 Centralized Sanitary Landfill II. The variance is described in the following subsection.

Minor Variance

One variance with the Closure Plan was noted during the course of final closure work at the Y-12 Centralized Sanitary Landfill II. The final contour map titled As-Built Closure of Sanitary Landfill II, as prepared by Adams Craft Herz Walker, indicates that a small portion of the south slope of the final closure area is slightly steeper than the maximum 3-foot horizontal to 1-foot

vertical (3:1) slope indicated on the Y-12 Centralized Sanitary Landfill II Site Closure Plan submitted as a part of the approved Closure Plan. Based on a review of the as-built contours, isolated portions of the south slope appear to range between 2-1/2-foot horizontal to 1-foot vertical and 3-foot horizontal to 1-foot vertical.

Remaining Closure Plan Requirements

As of the date of this certification report, one closure plan requirement remained to be completed as part of the closure activities. DOE must submit written notification to the TDEC Department of Solid Waste Management that closure of the facility has been completed. The written notification of completion is to include a certification that the disposal facility has been closed in accordance with the approved closure/post-closure plan.

The Closure Plan also requires certain post closure activities described in Section 3.0 of the Closure Plan. The post closure activities generally include abandonment of the sediment basin, post-closure maintenance, monitoring, and inspection, and recording within 60 days of completing final closure at the Y-12 Centralized Sanitary Landfill II, of a notification on the property deed that the site has been used as a disposal facility.

SUPPORTING DOCUMENTATION

Geotek personnel used the following documents in the course of monitoring, testing, and certification activities.

1. Y-12 Centralized Sanitary Landfill II Closure/Post Closure Plan, Revision 2, prepared by EBASCO, for DOE, April 14, 1992.
2. Results of Hydraulic Conductivity Tests and Recommended Water Content - Dry Density Criteria for Potential Borrow Soils, Daniel, David E. Austin, Texas: October, 1992.

3. Y-12 Centralized Sanitary Landfill II Construction Quality Assurance Plan, prepared by EBASCO, for DOE, February 12, 1992.
4. Written correspondence involving the Tennessee Department of Environmental and Conservation; the U.S. Department of Energy; and Martin Marietta Energy Systems, Inc.
 - a. Letter from Rick Brown (TDEC) to Larry L. Radcliffe (DOE), Subject: Closure of Y-12 Centralized Landfill II, August 3, 1994.
 - b. Letter from Rick Brown to Larry L. Radcliffe, Subject: Minor Procedural Modifications to Closure/Post Closure Plan for Y-12 Centralized Landfill II, November 3, 1994.
 - c. Letter from Charles E. Frye (MMES) to Larry L. Radcliffe (DOE), Subject: Minor Modification to Sanitary Landfill II Closure/Post Closure Plan, December 9, 1994.
 - d. Letter from Rick Brown (TDEC) to Larry L. Radcliffe (DOE), Subject: Minor c. Modification to Y-12 Centralized Landfill II Closure Plan, January 4, 1995.
5. Survey information developed by Adams Craft Herz Walker and provided to Geotek by LMES, including tabular summaries and field notes of the ground-surface elevations at established grid point locations before the placement of the cap material, after placement of the low permeability soil layer, and after completion of the vegetative support layer.

APPENDIX A

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 1

PROJECT NO.: 94-3832, FY94-20

DATE: 7/10/95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): A. Khonsari, Phil Getsi, R. Shorrad

WEATHER CONDITIONS: WEATHER: CLEAR A.M and afternoon, high of 87°F; partly cloudy late afternoon to evening w/ thunderstorm moving in @ ~1900 hrs.

MEETINGS & RESULTS: Met w/ Roger Sellers and Paul Waldschlager. Obtained drawings from Paul and oriented Phil Getsi to his position by stockpile to observe condition of fill material as hauled, no. of loads hauled, & approx. count-trip time per pass/loads.

DESCRIPTION OF WORK DONE: Dzer laid back vegetative cover from phase I on north end of phase II approx. 10 ft. to provide appropriate tie-in of new cap to existing cap. Prestrolled area bounded by westernmost corner of Phase I boundary on northern boundary of phase II, south to grid points (GIP) 150, and east to GIP 156, a triangular region encompassing rows 1-3 (6+50 to 8+00) on site survey drawing. No pumping or deflection observed. Observed scarifying and watering of area. Observed placement of lift #1 to an average depth of 4 to 6". Rock picking criteria was met. Triangular area had to be rescarified and moisturized two additional times before moisture/density specification could be met. Final testing (IDS) report verified that lift 1 met moisture/density acceptability criterion. Natural moisture from much

DESCRIPTION OF OFF SITE MATERIAL: needed rain will help reduce labor intensity.

Type A CLay (from stockpile obtained from Landfill II), some silt & few chert fragments, reddish brownish tan w/ yellow silt mottling & inclusions.

ADDITIONAL COMMENTS: Field moisture was running 15-18% prior to additional, labor intensive, watering which finally brought the moisture into an acceptable range for the Daniels curve criterion. A total of 21 pass/loads (@ ~27yd³ per load) were hauled and 1 truck load (@ ~20yd³/load). Thus, approx. 587yd³ were delivered as uncompacted fill to the site, providing ^{~0.58t} coverage of ~30,000 ft². The average time per load haul was about 8 min.

Ahmad Khonsari, Phil Getsi, R. Shorrad
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: # 2

PROJECT NO.: 94-3832, FY94-20

DATE: 7/11/95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): A. Khansari, R. Sherrod

WEATHER CONDITIONS: CLEAR A.M., CLEAR to partly cloudy & humid, P.M.; High in low 90's, drying conditions good.

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Placement and compaction of Lift 2¹ on
triangular area bounded by southern boundary of Phase I and
grid points 150 west to 156 east, lying within Rows 1-3
[6+50 to 8+00] on site survey map. Placement and compaction
of Lift 2¹ on Row 4. Placement of Lift 1 and preparation
of Lift for compaction along Row 5. Rows 4 and 5 were
prerolled prior to lift placement and no pumping or
deflection was observed. Observed scarification and
watering of both lift areas. Rock picking criteria was
met in all areas compacted. Moisture was a problem all day
due to intense summer heat and favorable drying conditions, requiring
large quantities of water in the wetting down process. Toward end of
work day, Lift 3 was placed on scarified Lift 2 in triangle area. Area
DESCRIPTION OF OFF SITE MATERIAL: consisting of Rows 1-5 was sealed w/
rubber tire pan @ EOB to prevent moisture loss.

Type A CLAY (from stockpile and Landfill II), hauled by both
tandem truck and pan.

ADDITIONAL COMMENTS: Very labor intensive watering down of material,
required, w/ some water-related equipment breakdowns. Doleman rock picker
working much better now that lift areas have expanded and operator can run
machine at relaxed pace; a total of 43 payloads (C ~ 27 yd³ per load)
and 30 tandem truck loads (C ~ 20 yd³ per load) were hauled to site, yielding
a days production of
~ 1,761 yd³ of uncompacted fill.

Ahmad Khansari R. Sherrod
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 3

PROJECT NO.: 94-3832, FY94-20

DATE: 7/12/95

CLIENT: AMES.

FIELD TECHNICIAN(S): R. Sherrad, A. Bice

WEATHER CONDITIONS: CLEAR A.M., HIGH 80's; CLEAR to partly cloudy; HOT & humid afternoon & evening - HIGH mid 90's

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Precontrolling of Row 6; no pumping or excessive deflection noticed. Placement of fill along Row 6, Lift 1, graded to approx. 6". Scarification, wetting, and additional rock picking of Row 5, followed by compaction. Rock picking criteria used met for Row 5. Compaction of Row 5 met density/ moisture curve criterion. Placement of Lift 2, 6" lift, in Row 4. Scarification, rock picking and raking of Lift 1 in Row 6, w/ several wettings due to very dry borrow material from stockpile. Scarifying, disking, rewetting and compaction of Lift 3, Rows 1-3. Compaction met specification. Rows 1-6 smooth-rolled & sealed w/ pan @ FOB.

DESCRIPTION OF OFF SITE MATERIAL:

Type A CLAY from stockpile (borrow material from Landfill V). Excessive chert fragments observed in placement of some loads, causing labor intensive rock raking & hand picking. Material very dry due to intense heat wave continuation.

ADDITIONAL COMMENTS: Labor intensive, repeated wetting of material continues due to intense heat wave. One pan broke down @ end of day. Production was good w/ 39 pan loads (~27 yd³/load), or 1,053 yd³ of fill material placed. Ave. round trip time / load was approx. 7 min.

R. Sherrad, A. Bice
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: #4

PROJECT NO.: 94-3832, FY94-20

DATE: 7/13/95

CLIENT: U.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod, A. Bice

WEATHER CONDITIONS: CLEAR A.M. High 80's; humid; clear to partly cloudy p.m., very hot (high 90's) and humid

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Observed completion of Lift #2 placement along Row 4 [Stations 6+00 to 6+50]; scarification (disking) of Lift #1 along Row 5. Row #7 was proof rolled w/ no pumping or deflection observed. No material was added to Row 7. During mechanical rock picking, noticed machine operators for Harley rock rake and Dagelman picker are more up to speed and furrowing into a single row w/ at least 3 passes, thus removing more gravel size fragments from edge of lift. Preparation & compaction of Lift 2, Row 4; placement of Lift 2, Row 5. During 2nd shift, preparation and compaction of Lift 1, Row 6. Placement of Lift 4 in triangle area (Rows 1-3). Attempt was made to prepare Lift 2, Row 5, for compaction but material too dry. Rows 1-6 smooth rolled w/ pan @ EOB to prevent moisture loss.

DESCRIPTION OF OFF SITE MATERIAL:

Type A clay from stockpile (borrow material from Landfill I). Material very dry, containing 12-15% moisture prior to wetting, due to arid conditions caused by intense heat wave. Moisturization of material very labor intensive to obtain passing results. Large tanker truck w/ 5000 gal capacity now in operation.

ADDITIONAL COMMENTS:

Given ^{very} dry conditions, production quota was high w/ 48 pan loads (~ 27 yd³/load) and 12 tandem truck loads (~ 20 yd³/load) hauled to the site, yielding ~ 1,536 yd³ of uncompacted fill material placed.

Ave. roundtrip time for pans was ~ 8 min.

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 5

PROJECT NO.: 94-3832, FY94-20

DATE: 7/14/95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod, A. Bice

WEATHER CONDITIONS: CLEAR & HUMID, A.M., High 80's; Partly cloudy, hot & humid, P.M., High 90's.

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Observed continued preparation and compaction of Lift 2, Row 5. The borrow material for Lift 4, Rows 1-3, was very dry from stockpile and was repeatedly scarified and wetted (4 times) before the density/moisture criterion could be met. Compaction of Lift 4, Rows 1-3, was achieved w/ passing tests near the end of the work day. Observed placement and preparation (scarifying, rock picking, & wetting) of Lift 3, Row 4. Lift 2, Row 6, was prepared for compaction, but not enough time remained to compact and test. The following summarizes the work to date: Rows 1-3, Lift 4, compacted w/ passing tests; Row 4, Lift 3, prepared for compaction but not yet moist enough; Row 5, Lift 2, ^{compacted and passed} new material added; Row 6, Lift 2, prepared for compaction. Rows 1-6 were sealed @ EOB to prevent moisture loss. Row 7 has been pre-rolled but no material added.

DESCRIPTION OF OFF SITE MATERIAL: Type A clay from stockpile (borrow material from Landfill V). Moisture condition of borrow material slightly improved as pans work deeper into stockpile. Moisturization of material remains labor intensive and will persist until weather conditions change.

ADDITIONAL COMMENTS: Production quota was satisfactory given the moisture problem and hot working conditions. A total of 47 pan loads (~27 yd³/load) and 6 tandem truck loads (~20 yd³/load) were delivered to the site, yielding a total, uncompacted fill placement of ~1,389 yd³. Ave. roundtrip time per pan load was 7-8 min.

R. Sherrod, A. Bice
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 6

PROJECT NO.: 94-3832, FY94-20

DATE: 7/15/95

CLIENT: H.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod, P. Getsi

WEATHER CONDITIONS: CLEAR & HUMID, AM, HIGH 80's; CLEAR to Hazy, Hot & HUMID, HIGH 90's, afternoon

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Compaction of Lift 2, Row 6. Preliminary testing indicated moisture too low (by ~2-3%) for compaction to achieve passing tests on density/moisture curve. Recommended scarification and additional moisturization, after which passing tests were achieved. Final preparation and compaction of Lift 3, Row 4 w/ passing tests on density/moisture curve. Placement of Lift 3, Row 5, followed by scarification, rock picking, and moisturization. Lift 3, Row 5, was not quite ready for compaction and testing by EOB. Placement of Lift 3, Row 6, was three-fourths complete by EOB, but no working of lift. Recommended wetting and sealing of Rows 1-6, followed by additional wetting over the weekend, if possible.

DESCRIPTION OF OFF SITE MATERIAL:

Type A CLAY from stockpile (borrow material from Landfill IV). Unusually high amt. of large chunk fragments in some loads, which were hand-picked to ease the task of the Harley rock rake when furnishing the rocks to the Dagelman picker.

ADDITIONAL COMMENTS: Moisture was a problem all day w/ very intense heat wave still in effect and natural moisture of stockpile low. Given the weather conditions, production quota was high w/ a total of 54 per loads (~27 yd³/load) hauled to the site, yielding a total uncompacted fill placement of ~1,458 yd³. Ave. round trip time per load was ~7-9 min.

R. Sherrod / Phil M. Deter
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: #7

PROJECT NO.: 94-3832, FY94-20

DATE: 7/17/95

CLIENT: W.M.E.S.

FIELD TECHNICIAN(S): R. Sherrad / P. Getsi

WEATHER CONDITIONS: CLEAR to Partly Cloudy w/ haze, a.m., mid 80's;
partly cloudy, hot, & humid, p.m., mid 90's; thunderstorm threat
w/ lightning, late afternoon.

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

Final preparation and compaction of
Lift 3, Rows 5 and 6. Placement of Lift 5
in triangular area within Rows 1-3, followed
by disk^{partial}ing and rock picking. (This process was
not finished by EOB, and will have to be repeated
next work day w/ additional wetting of lift.)
Placement of Lift 4, Row 4, approx. 3/4 complete
by EOB, but no time remaining for scarification
and rock removal. Rows 1-6 wetted and sealed
(smooth rolled w/ pans) to prevent over night
moisture loss and surface cracking.

DESCRIPTION OF OFF SITE MATERIAL:

TYPE A CLAY from stockpile
mixed w/ fresh loads from borrow area (Landfill II)
to increase natural moisture content. Large chert
boulders found in some loads, occasionally up to
1' to 1.5' in size. These are removed by hand since
they cannot be furrowed by Harley rock rake.

ADDITIONAL COMMENTS:

Moisture of borrow material is somewhat
better due to mixing in of fresh borrow material w/ stockpile,
but wetting of soil still labor intensive. Production was
high for the day w/ a total of 61 pan loads (~27 yd³/load), yielding
approx. 1,647 yd³ of uncompacted fill delivered to the site.

Ave. round trip time per
pan approx. 6-7 min.

R. Sherrad / Phil M. Kistai
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: #8

PROJECT NO.: 94-3832, FY94-20

DATE: 7/18/95

CLIENT: U.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod / P. Getz

WEATHER CONDITIONS: CLEAR, am. hrs, low to mid 80's; clear & breezy, afternoon & evening, high in low 90's; dry conditions favorable.

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Final preparation & compaction of Lift 5 in triangular area adjacent to southern Phase I boundary (Rows 1-3). This area had passing tests on first try and is now close to subgrade. Finished placement & preparation of Lift 4, Row 4, followed by compaction and testing ^{w/ passing results}. Boulder-size chert fragments removed from lifts by hand labor. Moisture of borrow material still a problem, requiring approx. 3,000 gal per lift to obtain passing results. Finished placement of Lift 4, Row 5, but preparation for compaction incomplete by EOB. Scarification, rock picking, and moisturing of Row 7 in preparation for placement of Lift 4, opening up a new row. Approx. 150' of fill material placed on Row 7 by EOB. No new material placed on.

DESCRIPTION OF OFF SITE MATERIAL: Lift 3, Row 6 to obtain step-down in elevation. Rows 1-7 wetted and sealed to prevent overnight moisture loss.

TYPE A CLAY
from stockpile
mixed w/ fresh
loads from
borrow area (Landfill I) to increase natural moisture content.

ADDITIONAL COMMENTS: Efficient machine operation of Harley Rock rake and Dagelmann picker has greatly reduced the need for manual rock picking, only required now for large boulder-size chert fragments observed in lift upon diskings. Production for the day was high w/ a total of 60 pan loads (~27 yd³/load), or approx. 1,620 yd³ of uncompacted fill placement. Ave. round trip time per pan approx. 6-7 min.

R. Sherrod / Phil M. Kiser
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 9

PROJECT NO.: 94-3832, FY94-20

DATE: 7/19/95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod / P. Getsi

WEATHER CONDITIONS: CLEAR & MILD, am, high mid 70's to low 80's;
CLEAR & BREEZY, pm, high upper 80's to low 90's

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Final preparation & compaction of Lift 4,
Row 5, and Lift 1, Row 7. Proof rolled Row 8
to open it up for Lift 1 placement; no pumping
or deflection observed. Scarification & moisturization
of Lift 3, Row 6, to start placement of Lift 4.
Disking, rock picking, & wetting down of Row 8 for
placement of Lift 1. The following summarizes
the lift placement work to date: Rows 1 - 3
(triangle area) - compacted & tested through Lift 5 w/
no work on this area today; Row 4 - compacted & tested
through Lift 4 w/ no additional work today; Row 5 - Lift 4
compacted & tested w/ passing results; Row 6 - partial placement
of Lift 4 (approx. one-half placed by EOB);

DESCRIPTION OF OFF SITE MATERIAL:

TYPE A CLAY
from stockpile
mixed w/ fresh
material from

Row 7 - Lift 1 compacted & tested w/
passing results; Row 8 - partial
placement (approx. three-fourths) of Lift 1.

borrow area (Landfill II) to increase natural moisture content,

ADDITIONAL COMMENTS: Manual labor required to remove large chert
boulders that resist furrowing by Harley rock rake. Slight
improvement observed in natural moisture content of borrow material,
but large amts. of wetting still required. Production for day was
very high w/ 67 pan loads (~27 yd³/load) & 34 truck loads (~20 yd³/load),
yielding a total volume
of ~ 2,489 yd³ of
fill placement (uncompacted). Ave. round trip time per pan of ~ 6-7 min.

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: #10

PROJECT NO.: 94-3832, FY94-20

DATE: 7/20/95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod / P. Getsi

WEATHER CONDITIONS: CLEAR to Partly Cloudy, a.m., high mid 80's;
partly cloudy, warm, & humid, p.m.; high in low 90's.

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Final preparation & compaction of Lift 1,
Row 8. Finished placement, preparation, & compaction
of Lift 4, Row 6. Finished placement of
Lift 1, Row 9 after proofrolling. No
pumping or deflection observed during proofrolling
of Row 9. Began placement of Lift 2, Rows
7 and 8. Fill production for day was along
Rows 6 - 9 [stations 3+50 to 5+50] w/ production
along Rows 1 - 5 [stations 5+50 to 8+00] idle,
except for periodic spraying w/ hydro-sprayer to maintain
surface moisture. At EOB, site was wetted
down & sealed to prevent overnight surface drying & cracking.

DESCRIPTION OF OFF SITE MATERIAL: TYPE A CLAY from stockpile
mixed w/ fresh material from borrow area
(Landfill V) to increase natural moisture content.

ADDITIONAL COMMENTS: Fill production for day: 74 pan loads
(~27 yd³/load) & 50 tandem truck loads (~20 yd³/load),
yielding a total volume of ~3,000 yd³ of
fill placement (uncompacted volume). Ave. round trip
time per pan was approx. 6 min.

R. Sherrod / Phil M. Ketai

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 11

PROJECT NO.: 94-3832, FY94-20

DATE: 7/21/95

CLIENT: U.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod / P. Getsi

WEATHER CONDITIONS: Partly Cloudy, warm & humid w/ intermittent light sprinkles of rain; temp. upper 80's to low 90's.

MEETINGS & RESULTS: Meeting w/ Roger Sellers @ end of 1st shift (approx 1430 hrs). Effective 7/21, 2nd shift work & work on Sats. have been temporarily halted until further notification by client. Advised client to maintain surface moisture of site over weekend as needed due to continuing drought conditions. This will not require GEOTEK's presence,

DESCRIPTION OF WORK DONE: but client will keep log of no. of gals. of water placed on fill material and times of water delivery.

Final preparation & compaction of Lift 1, Row 9. Proofrolled Row 10. No pumping or deflection observed. Placement of Lift 2, Row 7, completed but w/o preparation (i.e., rock picking, scarifying, etc.) for compaction. Partial placement of Lift 2, Row 8, approx. one-half complete by EOB. Start of placement of grade lift, Lift 6, in triangle area (Rows 1-3). No material placed on Row 10. Fill production by EOB was along Rows 7-9 and Rows 1-3.

DESCRIPTION OF OFF SITE MATERIAL:

TYPE A CLAY from stockpile mixed w/ fresh material from borrow area (Landfill II) to increase natural moisture content. Beginning to appear w/ more moisture as pans scrape deeper into stockpile material.

ADDITIONAL COMMENTS: Fill production for day (1st shift only):

41 pan loads (~ 27 yd³/load) & 16 tandem truck loads (~ 20 yd³/load), yielding a total volume of ~ 1,500 yd³ of fill placement (uncompacted volume). Ave. round trip time per pan approx. 6-7 min.

R. Sherrod / Phil Getsi

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 12

PROJECT NO.: 94-3832, FY94-20

DATE: 7/24/95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): R. Sherrod / P. Getsi

WEATHER CONDITIONS: Partly cloudy, breezy & mild, slightly humid, a.m. mid 70's to low 80's; p.m. conditions, warm & breezy w/ occasional wind gusts, high in low 90's; light shower w/ gusty winds late evening

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE: Final preparation & compaction of Lift 2, Row 7. Workdays, both shifts, consisted mainly of fill placement ^{only} along Rows 1-8 due to approx. 4 hrs down time of Harley rock rake, 1st shift, and approx. 2 hrs 2nd shift, which created a bottle neck in the rock picking phase. By EOB, the following lifts had been placed and graded but w/o preparation for compaction: Lift 6, essentially grade lift, in triangle area, Rows 1-3; Lift 5, Row 4 & 5; start of Lift 5, Row 6; Lift 2, Row 8. Lift 2, Row 7 was tested near close of workday w/ passing results. Production along Row 9 was idle; also for Row 10 w/ no lift yet placed on Row 10, light shower at end of day helped moisturize surface and maintain natural moisture.

DESCRIPTION OF OFF SITE MATERIAL:

TYPE A CLAY from stockpile mixed w/ fresh material from borrow area (Landfill II) hauled by tandem trucks. Natural moisture content continues to improve as pass cut deeper into stockpile, & freshly excavated material is hauled from II by tandem dump truck.

ADDITIONAL COMMENTS:

Fill production for day was high w/ 65 pan loads (~27 yd³/load) & 32 truck loads (~20 yd³/load) ~~was~~ delivered to the sites, yielding a total volume of ~2,400 yd³ of fill placement (uncompacted volume). Ave. round trip time per pan approx. 6-8 min.

R. Sherrod / Philip M. Getsi

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure - Phase II

REPORT NO.: # 13

PROJECT NO.: 94-3832, FY94-20

DATE: 7/25/95

CLIENT: M.E.S.

FIELD TECHNICIAN(S): R. Sherrod / P. Getz

WEATHER CONDITIONS: Clear & mild, breezy, a.m. hours, temp. range mid 70's to upper 80's; p.m. hrs, clear & hot, breezy, temp. mid 90's.

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Final preparation & compaction of Lift 6, Rows 1-3 (triangle area adjacent to southern boundary of Phase I), and Lift 5, Row 4. Rows 1-4 are now at grade and, according to measurements of lift thicknesses, satisfy the minimum requirement of 2' of compacted clay cover of Type A material. Final prep. & compaction of Lift 5, Row 5 (w/ grade confirmation awaiting return of surveyors on 7/27/95). Preparation of Lift 5, Row 6 for compaction (but not ready in time for testing). Placement of Lift 3, Row 7. Final preparation & compaction of Lift 2, Row 8. Began placement of Lift 3, Row 9. Moisturization & sealing of Lifts at EOR to prevent surface drying & cracking.

DESCRIPTION OF OFF SITE MATERIAL:

TYPE A clay from stockpile mixed w/ fresh material from borrow area (Landfill II) hauled by tandem truck. Natural moisture content of material still lower but improving as pans escape deeper into stockpile.

ADDITIONAL COMMENTS: Fill production per day was very high w/ 75 pan loads (~23 yd³/load) & 28 truck loads (~18 yd³/load), yielding a total volume of ~2,200 yd³ of fill placement (uncompacted). Ave. round trip time per pan approx. 6-7 min. Note: per discussion w/ Paul Waldschlager change volumes per load from 27 yd³ to 23 yd³ for pans and from 20 yd³ to 18 yd³ for trucks, effective 7/25/95. This does not affect the total load counts reported on previous reports.

R. Sherrod / Phil M. Getz
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: # 14

PROJECT NO.: 94-3832, FY94-20

DATE: 7-27-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / P. Gets.

WEATHER CONDITIONS: A.M. - Partly Cloudy Temp 70-80°F.
P.M. - Partly Cloudy, light sprinkles Early PM & late P.M. Temp 80-90°F.

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: 6" Vegetative cover placed from N.W. start point To G.P. 160 x 166 to 143. Type A soil was used for this cover.

Row 6, 1st 5, Row 7 1st 3 & Row 9 1st 2 completed and tested with passing results.

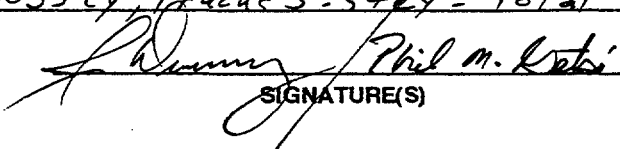
Row 10 1st # 1 placed & rockpicked.

Row 8 1st # 3 placed from Pin 204 To 197.

Watering of all areas continued throughout The day.

DESCRIPTION OF OFF SITE MATERIAL: Type A soil for both clay cap and First 6" of vegetative cover. This material hauled by both Dump truck from landfill #5 and Pans from stock pile at landfill II

ADDITIONAL COMMENTS: Average Turnaround Time for Pans was 6-7 min. Two pans used AM & PM Evening shift three pans were used. Total of 74 Pan loads for cap & cover this date.
Quantities - Veg Cover Pans 29 = 667 cy, Trucks 30 = 540 cy = total 1207 cy
" Cap Pans 45 = 1035 cy, trucks 3 = 54 cy = total 1089 cy


SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: # 15

PROJECT NO.: 94-3832, FY94-20

DATE: 7-28-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / P. Getsi

WEATHER CONDITIONS: A.M. Light Shower Temp 70s
P.M. Partly Cloudy

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Continuing placing 6" Vegetative Cover
at North End, now covered thru Row 5

Lift #1 Row 10 Completed all phases w/passing results

Lift #3 Row 8 Completed all phases w/passing tests

DESCRIPTION OF OFF SITE MATERIAL: Type A soil for both clay
cap and first 6" of vegetative cover. This material
was delivered by pan & Dump Truck from Landfill #5
and stockpile at Landfill #11

ADDITIONAL COMMENTS: Average Turnaround time for pans was
Six minutes.

Veg cover qty, Pans 18 Trucks, 6 Total cu yd = 522
Cap placement qty, Pans 72, Trucks 19 ~~34~~⁵⁰ Total Cu yd = 1998

Jerry Dunning / Phil Getsi
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: #16

PROJECT NO.: 94-3832, FY94-20

DATE: 7-31-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Gatsi

WEATHER CONDITIONS:

A.M. Clear 70s to 80s
P.M. Clear Mid 80s 6:30 PM Rain started

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Placing of top 6" Vegetative, completed
Thru Row 4 into row 5.

Lift #3 Row 9 Completed w/pressing tests.

Placement of lift 5 row 7 & lift 4 row 8.

DESCRIPTION OF OFF SITE MATERIAL:

Vegetative cover material, dark
grey silty sandy clay with some organics (decomposing
stage) large organics removed during placement.

Clay Cap material, Type A soil

All soils delivered by both Truck & pans

ADDITIONAL COMMENTS:

Average turn around for Pans was 7 min
on this date.

Veg. Cover Pans 73 Trucks 10 = 1859 cu Yd

Clay Cap Pans 31 Trucks 31 = 1145 cu Yd

SIGNATURE(S)

Jerry Dunning / Phil Gatsi

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: # 17

PROJECT NO.: 94-3832, FY94-20

DATE: 8-1-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Gatsi

WEATHER CONDITIONS:

A.M. Clear 70's To 80's

P.M. Early, Clear Mid 90's Late Overcast Mid 80's

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

L&T 2 Row 10

Completed w/passing Tests

L&T 4 Row 8

" " "

Proof Rolled Row #11 AM & Rows 12, 13 & 14 PM. No pumping was observed.

DESCRIPTION OF OFF SITE MATERIAL:

Clay cap material, Type A soil.

Soil delivered To site by both pans & Trucks

ADDITIONAL COMMENTS:

Avg. Turn Around Time 7 min.

Clay Cap Quantities

Pans 67 - Trucks 36 = 2,189 cy Yd

@ 23 cy ea

@ 18 cy ea

J. Dunning / Phil Gatsi

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: # 18

PROJECT NO.: 94-3832, FY94-20

DATE: 8-2-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Gatsi

WEATHER CONDITIONS:

A.M. Clear 80°

P.M. Partly Cloudy Mid 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

LIFT # 2 Row 11 Completed w/passing Tests

LIFT # 5 Row 7 " " "

Placement of LIFT #5 row B

DESCRIPTION OF OFF SITE MATERIAL:

Clay Cap material, Type A soil.

Soil Delivered to site by Truck & Pans.

ADDITIONAL COMMENTS:

Average Turn around Time for Pans from stockpile To site was 7 min on this date.

Clay Cap Quantities

Pans 39

Trucks 1 = 915 cy

@ 23 cy

@ 18 cy

(one shift only this date.)

J. Dunning / Phil Gatsi

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 19

PROJECT NO.: 94-3832, FY94-20

DATE: 8-3-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Gatsi

WEATHER CONDITIONS: A.M. Partly Cloudy, High 70's to Low 80's
P.M. Mostly Cloudy, 30 minute light shower 1:30 to 2:00 PM

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

LIFT #5 Row #8 completed w/passing Tests

LIFT #1 Row #12 Completed w/passing Tests

Proof rolled Row 15 & 15+, No Pumping Observed

Placement of LIFT #4 Row 9

Placement of LIFT #3 Row 10

Placement of LIFT #2 Row 11

Placement of LIFT #1 Row 13 & 14 Simultaneously

DESCRIPTION OF OFF SITE MATERIAL:

Clay Cap material, Type A
Soil. Soil delivered to site by Truck & Pans

ADDITIONAL COMMENTS:

Average Turn around Time for Pans
from Stockpile To site was 6 min on this date

Clay Cap Pans 77 Trucks 31 = 2,329 cy.
Quantities @ 23 cy @ 18 cy

SIGNATURE(S)

J. Dunning / Phil Gatsi

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 20

PROJECT NO.: 94-3832, FY94-20

DATE: 8-9-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / P. Gatsi

WEATHER CONDITIONS: A.M. Overcast, Breezy Mid 80s
P.M. Overcast Breezy Low 90s, Late PM shower

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

LIFT #4 Row #9 Completed with passing Tests

LIFT #3 Row #10 Completed with Passing Tests

Placement of LIFT #1 Row #15+

Placement of LIFT #5 Row #9

DESCRIPTION OF OFF SITE MATERIAL:

Clay Cap material, Type A
Soil. Soil delivered to site by Trucks & Pans

ADDITIONAL COMMENTS:

Average Turn around Time for Pans
from stockpile to site was 6 min on this Date

(Clay Cap
Quantities)

Pans 72 Trucks 40 = 2376
@ 23 cy @ 18 cy

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 21

PROJECT NO.: 94-3832, FY94-20

DATE: 8-7-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning

WEATHER CONDITIONS: Overcast & for showery all day

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

Placed First six inches of vegetative cover
over rows # 5, 6 & 7.

DESCRIPTION OF OFF SITE MATERIAL:

Type A clay, material delivered
by Trucks & Pans

ADDITIONAL COMMENTS:

Average Turn around for pans from
stockpile to site was 6min on this date.

Vegetative Cover Pans 41 Trucks 42 = 1699
Quantities @ 23 cy @ 18 cy

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 22

PROJECT NO.: 94-3832. FY94-20

DATE: 8-9-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / P. Getsi

WEATHER CONDITIONS: A.M. Overcast M.d To H. 70s

P.M. Hazy High 80s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

LIFT #2 Row 11 Completed w/Passing Tests
LIFT #5 Row 9 Completed w/Passing Tests
LIFT #1 Row 13 Completed w/Passing Tests

Placement of LIFT #2 Row 12

DESCRIPTION OF OFF SITE MATERIAL: Clay Cap Material, Type A
soil. Soil delivered to site by Trucks & Pans

ADDITIONAL COMMENTS: Average Turn around Time for Pans
from stock pile to site was 8 minutes on
this date.

Clay Cap) Pans 15 Trucks 5 = 435 cy
Quantities @ 23 cy @ 18 cy

Phil M. Ketsi
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 23

PROJECT NO.: 94-3832, FY94-20

DATE: 8-10-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Getsi

WEATHER CONDITIONS:

A.M. Overcast, Mid 70s
P.M. Partly Cloudy Hi 80s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Vegetative cover placement, second 1.5 ft
partially covering Rows 5, 6 & 7.

Lift #1 (west 1/2) Row 14 Completed w/passing Test

Lift #2 Row 12 Completed w/passing Test

DESCRIPTION OF OFF SITE MATERIAL:

Vegetative cover, ~~the~~ clayey silt, brownish
black with some organics (root hairs, small twigs decomposing leaves

Clay Cap material, Type A soil. Soil delivered to site
by trucks & pans

ADDITIONAL COMMENTS:

Average Turn around time for pans from
stockpile of Cap soil & Veg cover 7 minutes on this date

Clay Cap Quantities 52 Pans @ 23 cu yd = 1196 50 trucks @ 18 = 900 Tot. 2096 cy

Veg. Cov. Quan. 24 Pans @ 23 = 552 38 Trucks @ 18 cy = 684 Tot. 1236 cy

J. Dunning / Phil Getsi
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 24

PROJECT NO.: 94-3832, FY94-20

DATE: 8-11-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Getsi

WEATHER CONDITIONS:

A.M. Partly Cloudy, Hi 70's
P.M. Partly Cloudy, Low 90's

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Vegetative cover placement, second
lift covering east side area of Rows 5, 6 & 7.

Lift #4 Row 10 completed w/passing Tests

Lift #3 Row 11 completed w/passing Tests

Lift #2 Row 13 completed w/passing Tests

DESCRIPTION OF OFF SITE MATERIAL:

Vegetative cover - Clayey silt, brownish
black with some organics (root hairs, small twigs, de-
composing leaves.)

Clay Cap material: Type A soil, Soil delivered to
site by Trucks & Pans

ADDITIONAL COMMENTS: Average turn around time for pans from
stockpile of cap soil & veg cover was 7min on this date

Clay Cap Quantities 60 pans @ 23cy = 1380 18 Trucks @ 18cy = 324 Tot. 1704cy
Veg Cov. Quantities 15 " " = 345 48 " " = 864 Tot. 1209cy

SIGNATURE(S)

J. Dunning / Phil Getsi

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 25

PROJECT NO.: 94-3832 FY94-20

DATE: 8-12-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / Phil Getsi

WEATHER CONDITIONS: AM Partly Cloudy Mid 80's
PM " " Mid 80's

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

LIFT # 1 Row # 14 Completed with Passing Tests

LIFT # 1 Row # 15 Completed with Passing Tests

LIFT # 5 Row # 10 Completed with Passing Tests

DESCRIPTION OF OFF SITE MATERIAL: Clay Cap Material, Type "A"
soil. Soil delivered to site by trucks and
Pans.

ADDITIONAL COMMENTS:

Clay Cap Quantities Delivered on this Date:

Pans 5 @ 23 cy = 115

Trucks 39 @ 18 cy = 702 = total yardage³ @ 17

J. Dunning / Phil Getsi
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 26

PROJECT NO.: 94-3832, FY94-20

DATE: 8-14-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / R. Sherrard

WEATHER CONDITIONS:

AM - Clear Mid 80s
PM - Mid to Hi 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Lift # 4 Row 11 Completed with passing Tests

Lift # 3 Row 12 Completed with passing Tests

Placement of first 6" of Vegetative cover at west area of rows 8-9 & 10.

DESCRIPTION OF OFF SITE MATERIAL:

Clay Cap Material, Type "A" soil

Vegetative Cover soil, silty clay, grayish brown with some organic particles (root hairs, twigs & decomposing leaves).

Soil Delivered to site by Trucks & Pans.

ADDITIONAL COMMENTS:

Clay Cap Quantities on this date 67 Pans @ 23 cy = 1541 (Total)
28 Trucks @ 18 cy = 504 (1,008)

Veg Cover

25 Pans @ 23 cy = 575 Total

46 Trucks @ 18 cy 828. 1403

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 27

PROJECT NO.: 94-3832, FY94-20

DATE: 8-15-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Gats,

WEATHER CONDITIONS:

AM - Clear Hi 80s
PM - Clear Hi 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

* Lift # 5 Row 11 Completed w/passing tests

* Lift # 4 Row 12 Completed w/passing tests

Vegetative Cover placement on Rows 8, 9 & 10.

^{work}

* Lifts placed previous "day/days"

DESCRIPTION OF OFF SITE MATERIAL:

Clay Cap Material Type "A" soil

Vegetative cover soil silty clay grayish brown with
some organics (root hairs, twigs & decomposing
leaves)

Soil del

ADDITIONAL COMMENTS:

Vegetative cover Placement on this date:

91 Pans @ 23 cu.yd. = 2093

44 Trucks @ 18 cu.yd. = 792

2885 Total

SIGNATURE(S)

J. Dunning / Phil Gatsi

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 28

PROJECT NO.: 94-3832, FY94-20

DATE: 8-16-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Gatsi

WEATHER CONDITIONS:

A M - Clear Hi 80s
P M - Clear Hi 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Clay cap placement Lift #5 Row #12.

Watering of lift #2 at Rows 14 & 15

DESCRIPTION OF OFF SITE MATERIAL:

Clay cap material Type "A" soil

ADDITIONAL COMMENTS:

Clay cap Quantities on this date:

Pans 19 @ 23 cy = 437 + Trucks 23 @ 18 cy = 414 Total 851 Cy
Pan Turn around time 6 min Avg. Only one pan used
on this date.

J. Dunning / Phil M. Gatsi

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 29

PROJECT NO.: 94-3832, FY94-20

DATE: 8-17-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / P. Gater

WEATHER CONDITIONS: AM - Clear Hi 80s

PM - Clear Mid 90s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

Lift # 5 Row #12 Completed with passing Tests

Vegetative Cover placement Rows 8, 9, 10 & 11

DESCRIPTION OF OFF SITE MATERIAL: Clay cap Material, Type "A" soil

Vegetative Cover soil, Clayey silt with some organics
greyish brown

ADDITIONAL COMMENTS: Clay Cap Quantities on this date:

10 pans @ 23 cy = 230 No Trucks this date = 230 cy cap soil

Vegetative cover placed on this date:

83 Pans @ 23 cy = 1909 23 trucks @ 18 cy = 414 2318 cy. ^{1/3} cover

Phil Kotsi
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 30

PROJECT NO.: 94-3832, FY94-20

DATE: 8-18-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Gatz,

WEATHER CONDITIONS:

AM Partly Cloudy H. 80s
PM Partly Cloudy H. 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

LIFT 2 Row 14 completed w/passing Tests

Vegetative cover placement Rows 12 ^{§ 11} ~~13~~ ~~J.P.~~

DESCRIPTION OF OFF SITE MATERIAL:

Clay cap Material, Type "A" soil.

Vegetative Cover Material, Clayey silt, greyish brown with some organics

Soil Delivered by Trucks & Pans

ADDITIONAL COMMENTS: Clay Cap material 1 truck only @ 18cy = 18cy
Vegetative Cover placed on this date:

38 pans @ 23 cy = 874 72 Trucks @ 18cy = 1296 total 2170cy

Average 7 min Turn around for Pan deliveries.

Phil M. Kisti

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 31

PROJECT NO.: 94-3832, FY94-20

DATE: 8-21-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Getsi

WEATHER CONDITIONS:

AM Foggy Low 80s

PM Partly Cloudy Low 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Row 15, LIFT 2 Completed with passing tests

Vegetative Cover placement Row 12

DESCRIPTION OF OFF SITE MATERIAL:

Clay cap Material Type "A" soil

Vegetative cover material, Clayey silt, greyish brown
with some organics

ADDITIONAL COMMENTS:

Clay cap material:

Pans 4 @ 23 = 92 cy plus 50 Trucks @ 18 = 900 cy 992 cy Total

Vegetative Cover material:

Pans 18 @ 23 = 414 cy plus Trucks 27 @ 18 cy = 486 Total

SIGNATURE(S)

Jerry Dunning / Phil Getsi

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 32

PROJECT NO.: 94-3832, FY94-20

DATE: 8-22-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / P. Getsi

WEATHER CONDITIONS: AM Clear Mid 80s
PM Clear Low 90s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

Row 13 L&T 3 Completed with passing tests

DESCRIPTION OF OFF SITE MATERIAL:

Clay Cap Material Type "A" soil

Cap soil delivered by both dump trucks & Pans

ADDITIONAL COMMENTS:

Clay cap material; delivered and placed on this date:

Pans 22 @ 23 cy = 506 cy Trucks 8 @ 18 cy = 144 Total 650

Jerry Dunning / Phil M. Getsi
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 33

PROJECT NO.: 94-3832, FY94-20

DATE: 8-23-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / Phil Gets.

WEATHER CONDITIONS:

A M Foggy Low 80s

P M Partly cloudy Low 90s

MEETINGS & RESULTS:

Discussed my findings of lifts placed
Too deep on rows # 14 & 15 with Ken McCurdy and
Paul Walschliger (Both on site). Meeting results were
to place lifts thinner for remainder of Cap

DESCRIPTION OF WORK DONE:

Row 14, Lift #3 Completed w/passing tests

DESCRIPTION OF OFF SITE MATERIAL:

Clay cap material Type "A" soil

No cap soil was placed on this date.

ADDITIONAL COMMENTS:

Row 15 lift #3 East area completed
with passing tests. West area tests failed, contractor
stated they will rework this West area A.M. of
8-24-95

Contractor worked No overtime shift on this date.

SIGNATURE(S)

J. Dunning / Phil M. McCurdy

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 34

PROJECT NO.: 94-3832, FY94-20

DATE: 8-24-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning / P. Gates,

WEATHER CONDITIONS: A M Fog/Haze 80°
P M Clear Low 90s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

Row 15 LIFT #3 Compacted/Completed w/passing Tests

Placement of LIFT #4 on Rows 13, 14 & 15

DESCRIPTION OF OFF SITE MATERIAL: Clay Cap material Type "A" soil

No vegetative cover placed on this date

ADDITIONAL COMMENTS: Clay Cap soil delivered by Trucks only
on this date.

Trucks 22 @ 18 cu yd = 396 cu yd Total on this date

Jerry Dunning / Phil Gates
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 35

PROJECT NO.: 94-3832, FY94-20

DATE: 8-25-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning / Phil Getsi

WEATHER CONDITIONS:

AM Clear Hi 70s
PM Partly Cloudy Mid 80s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Row 13 LFT #4 Completed w/passing tests

Row 14 LFT #4 Completed w/passing Tests

Row 15 LFT #4 Completed w/passing Tests

DESCRIPTION OF OFF SITE MATERIAL:

Clay cap material Type "A" soil

No vegetative cover placed on this date

ADDITIONAL COMMENTS:

Clay cap soil delivered by Trucks
only on this date.

Trucks 20 @ 18 cy. = 360 cy. yd. Total on this date.

Jerry Dunning / Phil M. Getsi
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 36

PROJECT NO.: 94-3832. FY94-20

DATE: 8-28-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning / Phil Gets

WEATHER CONDITIONS: AM Clear H. 70s Low 80s
PM Clear Low 90s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

Row 13 LIFT #5 Completed w/passing Tests
Row 14 LIFT #5 Completed w/passing Tests
Row 15 LIFT #5 Completed w/passing Tests
Row 14 LIFT #6 Completed w/passing Tests

DESCRIPTION OF OFF SITE MATERIAL: Clay cap material Type "A" soil

No vegetative cover placed on this date

Soil delivered by Dump Truck & Pans

ADDITIONAL COMMENTS:

Pans 2 @ 23 cy = 46 cu yd
Trucks 22 @ 18 cy = 396 cu yd
Total = 442 cu yd.

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.:

37

PROJECT NO.: 94-3832, FY94-20

DATE:

8-29-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Getai

WEATHER CONDITIONS:

AM Clear Low 80s
PM Clear Low 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Row 14 LST 6 completed w/Passing Tests
(Fill in Touch up Area Final)

First 1st 6" Vegetative cover placement began
on Rows 13, 14 & 15

DESCRIPTION OF OFF SITE MATERIAL:

Clay cap material Type "A" soil

Vegetative Cover material Type "A" soil

All soils delivered by Trucks & Pans

ADDITIONAL COMMENTS:

Clay Cap. Quan. 1 Truck @ 18cy = 18cy 7 Pans @ 23cy = 161cy 179 Tot. cy.

veg. Cov. Quan. 41 Trucks @ 18cy = 738cy 49 Pans @ 23cy = 1127cy 1865 Tot. cy.

J. Dunning / Phil M. Getai
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 38

PROJECT NO.: 94-3832, FY94-20

DATE: 8-30-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Getai

WEATHER CONDITIONS:

AM Clear Low 80s
PM Clear Mid 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Negative Cover placement on Rows # 13, 14 & 15

Soil delivered by both Trucks & Pans.

DESCRIPTION OF OFF SITE MATERIAL:

Type "A" clay soil on first
6" 1.5 ft.

Second 6" 1.5 ft: Silty clay brownish gray
with some organics.

ADDITIONAL COMMENTS:

Veg Cover Quantities:

Trucks 79 @ 18 cy = 1422 cy Pans 52 @ 23 cy = 1196 cy

Daily grand Total = 2618 cu.yd.

Phil M. Getai

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 39

PROJECT NO.: 94-3832, FY94-20

DATE: 8-31-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning / P. Getsi

WEATHER CONDITIONS:

A M Clear Low 80s
P M Clear Mid 90s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Vegetative Cover placement on Rows #13, 14 & 15

Soil delivered by Trucks only on this date

DESCRIPTION OF OFF SITE MATERIAL:

Clayey silt, Greyish brown
with some organics (root hairs, twigs, decomposing
leaves etc)

ADDITIONAL COMMENTS:

Vegetative cover Quantities on this date:

105 Trucks @ 18 cy = 1890 cy Total.

SIGNATURE(S)

Phil M. Getsi

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 40

PROJECT NO.: 94-3832, FY94-20

DATE: 9-1-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: A.M. Clear Mid 80s
P.M. Rain Mid PM

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Final Grading work on
Rows 1 Thru 12. Waiting on Surveyors
for Elevations of Rows 13, 14 & 15. Rained
mid Mid PM

DESCRIPTION OF OFF SITE MATERIAL: No soil delivered on
this date

ADDITIONAL COMMENTS: N/A

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 41

PROJECT NO.: 94-3832, FY94-20

DATE: 9-5-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A. M. Clear Hi 70s

P. M. Clear Hi 80s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Light Scarification of rows 1 thru 12, after Scarification rock picking began on this vegetative cover.

P.M. Surveyors on site checking elevations of vegetative cover on rows 1 thru 12. Three isolated areas found to need inches of fill in this area

DESCRIPTION OF OFF SITE MATERIAL:

No soil delivered on this date.

ADDITIONAL COMMENTS:

N/A

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 42

PROJECT NO.: 94-3832, FY94-20

DATE: 9-6-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A M Clear Hi 70s
P M Clear Hi 80s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Vegetative cover placement

at Rows 1 thru 12 east slope.

Surveyors on site checking elevations of
vegetative cover at rows 13, 14 & 15

DESCRIPTION OF OFF SITE MATERIAL:

Vegetative cover, clayey silt
Greyish brown w/ some organics. Soil delivered
by Dump Trucks

Quantities: 28 Loads @ 18 cy = 504 Cu. Yd.

ADDITIONAL COMMENTS:

N/A

Jerry Dunning

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 43

PROJECT NO.: 94-3832, FY94-20

DATE: 9-7-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: A M Clear H, 70s
P M Clear H, 80s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Vegetative cover placement at isolated low areas.

West & South perimeter Berm retainer placement

Surveyors set Berm location stakes

DESCRIPTION OF OFF SITE MATERIAL: Vegetative cap cover, Clayey silt, Brownish red with some organics (Top soil)

Berm Construction, Type A clay

Soils delivered by Trucks & Pans

ADDITIONAL COMMENTS:

Quantities:

62 Truck loads @ 18 cy = 1116 cy

21 Pan loads @ 23 cy = 483 cy

Total = 1,599 cubic yards

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 44

PROJECT NO.: 94-3832, FY94-20

DATE: 9-8-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning / Ron Sherrod

WEATHER CONDITIONS: AM Clear Hi 70s
PM Clear Hi 80s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: West & South perimeter berm
retainer placement.

Mid Cap berm placement diagonally across
rows 3, 4, 5, 6, 7 & 8. Survey pins 140 To 212.

Drainage furrow cut along east edge leading
to existing runoff catch basin at S.E.
Corner of Landfill.

DESCRIPTION OF OFF SITE MATERIAL: Type "A" Clay

ADDITIONAL COMMENTS: Berm Soil Quantities Delivered on this date:
Trucks 39 @ 18 cy = 702 cy
Pans 3 @ 23 cy = 69 cy
771 Total cubic yards

Jerry Dunning - R. Sherrod
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 45

PROJECT NO.: 94-3832, FY94-20

DATE: 9-11-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

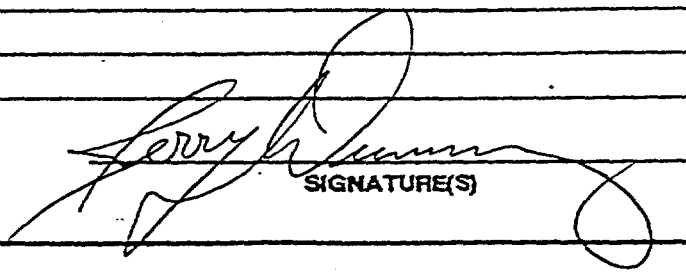
WEATHER CONDITIONS: A M - Clear H. 70s
P M - Overcast H. 80s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Perimeter and Mid Cap swale
Finish grade work.

DESCRIPTION OF OFF SITE MATERIAL: Swale/Berm Type "A" Clay

ADDITIONAL COMMENTS: No soil delivered on this date


SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 46

PROJECT NO.: 94-3832, FYS4-20

DATE: 9-12-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: A M: Clear H. 70s

P M: Partly Cloudy H. 80s

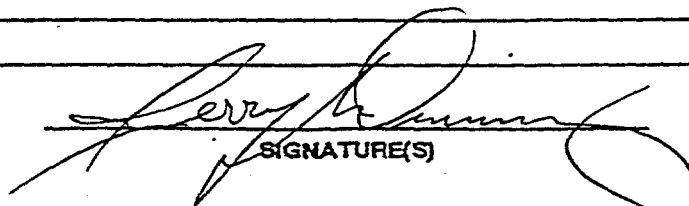
MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Construction of conveyance
Ditch # 2 at S.E. Corner of site.

Survivors on site checking ditch alignment
and setting offset stakes.

DESCRIPTION OF OFF SITE MATERIAL: Type "A" Clay delivered
for construction of ditch and adjacent Berm.

ADDITIONAL COMMENTS: Soil Quantity: 7 dump Truck loads @ 18cy = 126 cu. yd.


SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 47

PROJECT NO.: 94-3832, FY94-20

DATE: 9-13-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A.M.: Partly Cloudy Mid 70s

P.M.: Partly Cloudy Mid 80s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Construction of conveyance ditch #2 at S.E. corner of site. Build up of Swale along south perimeter. Vegetative cover placement at isolated low points at East slope.

DESCRIPTION OF OFF SITE MATERIAL:

Ditch and swale construction Type "A" Clay. Vegetative cover placement, Clayey silt, brown with some organics

ADDITIONAL COMMENTS:

Type "A" Clay 9 Trucks at 18cy = 162 cu.yd.

log Cover 4 Trucks at 18 cy = 72 cu. yd.

SIGNATURE(S)

Jerry Dunning

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 48

PROJECT NO.: 94-3832. FY94-20

DATE: 9-14-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Terry Dunning

WEATHER CONDITIONS: A M Overcast Low 70s
P M Overcast Low 80s

MEETINGS & RESULTS: NA

DESCRIPTION OF WORK DONE: South East Slope Fill & Grading at Conveyance
Ditch II

DESCRIPTION OF OFF SITE MATERIAL: Type "A" Clay

ADDITIONAL COMMENTS: 20 Truckloads delivered

Terry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 49

PROJECT NO.: 94-3832. FY94-20

DATE: 9-15-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning - A. Bice

WEATHER CONDITIONS: A. M.: overcast Mid 70s
P. M.: overcast Mid 80s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: South East Slope grading
and fill to form conveyance ditch #2

DESCRIPTION OF OFF SITE MATERIAL: Type "A" clay

ADDITIONAL COMMENTS: _____

Nine Truckloads delivered @ 18 cu ~~yd~~ = 162 Total cu. yd.

Jerry Dunning
A. Bice
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: #50

PROJECT NO.: 94-3832, FY94-20

DATE: 9-18-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A.M. - Mostly Cloudy Mid 60s
P.M. - Partly Cloudy Mid 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

South East Slope Conveyance
Ditch # II Fill & Compaction. Ditch wash out
areas from previous rains repaired and stabilized.

DESCRIPTION OF OFF SITE MATERIAL:

Type "A" Clay

ADDITIONAL COMMENTS:

24 Dump Trucks @ 18 cy. ea. = 432 cy. yd delivered on
this date

SIGNATURE(S)

Jerry Dunning

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 51

PROJECT NO.: 94-3832, FY94-20

DATE: 9-19-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

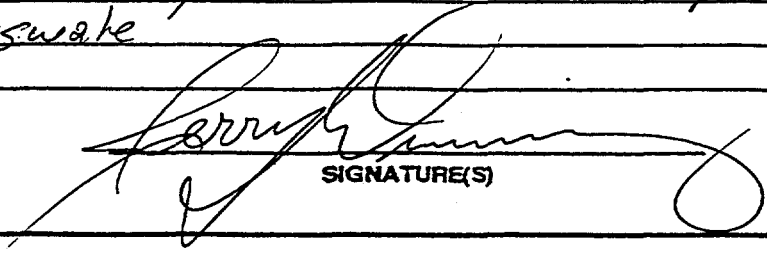
WEATHER CONDITIONS: A.M. Clear Low 70s
P.M. Clear Low 80s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Swale repair at south west corner. Repair necessary due to silt wash down from recent rains

DESCRIPTION OF OFF SITE MATERIAL: Type "A" Clay

ADDITIONAL COMMENTS: 11 Trucks of Silty soil from Rain wash down removed.
12 Trucks Type "A" Clay hauled in for replacement and repair of swale


SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 52

PROJECT NO.: 94-3832, FY94-20

DATE: 9-20-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: A M - Overcast Low 70s
P M - D

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: South West area swale repair
and light compaction. Straw bale delivery and
placement. Stabilization stone delivery.
Began placement of geotechnical Filter Fabric at
conveyance ditches #1 & #2.

DESCRIPTION OF OFF SITE MATERIAL: Type "A" Clay

ADDITIONAL COMMENTS: _____

8 Truck loads @ 23 cy = 184 cu.yd. Total

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 53

PROJECT NO.: 94-3832, FY94-20

DATE: 9-21-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning

WEATHER CONDITIONS: A.M. - sprinkles, overcast w.d. 70s
P.M. - Sprinkles, overcast Hi. 70s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Placement of geotextile fabric
at conveyance ditches #1 & 2. Fabric filter
was manually unrolled and hand stapled/nailed
to ditch soil surface. Rip rap placement
began at upper elevations of ditch.

DESCRIPTION OF OFF SITE MATERIAL: N/A

ADDITIONAL COMMENTS: Light showers kept Trucks from
delivering/stockpiling rip rap for conveyance ditches.

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 54

PROJECT NO.: 94-3832, FY94-20

DATE: 9-25-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

J. Dunning

WEATHER CONDITIONS:

AM - Overcast H. 60s
PM - No work

MEETINGS & RESULTS:

NA

DESCRIPTION OF WORK DONE:

Slope Forming at south side of
Conveyance Ditches #1 & #2.
Contractor only worked in A.M. due
To wet Plateau surface.

DESCRIPTION OF OFF SITE MATERIAL:

Type "A" Clay

ADDITIONAL COMMENTS:

3 Truck loads delivered at 18 cy = 54 cy Total

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 55

PROJECT NO.: 94-3832, FY94-20

DATE: 9/27/95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning / R. Sherrod

WEATHER CONDITIONS:

AM Clear Hi 60s

PM Clear Hi 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Slope Forming at south

sides of conveyance ditches # 1 & 2.

DESCRIPTION OF OFF SITE MATERIAL:

"A" Type soil used

for vegetative cover

ADDITIONAL COMMENTS:

18 dump truck loads at 18cy. ea. delivered
for grand total today = 324 cubic yards

Jerry Dunning / R. Sherrod

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 56

PROJECT NO.: 94-3832, FY94-20

DATE: 9-28-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A M Clear Hi 60s
P M Clear Hi 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Hydro seeding at North edge
of Plateau and riprap placement at conveyance
ditches #1 & 2

DESCRIPTION OF OFF SITE MATERIAL:

No soil placed on
this date

ADDITIONAL COMMENTS:

Rip Rap stone delivered from
on site stockpile.

SIGNATURE(S)

Jerry Dunning

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 5.7

PROJECT NO.: 94-3832, FY94-20

DATE: 9-29-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A M Clear H. 60s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Researched and discussed with
engineer Paul W. Seeding and Fertilizer
specifications and application procedures

DESCRIPTION OF OFF SITE MATERIAL:

No offsite material
delivered on this date due to operator
absence.

ADDITIONAL COMMENTS:

No work activity during
A M or P M due to operator absence.
Paul W. Rogers & J. Dunning only on site
during A.M.

SIGNATURE(S)

Jerry Dunning

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 58

PROJECT NO.: 94-3832, FY94-20

DATE: 10-2-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: AM Partly Cloudy Hi 70s

PM Partly Cloudy Low

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Rock (Rip Rap) placed at

Conveyance Ditches # 1 & 2. Stone was
Trucked To Ditches from on site stock pile.

DESCRIPTION OF OFF SITE MATERIAL: 10"± stone as per drawings

placed to a depth of two feet.

ADDITIONAL COMMENTS: N/A

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 59

PROJECT NO.: 94-3832, FY94-20

DATE: 10-3-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A M Light Showers Low 70s
P M Light Showers Mid 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Rock (Rip Rap) placed at
conveyance ditches #1 & 2. Construction of
dissipator at Junction of Perimeter and Plateau
Swales.

DESCRIPTION OF OFF SITE MATERIAL:

10"± stone as drawings
placed to a depth of two feet. Geotechnical
filter fabric placed at dissipator prior to stone
placement.

ADDITIONAL COMMENTS:

N/A
Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 60

PROJECT NO.: 94-3832, FY94-20

DATE: 10-9-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

AM Clear Low 70s

PM Clear Mid 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Conveyance ditches 1&2 Construction.

Sod Placement at N.W. Swale area.

Hydro Seeding East Slope.

Swale Repair

DESCRIPTION OF OFF SITE MATERIAL:

Type "A" Clay - Swale Repair.

10" Stone Conveyance ditch construction.

ADDITIONAL COMMENTS:

Dump Trucks used to haul material to site

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 61

PROJECT NO.: 94-3832, FY94-20

DATE: 10-10-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: A M Clear Mid 70s
P M Clear H. 70s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Sod placement at swales, Fine
grading of swales & Hydro seeding at East
Slope area.

DESCRIPTION OF OFF SITE MATERIAL: N/A

ADDITIONAL COMMENTS: To date all work has been done
as per drawings for closure plan.

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 6-2

PROJECT NO.: 94-3832, FY94-20

DATE: 10-11-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): J. Dunning

WEATHER CONDITIONS: AM Clear Mid 70s
PM Clear Low 80s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Sod placement at swales, Fine grading of swales and slope (South side). Hydro seeding slope areas. Completion of conveyance ditches #1 & 2.

DESCRIPTION OF OFF SITE MATERIAL: Type "A" Clay Veg cover South slope. 10" Stone Conveyance ditch construction

ADDITIONAL COMMENTS: To date all work completed to drawing & for closure specifications

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 63

PROJECT NO.: 94-3832, FY94-20

DATE: 10-12-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

AM - Clear Low 70s
PM - Clear Low 80s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Sod placement at swales, Fine
grading at south slope, Hydro seeding at
South Slope, discing & mechanical rock removal
North plateau area.

DESCRIPTION OF OFF SITE MATERIAL:

N/A

ADDITIONAL COMMENTS:

To date all work completed
has met drawing & closure specifications.

Jerry Dunning

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 64

PROJECT NO.: 94-3832, FY94-20

DATE: 10-13-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

A M - overcast Low 70s
P M - Showers Mid 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Sod placement at swales

Finish grading south slope

Hydro seeding south slope

DESCRIPTION OF OFF SITE MATERIAL:

N/A

ADDITIONAL COMMENTS:

To date all work completed has
not drawing for closure specifications

SIGNATURE(S)

Jerry Dunning

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 65

PROJECT NO.: 94-3832, FY94-20

DATE: 10-16-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

WEATHER CONDITIONS:

AM - Clear Hi. 60s

PM - Clear Low 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Sod placement at swales

Finish grading at south slope

Hydro seeding at south slope

DESCRIPTION OF OFF SITE MATERIAL:

N/A

ADDITIONAL COMMENTS:

To date all work performed has met or exceeded drawing for specifications

Jerry Dunning

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 66

PROJECT NO.: 94-3832, FY94-20

DATE: 10-17-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: AM Clear H. 60s

PM Clear Low. 70s

MEETINGS & RESULTS:

NA

DESCRIPTION OF WORK DONE:

Soil placement at Swales.

Plateau Discing & Rock Removal.

Hydro seeding South Slope and Plateau

DESCRIPTION OF OFF SITE MATERIAL:

NA

ADDITIONAL COMMENTS:

To date all work performed has met or exceeded drawing &/or specifications.
apx 200 lbs + per acre grass seed placed per drawings on this date.

Jerry Dunning

SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 67

PROJECT NO.: 94-3832, FY94-20

DATE: 10-18-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: AM - Clear Mid 60s
PM - Clear Mid 70s

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE:

Good stapling at swales.

Hydro Seeding Plateau.

Rock Pick up Plateau.

Fine grading South Slope.

Survey, Elevation Verification,

DESCRIPTION OF OFF SITE MATERIAL:

ADDITIONAL COMMENTS: Appx. 200 lbs grass seed per acre
was placed on this date.

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

PROJECT NO.: 94-3832, FY94-20

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S):

Jerry Dunning

REPORT NO.:

68

DATE:

10-19-95

WEATHER CONDITIONS:

A M - Clear Hi 60s

P M - Clear Mid 70s

MEETINGS & RESULTS:

N/A

DESCRIPTION OF WORK DONE:

Sod stapling at swales

Hydro Seeding, Plateau & East slope

Fine grading South slope

Survey, Elevation Verifications

DESCRIPTION OF OFF SITE MATERIAL:

N/A

ADDITIONAL COMMENTS:

Appx 200 lbs grass seed placed
per acre on this date.

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 69

PROJECT NO.: 94-3832, FY94-20

DATE: 10-20-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: AM - Overcast Mid 60s early, Rain Late AM.
PM - Rained out

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: _____

Fine grading South slope.

DESCRIPTION OF OFF SITE MATERIAL: N/A

ADDITIONAL COMMENTS: All work performed to date has met or exceeded drawing & for closure specifications.

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 70

PROJECT NO.: 94-3832, FY94-20

DATE: 10-23-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: A M Clear H. 40s

P M N/A

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Surveyors on site as built elevations and monument locations.

DESCRIPTION OF OFF SITE MATERIAL: N/A

ADDITIONAL COMMENTS: T.D. on site A.M. only. No grading or hydroseeding due to shortage of manpower

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 71

PROJECT NO.: 94-3832, FYS4-20

DATE: 10-24-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: AM - overcast Mid 60s w/sprinkles
PM - overcast Low 60s w/sprinkles

MEETINGS & RESULTS: N/A

DESCRIPTION OF WORK DONE: Fine grading South slope.
Surveyors on site for as built elevations

DESCRIPTION OF OFF SITE MATERIAL: N/A

ADDITIONAL COMMENTS: Hydro seeding began late A.M.
Hydro seeding equipment malfunctioned almost
immediately after start. Hydro seeder sent to
Maintenance. Scheduled restart seeding AM of 10-25-95

Jerry Dunning
SIGNATURE(S)

DAILY SUMMARY REPORT

PROJECT: Sanitary Landfill II Closure

REPORT NO.: 72

PROJECT NO.: 94-3832, FY94-20

DATE: 10-25-95

CLIENT: M.M.E.S.

FIELD TECHNICIAN(S): Jerry Dunning

WEATHER CONDITIONS: A M Clear H. 40s
P M Clear Low 60s

MEETINGS & RESULTS: NA

DESCRIPTION OF WORK DONE: Completion of Hydroseeding
South Slope.

DESCRIPTION OF OFF SITE MATERIAL: NA

ADDITIONAL COMMENTS: End of work for phase II.

Jerry Dunning
SIGNATURE(S)

APPENDIX B

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: # 1
SHEET NO.: 1 of 1
DATE: 7/10/95

JOB NAME: Y12 Landfill II - FY94 -
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: R. Sherrod
Density / Moisture Curve CHECKED BY: R. Sherrod

LOCATION OF ACTIVITY: Westernmost corner of PHASE I boundary on the north of PHASE II boundary, south to Grid Point (G.P.) 150 and east to G.P. 156, a triangular area lying within rows 1-3 (6+50 - 8+00) on site survey map.

OBSERVATION: Placement & compaction of Lift # 1. Rock removal criterion met. Soil obtained from stockpile, consistently Type A (borrow material on-site from Landfill II). Density/moisture curves for permeability met specification of $\leq 1.0 \times 10^{-7}$ cm/s by nuclear gage testing for Lift # 1 (Test #s 1 - 3) in location described.

EQUIPMENT REMEDIATION IDENTIFIED: Dagelan rock picker is slow compared w/ other machinery and manual labor in progress. It will not be a bottleneck m.e. work expands to a larger area so that multiple stages in the process will be taking place.

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	24.0		96.5	12	5'E 25'N of G.P. 140	1 pt Proctor, Atterberg, moisture sample collected *
2	A	23.5		97.8	8	10'E 20'N of G.P. 152	
3	A	31.6		90.3	6	5'E 20'N of G.P. 155	

* Sample sent to Nashville for verification of nuclear gage results & soil type classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: #2
SHEET NO.: 1 of 1
DATE: 7/11/95

JOB NAME: Y12 Landfill II - Phase II FR94- JOB NO.: 20 INSPECTED BY: R. Sherrad
INSPECTION ACTIVITY: Density/Moisture Curve CHECKED BY: R. Sherrad

LOCATION OF ACTIVITY: Triangular area adjacent to Phase I southern boundary, lying within rows 1-3 (6+50 to 8+00) on site survey map and 2 rows (rows 4 & 5) adjacent to triangular area.

OBSERVATION: Placement & compaction of lift #2 in triangular area (rows 1-3), test numbers 1-3. Placement and compaction of lift #4 on Row 4. Rack removal criteria met.
Soil from stockpile as hauled by payloads & from Landfill II by tandem dump trucks. Soil consistently type A. Density moisture curve met specification for permeability by nuclear gage testing.

EQUIPMENT REMEDIATION IDENTIFIED: Water truck & Hydro sprayer backhauled. Remedied toward end of day.

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216				
1	A	29.7		92.5	6	25'E 5'N at G.P. 128	1 pt. Proctor, Atterberg, * moisture sample collected
2	A	23.7		99.2	10	5'E 20'N at G.P. 151	
3	A	25.7		96.4	8	15'E 25'N at G.P. 154	
4	A	30.7		89.7	6	20'E 40'N at G.P. 161	
5	A	25.8		96.4	10	10'E 30'N at G.P. 165	
6	A	27.1		95.8	8	10'E 20'N at G.P. 168	Moisture sample only * collected

* Samples sent to Nashville for verification of nuclear gage results & soil type classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: # 3
SHEET NO.: 1 of 1
DATE: 7/12/95

JOB NAME: Y12 Landfill II - Phase II JOB NO.: FY94-20 INSPECTED BY: R. Shorrod
INSPECTION ACTIVITY: Density/Moisture Curve CHECKED BY: K. Shorrod

LOCATION OF ACTIVITY: Triangular area adjacent to Phase I southern boundary, lying within Rows 1-3 on site survey map, and 3 Rows (4-6) south.

OBSERVATION: Placements and compaction of Lift #1 along Row 5 (test nos. 1-3). Compaction of Lift #3 in Rows 1-3 (test nos. 4-6). Rock removal criterion met. Soil consistently type A. Lift thickness uncompacted approx. 6". Density/moisture curve specification met.
EQUIPMENT REMEDIATION IDENTIFIED: None. Breakdown of 1 pan @ end of day but did not affect production.

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	23.9		97.4	12	20' E 30' N of G.P. 173	1 pt. Proctor, Atterberg, moisture sample *
2	A	34.4		85.5	6	10' E 30' N of G.P. 177	
3	A	27.0		96.2	6	15' E 25' N of G.P. 180	
4	A	25.9		96.5	12	40' E 30' N of G.P. 155	
5	A	23.1		98.2	10	10' E 30' N of G.P. 150	
6	A	27.9		93.2	8	10' E 20' N of G.P. 128	moisture sample only collected *

* Samples sent to Nashville for verification of nuclear gage results & soil type classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: #4
SHEET NO.: 1 of 1
DATE: 7/13/95

JOB NAME: Y12 Landfill II - FY94 -
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: R. Sherrod
Density / Moisture Curve CHECKED BY: R. Sherrod
LOCATION OF ACTIVITY: Row 4 [Stations 6+00 to 6+50] /
Row 6 [Stations 5+00 to 5+50],

OBSERVATION: Placement, Preparation, & compaction of Lift 2, Row 4
(test nos. 1-3). Rock removal criterion met.

Preparation of Lift 1, Row 6, followed by compaction
(test nos. 4-6). Rock removal criterion met.
In both cases, density/moisture curve specification met.
EQUIPMENT REMEDIATION IDENTIFIED: None. Thickness of uncompacted lifts approx 6".
Soil consistently TYPE A. Natural moisture
very low due to intense drying conditions.
Continuous watering and wetting down of soil required.

RECORD OF
TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-5017	D-2216	D-2922			
1	A	23.3		97.6	8	10'E 20'N at G.P. 163	1 pt. Proctor, Atterberg, moisture sample *
2	A	29.3		92.5	8	30'E 30'N at G.P. 166	
3	A	24.4		99.3	8	15'E 15'N at G.P. 169	
4	A	26.2		95.4	12	20'E 25'N at G.P. 183	
5	A	27.6		94.3	12	20'E 30'N at G.P. 187	
6	A	28.8		92.0	12	25'E 25'N at G.P. 190	moisture sample only collected *

* Samples green-tagged and sent to Nashville for laboratory verification of nuclear gage field results & soil type classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: # 5
SHEET NO.: 1 of 1
DATE: 7/14/95

JOB NAME Y12 Landfill II - FY94-
INSPECTION ACTIVITY Phase II JOB NO.: 20 INSPECTED BY: R. Sherrard
Density/Moisture Curve CHECKED BY: R. Sherrard
LOCATION OF ACTIVITY Row 5 [Stations 5+50 to 6+00] //
Triangular Area within Rows 1-3
[Stations 6+50 to 8+00]
OBSERVATION Preparation and compaction of Lift 2, Row 5
(test nos. 1-3) and Lift 4, Rows 1-3. 3,000 gal.
of water added to lift 4 prior to compaction; material very
dry. lift 4 passed (test nos. 4-6) after additional
rescarification and wetting followed by second compaction.
EQUIPMENT REMEDIATION IDENTIFIED None Back removal criterion met. Density/moisture
specification met. Material TYPE A from
stockpile w/ very low natural moisture.
RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.6		95.3	10	20'E 30'N of G.P. 172	1pt. Proctor, Atterberg, & moisture sample.
2	A	26.5		94.4	10	15'E 20'N of G.P. 176	
3	A	31.5		88.1	6	20'E 25'N of G.P. 179	
4	A	24.6		96.7	12	20'E 20'N of G.P. 141	
5	A	23.4		98.2	12	25'E 25'N of G.P. 153	
6	A	22.6		100.3	12	40'E 40'N of G.P. 154	Moisture sample only collected *

* Samples to be green-tagged and sent to Nashville for laboratory verification of nuclear gage field results & soil classification

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: # 6
SHEET NO.: 1 of 1
DATE: 7/15/95

JOB NAME: Y12 Landfill II - FY94-
INSPECTION ACTIVITY: Phase II
JOB NO.: 20
INSPECTED BY: R. Sherrod
CHECKED BY: R. Sherrod

LOCATION OF ACTIVITY: Row 4 [Stations 6+00 to 6+50]
Row 6 [Stations 5+00 to 5+50]

OBSERVATION: Compaction of Lift 2, Row 6 (test nos. 4-6) and completion of preparation & compaction of Lift 3, Row 4 (test nos. 1-3). Lift 2, Row 6, had to be retested after addition of 2-3% more water and re-compaction. Rock removal criterion met, Density/Moisture specification met. ~~Base material~~ Type A Gran stockpile, large chunk boulders removed in some loads, pulled by hand.

EQUIPMENT REMEDIATION IDENTIFIED: None

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.5		93.4	8	10'E 30'N at G.P. 162	1st, Proctor, Atterberg & moisture sample
2	A	28.6		91.1	8	20'E 25'N at G.P. 164	
3	A	27.1		93.5	8	20'E 30'N at G.P. 168	
4	A	29.4		91.8	6	20'E 30'N at G.P. 184	
5	A	24.4		98.1	12	10'E 25'N at G.P. 188	
6	A	25.2		95.8	8	10'E 15'N at G.P. 191	Moisture sample only collected

* Samples to be green-tagged and sent to Nashville for laboratory verification of nuclear gage field results & soil classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: #7
SHEET NO.: 1 of 1
DATE: 7/17/95

JOB NAME: Y12 Landfill II - Phase II
INSPECTION ACTIVITY: Density / moisture curve
FR94-
JOB NO.: 20
INSPECTED BY: R. Sherrod
CHECKED BY: R. Sherrod

LOCATION OF ACTIVITY: Row 5 [Stations 5+50 to 6+00]
Row 6 [Stations 5+00 to 5+50]

OBSERVATION: Testing of Lift 3, Row 5 (Test Nos. 1-3) & Lift 3, Row 6 (Test Nos. 4-6)
Rock removal criterion met.
Approx. 5,000 gal of water added to the lift in each row to meet moisture requirements.
Thickness of uncompacted lift approx. 6".
Density / moisture specification met by nuclear gage testing.
Borrow material consistently TYPE A.
EQUIPMENT REMEDIATION IDENTIFIED: None

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2116	D-2922			
1	A	23.6		98.2	10	20'E 25'N of G.P. 174	1 Pt. Proctor, Atterberg & moisture sample
2	A	28.5		93.3	6	20'E 30'N of G.P. 178	
3	A	25.4		97.3	8	30'E 40'N of G.P. 180	
4	A	30.1		92.2	12	25'E 30'N of G.P. 185	
5	A	28.1		93.1	12	10'E 40'N of G.P. 189	
6	A	27.9		94.8	12	20'E 30'N of G.P. 191	Moisture sample only collected

* Samples to be green-tagged and sent to Nashville for verification of nuclear gage field results and soil classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: #8
SHEET NO.: 1 of 1
DATE: 7/18/95

JOB NAME Y12 Landfill II - FY94 -
INSPECTION ACTIVITY Phase II JOB NO.: 20 INSPECTED BY: R. Sherrod
Density/moisture curve CHECKED BY: R. Sherrod
LOCATION OF ACTIVITY Triangular Area within Rows 1-3 [Stations 6+50 to 8+00]
Row 4 [Stations 6+00 to 6+50]

OBSERVATION Testing of Lift #5, Rows 1-3 (Test Nos 1-3); testing
of Lift #4, Row 4 (Test Nos 4-6)
Rock removal criterion met; Density/moisture spec.
met by nuclear gage testing. Thickness of uncompacted
lift approx. 6". Borrow material consistently Type A,

EQUIPMENT
REMEDIAL ACTION
IDENTIFIED

None

RECORD OF
TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	23.8		98.7	12	5' E 30' N of G.P. 154	1 pt. Proctor, Atterberg & moisture sample *
2	A	23.1		101.0	12	40' E 40' N of G.P. 151	
3	A	28.1		93.9	6	20' E 30' N of G.P. 139	
4	A	26.3		93.8	8	40' E 30' N of G.P. 168	
5	A	23.7		99.8	8	10' E 30' N of G.P. 167	
6	A	26.6		94.9	8	10' E 30' N of G.P. 161	Moisture sample only collected *

* Samples to be green-tagged and sent to Nashville for verification of nuclear gage field results and soil classification

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: #9
SHEET NO.: 1 of 1
DATE: 7/19/95

JOB NAME: Y12 Landfill II - FY94 -
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: R. Sherrard
ACTIVITY: Density/moisture curve CHECKED BY: R. Sherrard
LOCATION OF ACTIVITY: Row 5 [Stations 5+50 to 6+00]
Row 7 [Stations 4+50 to 5+00]

OBSERVATION: Testing of Lift 4, Row 5 (test nos. 1-3) & Lift 1, Row 7 (test nos. 4-6). Thickness of uncompacted lift approx. 6". Rock removal criterion met. Density/moisture specification met by nuclear gage testing. Borrow material consistently TYPE A CLAY.

EQUIPMENT REMEDIATION IDENTIFIED: None //

**RECORD OF
TEST DATA**

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.8		95.7	10	30'E 30'N of G.P. 171	1 pt. Proctor, Atterberg, & moisture sample *
2	A	24.4		96.8	10	28'E 30'N of G.P. 175	
3	A	25.5		96.2	10	20'E 40'N of G.P. 179	
4	A	29.8		90.2	6	25'E 30'N of G.P. 201	
5	A	27.0		94.1	8	10'E 25'N of G.P. 199	
6	A	23.9		98.0	12	30'E 30'N of G.P. 195	Moisture sample only collected *

* Samples to be green-tagged and sent to Nashville for verification of nuclear gage field results and soil classification

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO: # 10
SHEET NO: 1 of 1
DATE: 7/20/95

Y12 Landfill II - FY94 -

JOB NAME
INSPECTION
ACTIVITY

Phase II JOB NO: 20 INSPECTED BY: R. Sherrod

LOCATION
OF
ACTIVITY

Density/moisture curve CHECKED BY: R. Sherrod
Row 8 [Stations 4+00 to 4+50]
Row 6 [Stations 5+00 to 5+50]

OBSERVATION

Testing at Lift 1, Row 8 (test nos. 1-3) &
Lift 4, Row 6 (test nos. 4-6). Thickness of
uncompacted lift approx. 6", compacting to approx. 4-8".
Rock removal criterion met. No. of required passes met.
Density/moisture spec. met by nuclear gage testing.
Borrow material consistently type A clay.

EQUIPMENT
REMEDATION
IDENTIFIED

None //

RECORD OF
TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	22.6		100.7	12	20' E 25' N of G.P. 206	1 pt. Proctor, Atterberg, & moisture sample *
2	A	24.8		97.3	12	20' E 30' N of G.P. 210	
3	A	25.3		96.8	12	20' E 35' N of G.P. 213	
4	A	25.4		97.3	12	10' E 40' N of G.P. 190	
5	A	25.3		96.9	12	20' E 35' N of G.P. 186	
6	A	24.2		98.0	12	25' E 30' N of G.P. 182	Moisture sample only collected *

* Samples to be green-tagged and sent to Nashville for verification of nuclear gage field results and soil classification,

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: # 11
SHEET NO.: 1 of 1
DATE: 7/21/95

JOB NAME: Y12 Landfill II - FY94 -
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: R. Sherrard
Density/moisture curve CHECKED BY: R. Sherrard

LOCATION OF ACTIVITY: Row 9 [Stations 3+50 to 4+00]

OBSERVATION: Testing of Lift 1, Row 9 (test nos. 1-3),
Thickness of uncompacted lift approx. 6", compacting
to approx. 5.8". Rock removal criterion met.
No. of required passes met. Density/moisture spec.
met by nuclear gage testing. Borrow material Type A clay,

EQUIPMENT REMEDIATION IDENTIFIED: None //

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	25.3		96.2	8	10' E 30' N of G.P. 216	1 pt. Proctor, Afterberg, & moisture sample. *
2	A	25.8		95.4	8	30' E 30' N of G.P. 220	
3	A	23.7		99.6	12	10' E 30' N of G.P. 223	

* Samples to be green-tagged and sent to Nashville for verification of nuclear gage field results and soil classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: #12
SHEET NO.: 1 of 1
DATE: 7/24/95

JOB NAME: Y12 Landfill II - FY94 -
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: R. Sherrod
LOCATION OF ACTIVITY: Density/moisture Curve CHECKED BY: R. Sherrod
Row 7 [Stations 4+50 to 5+00]

OBSERVATION: Testing of Lift 2, Row 7 (test nos. 1-3). Thickness of uncompacted lift approx. 5", compacting to approx. 5.8". Rock removal criterion met. No. of required passes (6) met. Density/moisture spec. met by nuclear gage testing. Bottom material TYPE A CLAY.

EQUIPMENT REMEDIATION IDENTIFIED: Harley Rock Rake - flat tire & other maintenance hardware problems // parts supply list is being faxed.
RECORD OF TEST DATA: critical parts may be stocked to avoid long down times.

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY		PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922				
1	A	29.0		92.3	8	20° E 30' N of G.P. 202	1 pt. Proctor, Atterberg	* + moisture
2	A	25.2		96.5	10	10° E 35' N of G.P. 198		
3	A	27.2		93.1	8	15° E 25' N of G.P. 194		

* Sample to be green-tagged and sent to Nashville for verification of nuclear gage field results and soil classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

7-25-95

REPORT NO.: # 13
SHEET NO.: 1 of 1
DATE: 7/25/95

Y12 Landfill II - FY94 -

JOB NAME: Phase II **JOB NO.:** 20 **INSPECTED BY:** R. Sherwood

ACTIVITY: Density/moisture Curve **CHECKED BY:** R. Sherwood

LOCATION OF ACTIVITY: Rows 1 - 3 [Stations 6+50 to 8+00]; Row 4 [Stations 6+00 to 6+50];
Row 5 [Stations 5+50 to 6+00]; Row 8 [Stations 4+00 to 4+50]

OBSERVATION: Testing of Lift 6, Rows 1-3 (Test Nos. 1-3); Testing of Lift 5, Row 4 (Test Nos. 4-6); Testing of Lift 5, Row 5 (Test Nos. 7-9); Testing of Lift 2, Row 8 (Test Nos. 10-12). Thickness of uncompacted lift approx 6"; rock removal criterion met; density/moisture specification met by nuclear gage testing; borrow material TYPE A clay.
Rows 1 - 4 now have minimum 2' thickness of compacted clay cap that satisfies the testing requirements.

EQUIPMENT REMEDIATION IDENTIFIED: None //

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	25.1		96.5	10	30'E 40'N at G.P. 140	1pt. Picotator, Atterberg, & moisture sample *
2	A	26.5		94.4	8	20'E 35'N at G.P. 151	
3	A	25.1		95.5	8	30'E 35'N at G.P. 154	
4	A	20.0		103.8	12	5'E 30'N at G.P. 162	
5	A	26.5		95.4	8	40'E 40'N at G.P. 165	
6	A	25.5		96.5	10	5'E 15'N at G.P. 169	Moisture sample only collected *
7	A	23.6		97.7	12	40'E 40'N at G.P. 172	
8	A	24.9		96.8	8	35'E 45'N at G.P. 176	
9	A	25.0		96.5	8	40'E 40'N at G.P. 179	
10	A	29.2		91.4	6	20'E 30'N at G.P. 205	
11	A	28.4		92.2	6	20'E 30'N at G.P. 209	Moisture sample only collected *
12	A	27.8		92.7	6	20'E 30'N at G.P. 212	

* Samples to be green tagged and sent to Nashville for verification of nuclear gage field results and soil classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: # 14
SHEET NO.: 1 of 1
DATE: 7-27-95

JOB NAME: Y12 Landfill II FY 94-
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
Density/moisture curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: Row 6 5+00 TO 5+50 Tests 1-3 Lift #5.
Row 7 4+50 TO 5+00 Tests 4-6 Lift #3.
Row 9 3+50 TO 4+00 Tests 7-9 Lift #2.

OBSERVATION: All criteria met of rock removal, minimum compaction
passes. Material used type A clay.

EQUIPMENT REMEDIATION IDENTIFIED: None

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT			DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922				
1	A	22.2		100.9	8	10' S. of GP #180	1st pr. ATT. & moist. sample collected	*
2	A	23.8		96.8	10	10' S. of GP. 177		
3	A	24.4		98.0	10	20' S. of GP 173		
4	A	22.9		97.8	8	40' S. of GP 185		
5	A	26.2		95.1	14	30' S. of GP 187		
6	A	25.9		94.2	14	40' S.W. of Pin #191	Moisture sample only collected	*
7	A	23.4		98.6	8	20' S. of Pin 213		
8	A	30.3		88.4	8	20' S. of GP 209		
9	A	24.1		98.0	8	40' S. of GP 207		

* Samples to be green tagged & sent to Nashville for verification of Nuclear gage field results and soil classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: #15
SHEET NO.: 1 of 1
DATE: 7-28-95

J12 Landfill II FY90
JOB NAME: Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
ACTIVITY: Density/Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY:
Row 10 3+00 TO 3+50 LIFT #1 Tests 1-3
Row 8 4+00 TO 4+50 LIFT #3 Tests 4-6

OBSERVATION: Rock removal, compaction passes to lift depth
criteria was met. Material used was Type A clay

EQUIPMENT REMEDIATION IDENTIFIED: Pays, Trucks, Disc, Rock removal/mechanical/except
None

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	24.5		97.0	8	20' S. of Pin 225	1st pr. art. & moist sample collected *
2	A	22.3		98.1	8	18' S. of Pin 221	
3	A	27.3		97.3	8	40' S. of Pin 217	
4	A	27.2		93.8	8	10' S. of Pin 196	
5	A	26.1		95.7	8	10' S. of Pin 199	
6	A	25.9		96.4	8	10' S. of Pin 202	Moisture Sample only collected *

* Samples to be green tagged & sent to Nashville for verification of Nuclear gage field results and soil classification.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 16
SHEET NO.: 1 of 1
DATE: 7-31-95

JOB NAME: Landfill II FY 94-
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: Row 9, L&T 3 3+50 to 4+00 Tests 1-3

OBSERVATION: Placement of soil, Rock removal, watering & Compaction. all criteria met

EQUIPMENT REMEDIATION IDENTIFIED: Pgns, Trucks, Disc, Grader, Dozer, Watertank, Compactor
None

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.9		94.1	8	20' South of Pn 214	1st pr. ATT, moist. sample collected *
2	A	25.9		93.8	8	20' South of Pn 211	
3	A	24.1		97.0	8	15' South of Pn 208	

* Samples to be green tagged & sent to Nashville for verification of Nuclear gage field results and soil classifications

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 17
SHEET NO.: 1 of 1
DATE: 8-1-95

Y12 Landfill II
JOB NAME: Phase II JOB NO.: FY 94-20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY: Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: Row 10, LST 2 3+00 TO 3+50 Tests 1-3
Row 8 LST 4 4+00 TO 4+50 Tests 4-6

OBSERVATION: All criteria met of soil placement, rock removal, watering & compacting

EQUIPMENT REMEDIATION IDENTIFIED: Pans, Trucks, Disc Grader, Dozer, Water applicator, Compactor
None

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	27.0		96.2	10	3+00 to 10' 5.0' of Pin 217	1st pr. ATT. 2nd moist sample collected *
2	A	26.3		96.1	10	40' S.W. of Pin 221	
3	A	29.3		90.3	10	30' S. of Pin #224	
4	A	28.8		91.3	8	10' S. of Pin 195	
5	A	27.0		93.2	8	40' S. of Pin 199	
6	A	27.0		92.5	8	20' S. of Pin 202	Moist sample pulled. *

* Samples to be green tagged & sent to Nashville for verification of Nuclear gage field results & soil classifications

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 18
SHEET NO.: 1 of 1
DATE: 8-2-95

Y12 Landfill II FY94-
JOB NAME Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY Density Moisture Curves BY: J. Dunning

LOCATION OF ACTIVITY
Row 11 Left 1 2+50 To 3+00
Row 7 Left 5 4+50 To 5+00

OBSERVATION
All criteria met for soil placement, rock removal, watering and compaction tests.

EQUIPMENT REMEDIATION IDENTIFIED
Pans, Trucks, Disc, Grader, Dozer, H₂O applicator, Compactor
NONE

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-5017	D-2216	D-2922			
1	A	23.3		98.6	8	25' S. of Pin 236	1st, 2nd, and moist. sample collected *
2	A	26.0		95.3	8	15' S. of Pin 233	
3	A	29.0		91.9	8	30' S. of Pin 230	
4	A	24.4		96.5	8	40' S. of Pin 192	
5	A	26.9		94.4	8	10' S. of Pin 189	
6	A	28.0		91.9	8	10' S. of Pin 183	Moisture sample only collected *

* Samples to be green Tagged and sent to Nashville for verification of Nuclear gage field results and classifications.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 19
SHEET NO.: 1 of 1
DATE: 8-3-95

Y12 Landfill II FY 94-
JOB NAME Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY Row 8, LIFT 5, 4+00 To 4+50
Row 12, LIFT I 2+00 To 2+50

OBSERVATION All criteria met for soil placement, rock removal
watering, ~~and~~ compacting & Testing

EQUIPMENT REMEDIATION IDENTIFIED Pave Trucks, Grader, Disc Dozer, H2O applicator and
Compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.4		97.6	8	10' S. of Pin 194	1st pr. A.T. and moist sample collected *
2	A	26.3		94.1	8	40' S. of Pin 2198	
3	A	23.1		97.1	8	40' S. of Pin 203	
4	A	25.2		96.6	8	10' S. of Pin 239	
5	A	25.3		99.7	16	10' S. of Pin 293	

* Sample to be green tagged and sent to Nashville for verification of Nuclear gage field Results and classifications.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO: 20
SHEET NO: 1 of 1
DATE: 8-4-95

Y12 Landfill II FY-94
JOB NAME Phase II JOB NO: 20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY
Row #9 Lift #4 3+50 To 4+00
Row #10 Lift #3 3+00 To 3+50

OBSERVATION All criteria met for soil placement which included
rock removal, watering, compacting, spreading and
testing

EQUIPMENT REMEDIATION IDENTIFIED
Pans, Trucks, Grader, Disc, Dozer, H₂O applicator
and Compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT			DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922				
1	A	25.0		98.3	16	40' S. of Pin #206	10' pr. AT, and moist sample collected	*
2	A	26.4		95.9	16	35' S.W. of Pin #211		
3	A	25.9		94.7	16	25' S.W. of Pin #214		
4	A	23.6		97.8	8	30' S. of Pin #218		
5	A	30.2		91.2	8	10' S. of Pin #222	Moisture sample collected J.O.B. 795	
6	A	25.0		96.5	8	10' S. of Pin #224	Moisture sample collected	*

* Sample To be green tagged and sent To Nashville for Verification of Nuclear gage Field Results and Classifications.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 21
SHEET NO.: 1 of 1
DATE: 8-7-95

JOB NAME: Y12 Landfill II FY99
INSPECTION ACTIVITY: Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
_____ CHECKED BY: J. Dunning
LOCATION OF ACTIVITY: South edge of Row 5 plus Row 6 & Row 7

OBSERVATION: Type A Clay used for first 6" of 12" vegetative
cover

EQUIPMENT REMEDIATION IDENTIFIED: Pans, trucks, Grader

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT			DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922				
<u>N/A</u>	<u>A</u>	<u>No Testing on this date</u>						

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO: 22
SHEET NO: 1 of 1
DATE: 8-9-95

Y12 Landfill II
JOB NAME Phase II FY 94 JOB NO: 20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY: Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: Row 11 LIFT 2 2+50 To 3+00
Row 9 LIFT 5 3+50 To 4+00
Row 13 LIFT 1 1+50 To 2+00

OBSERVATION: All criteria met for soil placement which included rock removal, watering, compacting spreading and testing

EQUIPMENT REMEDIATION IDENTIFIED: Pave, Trucks, Grader, Disc, Dozer, H₂O applicator and compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	23.2		100.8	8	10' S. of Pin 235	1st test, Att, and moist. sample collected *
2	A	22.4		100.2	8	10' S. of Pin 232	
3	A	26.7		95.9	8	10' S. of Pin 228	
4	A	23.0		99.4	8	10' S. of Pin No 214	
5	A	28.3		94.2	8	10' S. of Pin 210	
6	A	27.7		95.7	8	10' S. of Pin 207	Moisture sample collected *
7	A	24.6		99.3	8	10' S. of Pin 254	
8	A	24.8		97.9	8	10' S. of Pin 250	

* Sample to be green tagged and sent To Nashville for verification of Nuclear gage field results and classifications.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 23
SHEET NO.: 1 of 1
DATE: 8-10-95

J12 Landfill II
Phase 2 JOB NO.: FY-94-20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY: Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: Row 14 (West 1/2) L1st #1 1+00 to 1+50
Row 12 L1st #2 2+00 to 2+50

OBSERVATION: All criteria met for soil placement which included
rock removal, watering, compacting, spreading & Testing

EQUIPMENT REMEDIATION IDENTIFIED: Pans, Trucks, Grader, Disc, Dozer H₂O applicator
and compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.8		95.7	8	10' S of Pin 258	1st pr. ATT & moist sample collected *
2	A	25.8		97.2	8	10' S of Pin 245	
3	A	23.2		99.9	8	10' S of Pin 241	

Sample to be green tagged and sent to Nashville for verification of Nuclear gage field results and classifications

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 24
SHEET NO.: 1 of 1
DATE: 8-11-95

J12 Landfill II
Phase II
JOB NO.: FY 94 20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY: Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: Row 10 Left #4 3+00 To 3+50
Row 11 Left #3 2+50 To 3+00
Row 13 Left #2 1+50 To 2+00

OBSERVATION: All criteria met for soil placement which included rock removal, watering, compacting, spreading & testing

EQUIPMENT IDENTIFIED: Pans, Trucks, Grader, Disc, Dozer, H₂O applicator and Compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.6		96.0	8	10' S.W. of An #225	1st pin, Att, & Moist. Sample collected *
2	A	25.9		95.6	8	40' S.W. of Pin #222	
3	A	25.1		97.6	8	10' S.W. of Pin 218	
4	A	23.4		99.6	8	25' S.W. of Pin 236	
5	A	25.7		96.0	8	25' S.W. of An #233	
6	A	24.6		97.4	8	10' S.W. of Pin 229	Moist sample collected *
7	A	25.6		96.6	8	30' S.W. of pin 253	
8	A	25.1		98.3	8	30' S.W. of pin 251	

Sample to be green tagged and sent To Nashville for verification of Nuclear gage field results and classifications.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 25
SHEET NO.: 1081
DATE: 8-12-95

J12 Landfill II FY 90-
JOB NAME Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY Density Moisture Curve CHECKED BY: J. Dunning
LOCATION OF ACTIVITY Row 14 L&T # 1 1+00 To 1+50
Row 15 L&T # 1 0+50 To 1+00
Row 10 L&T # 5 3+00 To 3+50
OBSERVATION All criteria met for soil placement which
included rock removal watering, compacting,
spreading & testing.
EQUIPMENT REMEDIATION IDENTIFIED Pans, Trucks, Grader, Disc, Dozer, H₂O applicator
and compactor.

RECORD OF
TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	29.0		90.9	8	10' S. of Pin 258	1st PT. ATTEMPT sample collected *
2	A	26.9		95.6	8	10' S. of Pin 260	
3	A	22.3		99.4	8	40' S. of Pin 265	
4	A	24.8		95.1	8	10' S. of Pin 267	
5	A	26.6		96.6	8	10' S. of Pin 219	
6	A	25.6		95.7	8	10' S. of Pin 221	MOISTURE sample collected *
7	A	25.3		96.9	8	40' S. of Pin 224	

Samples To be green tagged and sent to Nashville
for verification of Nuclear gage field results
and Classifications.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

Y 12
Landfill II
Phase II
FY 94-
JOB NAME: Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
ACTIVITY: Density Moisture Curves CHECKED BY: J. Dunning

REPORT NO.: 26
SHEET NO.: 1 of 1
DATE: 8-14-95

LOCATION OF ACTIVITY: Row 11 L1T 4 2+50 To 3+00
Row 12 L1T 3 2+00 To 2+50

OBSERVATION: All criteria met for soil placement which included rock removal, watering, compacting, spreading and testing.

EQUIPMENT IDENTIFIED: Pans, Trucks, Grader, Disc, Dozer, H₂O applicator and Compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	23.6		99.1	8	20' S. of Pin # 235	1st pr. ATT & Moist sample collected *
2	A	26.3		96.4	8	10' S. of Pin # 246	
3	A	21.9		101.6	8	40' S.W. of Pin 232	
4	A	24.4		95.7	8	40' S.W. of Pin 229	
5	A	22.4		102.2	8	30' S. of Pin 240	

Sample to be green tagged and sent to Nashville for verification of Nuclear gage field results and classifications

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 27
SHEET NO.: 1041
DATE: 8-15-95

Closure
JOB NAME Y-12 Landfill II FP-94
INSPECTION ACTIVITY Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY
Row 11 List 5 2+50 To 3+00
Row 12 List 4 2+00 To 2+50

OBSERVATION All criteria met for soil placement which
included rock removal, watering, compacting,
spreading and Testing

EQUIPMENT REMEDIATION IDENTIFIED
Pans, Trucks, Grader, Disc, Dozer, H₂O applicator
and compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	23.6		97.3	8	30' S. of Pin 235	1st pr. of 49.13 sample collected *
2	A	29.6		92.1	8	20' S. of Pin 231	
3	A	27.6		93.8	8	45' S. of Pin 238	
4	A	25.1		96.5	8	40' S. of Pin 244	
5	A	26.8		93.9	8	10' S. of Pin 240	

* Sample to be green Tagged and sent to Nashville for verification of Nuclear gage field Test results and classifications

REPORT NO: 28
SHEET NO: 1 of 1
DATE: 8-16-95

Phase II PP 94-20
 Closure JOB NO: INSPECTED BY: J. Dunning
 Density Moisture Curve BY: P. Gater

Soil placement only, No testing performed

Short handed on operators of equipment
on this date

Water sprayer/applicator, Grader, Trucks & Pans

[illegible]

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

Y-12
Landfill II
Phase II
FY-94
JOB NO: 20
INSPECTED BY: J. Dunning
CHECKED BY: J. Dunning
DATE: 8-17-95

JOB NAME
INSPECTION
ACTIVITY
DENSITY Moisture Curve

LOCATION
OF
ACTIVITY
LIFT #5 Row 12 2+00 To 2+50

OBSERVATION
All criteria met for soil placement which included rock removal, watering, compacting, spreading & testing

EQUIPMENT
REMEDIALATION
IDENTIFIED
Pans, Trucks, Grader, Disc, Dozer, H₂O applicator and compactor

RECORD OF
TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	21.2		102.2	8	10' S. of Bn 240	10' pr. ATT & moist sample collected *
2	A	27.9		93.8	8	25' S.W. of Bn 241	

* sample to be green tagged and sent to Nashville for verification of Nuclear gage field test results and classifications

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 30
SHEET NO.: 1 of 1
DATE: 8-18-95

Closure
Y12
Landfill II FY-94-
JOB NAME: Phase II JOB NO.: 20 INSPECTED BY: J. Dunning
ACTIVITY: Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: List # 2 Row 14 1+00 To 1+50

OBSERVATION: All criteria met for soil placement which included rock removal, watering, compacting, spreading and testing

EQUIPMENT REMEDIATION IDENTIFIED: Pans, Trucks, Grader, Disc, Dozer, H₂O applicator and compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	26.2		94.1	8	40'S. W of Ain # 262	1st pr. Att & moist sample collected *
2	A	28.4		90.8	8	20'S. 08 Ain 259	

* Sample To be greentagged and sent to Nashville for verification of Nuclear gage field test results and classifications.

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

JOB NAME: Closure Landfill II Phase II FP 94- Y12 20 INSPECTED BY: J. Dunning
 INSPECTION ACTIVITY: Density moisture Curve CHECKED BY: J. Dunning
 LOCATION OF ACTIVITY: Lift # 2 Row 15 0+50 To 1+00
 OBSERVATION: All criteria met for soil placement which included rock removal, watering, compacting
 EQUIPMENT REMEDIATION IDENTIFIED: Long Trucks, Grader, Disc, Dozer, H₂O applicator and compactor
 RECORD OF TEST DATA

REPORT NO.: 31
 SHEET NO.: 1 of 1
 DATE: 8-21-95

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	25.6		94.7	8	40' S. W of Lin # 265	1 pt pr. Att & Moist Sample Collected
2	A	29.9		88.5	8	30' S. E. Lin # 268	

* Sample To be greentagged and sent to Nashville for verification of Nuclear gage field Test results for classifications Sample # 48

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 32
SHEET NO.: 1 of 1
DATE: 8-22-95

Landfill II
Phase II
JOB NAME: Closure @ Y 12 JOB NO.: FY 94 20 INSPECTED BY: J. Dunning
ACTIVITY: Density Moisture Curve CHECKED BY: J. Dunning
LOCATION OF ACTIVITY: Row #13 LST #3 1+50 TO 2+00

OBSERVATION: All criteria met for soil placement which included placement, rock removal, watering & compacting

EQUIPMENT IDENTIFIED: Pans, Trucks, Grader, disc, dozer, H₂O applicator and compactor

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	29.3		89.5	8	45' S.W. of Pn #254	1st py, 25' & moist. sample collected
2	A	24.5		96.0	8	25' S.W. of Pn 250	

* Sample To be green tagged and sent to Nashville for verification of Nuclear gage field Test results and classifications. Sample #49

Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET

REPORT NO.: 33
SHEET NO.: 1 of 1
DATE: 8-23-95

Y.12 closure
Landfill II
Phase II
Density Moisture Curve

FX-94
JOB NO.: 20
INSPECTED BY: J. Dunning
BY: J. Dunning

SHEET NO.: 1081
DATE: 8-23-9

JOB NAME
INSPECTION
ACTIVITY

LOCATION OF ACTIVITY				
Row #14	L.F.T #3	1+00	To	1+50
Row #15	L.F.T #3	0+50	To	1+00 west side

OBSERVATION	All criteria met for soil placement which included placement, rock removal, watering & compacting
-------------	---

EQUIPMENT Disc H₂O applicator & compactor plus Dozer &
REMEDATION pan for sealing
IDENTIFIED

RECORD OF TEST DATA

[illegible]

* Sample To be green Tagged and sent To
Nashville for verification of Nuclear gage field
Test results and classifications.

Sample #50

Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET

Land S, II II
Phase II

FY
94-20

REPORT NO.: 34
SHEET NO.: 1 of 1
DATE: 8-24-95

JOB NAME: Closure Y 12
INSPECTION ACTIVITY: Density Moisture Curve

JOB NO.:
INSPECTED BY: J. Dunning
CHECKED BY: J. Dunning

LOCATION
OF
ACTIVITY: Row 15 LFT#3 0+50 To 1+00

OBSERVATION All criteria for soil placement which included
placement, rock removal watering & compacting

EQUIPMENT Disc H₂O applicator, compactor Grader, dozer Pan for
REMEDATION sealing
IDENTIFIED

RECORD OF TEST DATA

[illegible]

* Sample To be green Tagged and sent To Nashville For verification of Nuclear gege field Test results and classifications.

ERWM/doc=2017
FEBRUARY 1992

Sample #51

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

REPORT NO.: 35
SHEET NO.: 1 of 1
DATE: 8-25-95

Y12 Landfill II
Phase II *FY 94*
JOB NAME: Closure JOB NO.: 20 INSPECTED BY: J. Dunning
INSPECTION ACTIVITY: Density Moisture Curves BY: J. Dunning
LOCATION OF ACTIVITY: Row 13 LST #4 1+50 To 2+00
Row 14 LST #4 1+00 To 1+50
Row 15 LST #4 0+50 To 1+00

OBSERVATION: All criteria met for soil placement which included placement, rock removal watering & compacting

EQUIPMENT REMEDIATION IDENTIFIED: Dozer, Dumptrucks, the applicator, Disc, mechanical rock remover

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-5017	D-2116	D-2922			
1	A	22.5		98.4	8	10' S. of Pin 253	1st of 4th moist sample collected
2	A	24.6		98.3	8	25' S. of Pin 260	
3	A	30.6		89.3	8	25' S. W. of Pin #267	
4	A	30.6		90.4	8	40' S. W. of Pin #258	50' 262
5	A	29.0		92.0	8	25' S. W. of Pin #266	
6	A	32.1		88.1	8	10' S. of Pin 251	Moist sample collected

* Samples to be green tagged and sent to Nashville for verification of Nuclear gage field Test results and classifications. Samples 52 & 53

**Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET**

Y12
Land S. II II
Phase II
Closure

REPORT NO.: 36
SHEET NO.: 1 of 1
DATE: 8-28-95

FY 94-

JOB NAME: Closure JOB NO.: 20 INSPECTED BY: J. Dunning

INSPECTION ACTIVITY: Density Moisture Curve CHECKED BY: J. Dunning

LOCATION OF ACTIVITY: Row 13 Lift 5 1+50 TO 2+00
Row 14 Lift 5 1+00 TO 1+50
Row 15 Lift 5 0+50 TO 1+00

OBSERVATION: Row 14 Lift 6 1+00 TO 1+50
All criteria met for soil placement which included
placement, rock removal, watering and compacting

EQUIPMENT REMEDIATION IDENTIFIED: Dzer, Pans, Trucks, H₂O Applicator, Disc

RECORD OF TEST DATA

TEST NUMBER	SOIL TYPE	MOISTURE CONTENT		DENSITY	PASSES	LOCATION	REMARKS
		D-3017	D-2216	D-2922			
1	A	30.5		88.0	8	10' S. of Pin 248	1st of 1st/1st Moist Sample # 54 Collected *
2	A	28.5		90.3	8	25' S. of Pin 255	
3	A	28.6		90.7	8	10' S. of Pin 259	
4	A	32.1		88.0	8	25' S. W of Pin 266	
5	A	34.9		85.3	8	15' S. of Pin 262	
6	A	30.5		88.7	8	10' S. of Pin 269	Moist Sample # 55 collected *
7	A	29.8		89.1	8	10' S. of Pin 257	

* Sample To be green tagged and sent to Nashville for verification of Nuclear gage field test results and classifications
 Samples # 54 & 55

Y-12 CENTRALIZED SANITARY LANDFILL II
CONSTRUCTION QUALITY ASSURANCE
INSPECTION DATA SHEET

Sanitary Y12 Closure
Landfill II

REPORT NO.: 37
SHEET NO.: 1041
DATE: 8-29-95

JOB NAME Phase II JOB NO. 20 INSPECTED BY: J. Dunning
 INSPECTION Density Moisture Curve ~~TESTED~~ BY: J. Dunning
 ACTIVITY:

LOCATION OF ACTIVITY	Row 14 LST 6 1+00 to 1+50
----------------------------	---------------------------

OBSERVATION All criteria met for soil placement which included
placement, rock removal, watering, compacting & testing

EQUIPMENT IDENTIFIED Dozer, Pans, Trucks, H₂O Applicator, Compactor

RECORD OF TEST DATA

[illegible]

* Sample # 56 To be green tagged and sent to Nashville for verification of Nuclear gage field test results and classifications.

APPENDIX C

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
TIMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

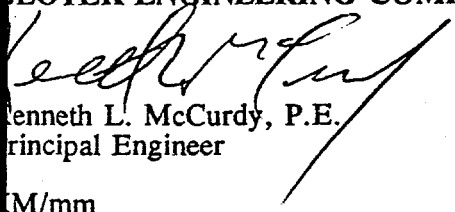
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	1	2	3
Date Sampled	7-10-95	7-11-95	7-11-95
Location	10' E, 20' N of G.P. 168	25' E, 5' N of G.P. 128	10' E, 20' N of G.P. 168
Lift Number	1	2	1
Dry Density, Nuclear Gauge (pcf)	96.5	92.5	95.8
Moisture Content, Nuclear Gauge	24.0	29.7	27.1
Moisture Content, Oven Drying	26.0	29.3	28.3
1-PT Proctor Dry Density (pcf)	93.6	91.1	-
Moisture Content, 1-PT Proctor Sample	26.0	29.1	-
Liquid Limit	59.4	51.3	-
Plasticity Index	25.4	25.9	-
Description	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

MM/mm

mmes9.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

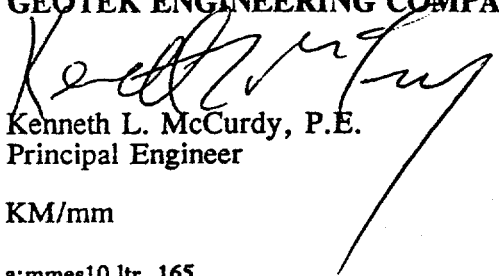
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	4	5
Date Sampled	7-12-95	7-12-95
Location	20' E, 30' N of G.P. 173	10' E, 20' N of G.P. 128
Lift Number	1	3
Dry Density, Nuclear Gauge (pcf)	97.4	93.2
Moisture Content, Nuclear Gauge	23.9	27.9
Moisture Content, Oven Drying	24.0	28.0
1-PT Proctor Dry Density (pcf)	90.7	-
Moisture Content, 1-PT Proctor Sample	24.0	-
Liquid Limit	46.9	-
Plasticity Index	19.5	-
Description	SILTY CLAY, yellowish red tan w/chert	SILTY CLAY w/chert, yellow red tan

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:mmes10.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
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Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

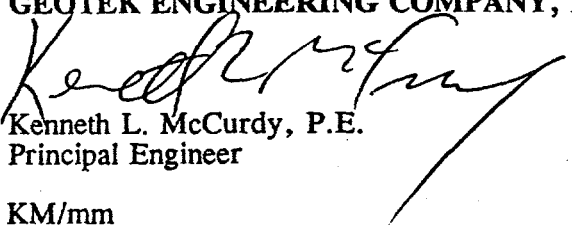
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	6	7
Date Sampled	7-13-95	7-13-95
Location	10' E, 20' N of G.P. 163	25' E, 25' N of G.P. 190
Lift Number	2	1
Dry Density, Nuclear Gauge (pcf)	97.6	92.0
Moisture Content, Nuclear Gauge	23.3	28.8
Moisture Content, Oven Drying	26.0	28.4
1-PT Proctor Dry Density (pcf)	94.1	-
Moisture Content, 1-PT Proctor Sample	25.9	-
Liquid Limit	50.6	-
Plasticity Index	22.3	-
Description	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:mme11.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

Please find below the laboratory test results on the compacted fill for the above-referenced project.

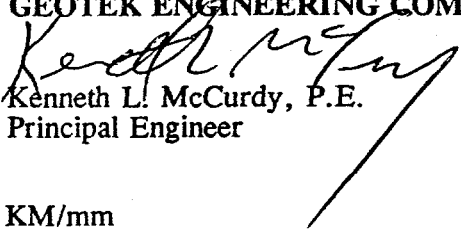
Sample No.	8	9
Date Sampled	7-14-95	7-14-95
Location	20' E, 30' N of G.P. 172	40' E, 40' N of G.P. 154
Lift Number	2	4
Dry Density, Nuclear Gauge (pcf)	95.3	100.3
Moisture Content, Nuclear Gauge	26.6	22.6 *
Moisture Content, Oven Drying	25.5	26.1
1-PT Proctor Dry Density (pcf)	93.1	-
Moisture Content, 1-PT Proctor Sample	25.5	-
Liquid Limit	57.8	-
Plasticity Index	27.6	-
Description	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert

* presence of chert probably lowered moisture content reading

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm
a:mmes12.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

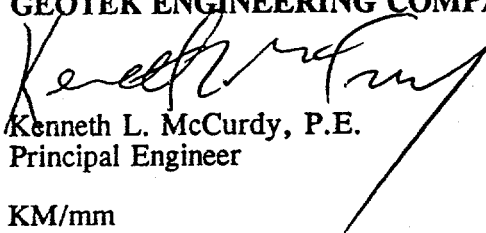
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	10	11
Date Sampled	7-15-95	7-15-95
Location	10' E, 30' N of G.P. 162	10' E, 15' N of G.P. 191
Lift Number	3	2
Dry Density, Nuclear Gauge (pcf)	93.4	95.8
Moisture Content, Nuclear Gauge	26.5	25.2
Moisture Content, Oven Drying	27.3	26.8
1-PT Proctor-Dry Density (pcf)	92.0	-
Moisture Content, 1-PT Proctor Sample	27.3	-
Liquid Limit	47.5	-
Plasticity Index	21.6	-
Description	SILTY CLAY, yellowish red tan w/chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:mmes13.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

Please find below the laboratory test results on the compacted fill for the above-referenced project.

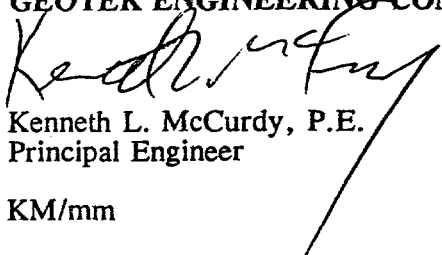
Sample No.	12	13
Date Sampled	7-17-95	7-17-95
Location	20' E, 25' N of G.P. 174	20' E, 30' N of G.P. 191
Lift Number	3	3
Dry Density, Nuclear Gauge (pcf)	98.2	94.8
Moisture Content, Nuclear Gauge	23.6 *	27.9
Moisture Content, Oven Drying	26.6	27.4
1-PT Proctor Dry Density (pcf)	92.4	-
Moisture Content, 1-PT Proctor Sample	26.6	-
Liquid Limit	54.6	-
Plasticity Index	25.9	-
Description	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert

* presence of chert probably lowered moisture content reading

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:mme14.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

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August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

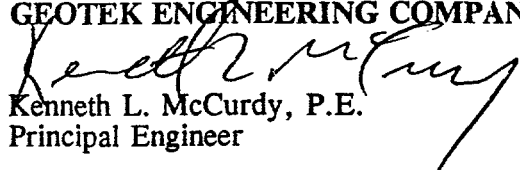
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	14	15
Date Sampled	7-18-95	7-18-95
Location	5' E, 30' N of G.P. 154	10' E, 30' N of G.P. 161
Lift Number	5	4
Dry Density, Nuclear Gauge (pcf)	98.7	94.9
Moisture Content, Nuclear Gauge	23.8	26.6
Moisture Content, Oven Drying	24.2	25.0
1-PT Proctor Dry Density (pcf)	96.4	-
Moisture Content, 1-PT Proctor Sample	24.2	-
Liquid Limit	52.2	-
Plasticity Index	23.8	-
Description	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm
a:mmes15.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

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Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

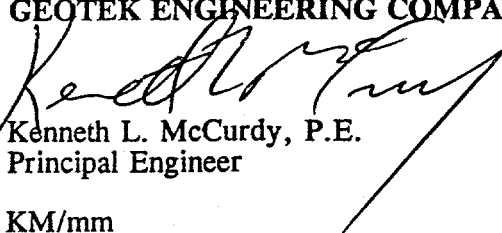
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	16	17
Date Sampled	7-19-95	7-19-95
Location	30' E, 30' N of G.P. 171	30' E, 30' N of G.P. 195
Lift Number	4	1
Dry Density, Nuclear Gauge (pcf)	95.7	98.0
Moisture Content, Nuclear Gauge	26.8	23.9
Moisture Content, Oven Drying	26.3 *	25.1
1-PT Proctor Dry Density (pcf)	91.4	-
Moisture Content, 1-PT Proctor Sample	26.3	-
Liquid Limit	52.0	-
Plasticity Index	22.3	-
Description	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:mmes16.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

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Oak Ridge, TN 37830

August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

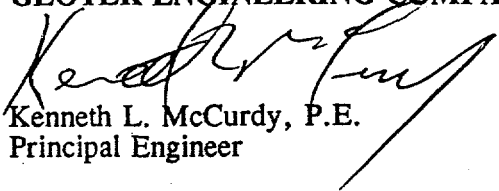
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	18	19
Date Sampled	7-20-95	7-20-95
Location	20' E, 25' N of G.P. 206	25' E, 30' N of G.P. 182
Lift Number	1	4
Dry Density, Nuclear Gauge (pcf)	100.7	98.0
Moisture Content, Nuclear Gauge	22.6	24.2
Moisture Content, Oven Drying	22.6	25.0
1-PT Proctor Dry Density (pcf)	96.4	-
Moisture Content, 1-PT Proctor Sample	22.6	-
Liquid Limit	48.0	-
Plasticity Index	22.5	-
Description	SILTY CLAY, yellowish red tan w/chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:mmes17.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

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August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

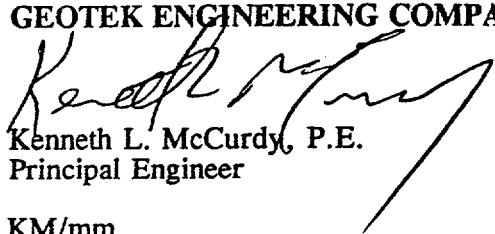
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	20	21
Date Sampled	7-21-95	7-24-95
Location	10' E, 30' N of G.P. 216	20' E, 30' N of G.P. 202
Lift Number	1	2
Dry Density, Nuclear Gauge (pcf)	96.2	92.3
Moisture Content, Nuclear Gauge	25.3	29.0
Moisture Content, Oven Drying	22.0	27.2
1-PT Proctor Dry Density (pcf)	100.9	92.1
Moisture Content, 1-PT Proctor Sample	22.0	27.2
Liquid Limit	46.3	48.0
Plasticity Index	20.0	27.7
Description	SILTY CLAY fine sand traces, reddish tan w/chert	SILTY CLAY, brownish red tan w/chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:\mmes18.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

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UBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

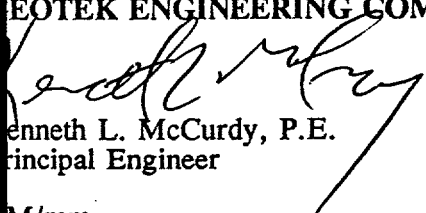
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	22	23	24
Date Sampled	7-25-95	7-25-95	7-25-95
Location	30' E, 40' N of G.P. 140	5' E, 15' N of G.P. 169	20' E, 30' N of G.P. 209
Lift Number	6	5	2
Dry Density, Nuclear Gauge (pcf)	96.5	96.5	92.2
Moisture Content, Nuclear Gauge	25.1	25.5	28.4
Moisture Content, Oven Drying	23.8	26.4	29.9
1-PT Proctor Dry Density (pcf)	96.9	-	-
Moisture Content, 1-PT Proctor Sample	23.8	-	-
Liquid Limit	53.6	-	-
Plasticity Index	35.8	-	-
Description	CLAY w/silt, yellowish red tan, chert	SILTY CLAY, fine hairline roots, yellowish red tan w/chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

M/mm

mmes19.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

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August 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

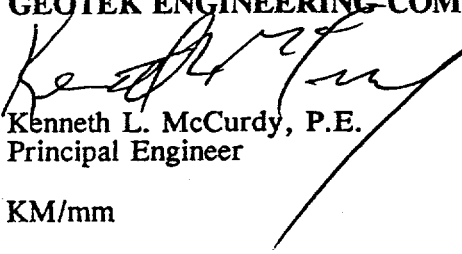
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	25	26
Date Sampled	7-27-95	7-27-95
Location	20' S of G.P. 180	40' S.W. of G.P. 191
Lift Number	5	3
Dry Density, Nuclear Gauge (pcf)	100.9	94.2
Moisture Content, Nuclear Gauge	22.2	25.9
Moisture Content, Oven Drying	20.9	27.2
1-PT Proctor Dry Density (pcf)	98.7	-
Moisture Content, 1-PT Proctor Sample	20.9	-
Liquid Limit	44.0	-
Plasticity Index	16.7	-
Description	SILTY CLAY, yellowish red tan w/chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:mmes20.ltr.,165

cc: Mr. Mickey Willoughby, L.M.E.S.

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September 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

Please find below the laboratory test results on the compacted fill for the above-referenced project.

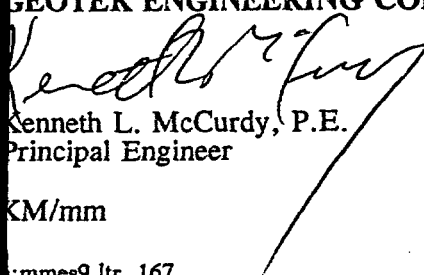
Sample No.	27	28	29
Date Sampled	7-28-95	7-28-95	7-31-95
Location	20' S of G.P. 225	10' S of G.P. 202	20' S of G.P. 214
Lift Number	1	3	3
Dry Density, Nuclear Gauge (pcf)	97.0	96.4	94.1
Moisture Content, Nuclear Gauge	24.5 *	25.9 *	26.9
Moisture Content, Oven Drying	28.8	30.4	26.7
1-PT Proctor Dry Density (pcf)	90.3	-	93.7
Moisture Content, 1-PT Proctor Sample	28.8	-	26.7
Liquid Limit	55.1	-	57.9
Plasticity Index	22.9	-	29.8
Description	CLAY w/silt, yellowish red brown, chert, small ferrous oxide nodules	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, little ferrous oxide nodules, chert

* presence of chert probably lowered moisture content reading

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

mmes9.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

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Oak Ridge, TN 37830

September 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

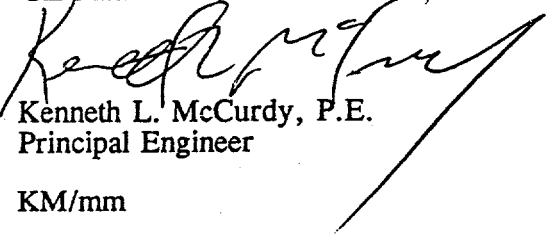
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	30	31
Date Sampled	8-1-95	8-1-95
Location	10' S of G.P. 217	20' S of G.P. 202
Lift Number	2	4
Dry Density, Nuclear Gauge (pcf)	96.2	92.5
Moisture Content, Nuclear Gauge	27.0	27.0
Moisture Content, Oven Drying	27.6	26.2
1-PT Proctor Dry Density (pcf)	94.3	-
Moisture Content, 1-PT Proctor Sample	27.6	-
Liquid Limit	49.5	-
Plasticity Index	24.2	-
Description	SILTY CLAY w/chert, yellowish red tan	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:\mmes10.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

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September 11, 1995

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SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

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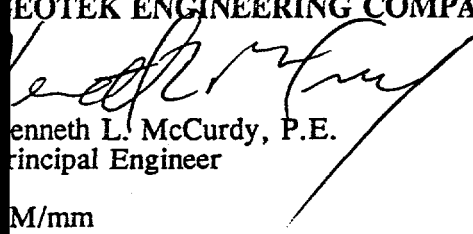
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	32	33	34
Date Sampled	8-2-95	8-2-95	8-3-95
Location	25' S of G.P. 236	10' S of G.P. 183	10' S of G.P. 194
Lift Number	1	5	5
Dry Density, Nuclear Gauge (pcf)	98.6	91.9	97.6
Moisture Content, Nuclear Gauge	23.3	28.0	26.4
Moisture Content, Oven Drying	23.8	28.7	25.3
1-PT Proctor Dry Density (pcf)	99.6	-	93.8
Moisture Content, 1-PT Proctor Sample	23.8	-	25.3
Liquid Limit	43.0	-	56.1
Plasticity Index	18.6	-	27.0
Description	SILTY CLAY w/chert, reddish brown, ferrous oxide nodules	CLAY w/silt, reddish brown, ferrous oxide nodules, chert	CLAY w/silt, reddish brown, ferrous oxide nodules, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

M/mm

mmes11.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

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September 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

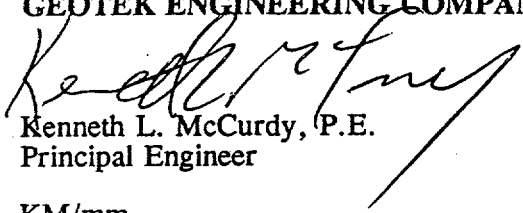
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	35	36
Date Sampled	8-4-95	8-4-95
Location	40' S of G.P. 206	10' S of G.P. 224
Lift Number	4	3
Dry Density, Nuclear Gauge (pcf)	98.3	96.5
Moisture Content, Nuclear Gauge	25.0	25.0
Moisture Content, Oven Drying	22.0	25.0
1-PT Proctor Dry Density (pcf)	92.3	-
Moisture Content, 1-PT Proctor Sample	22.0	-
Liquid Limit	57.3	-
Plasticity Index	29.1	-
Description	CLAY w/silt, reddish brown, chert, ferrous oxide nodules	CLAY w/silt, reddish brown, chert, ferrous oxide nodules

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:\mmes12.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

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September 11, 1995

ATTN: Mr. Paul Waldschlager

UBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

Please find below the laboratory test results on the compacted fill for the above-referenced project.

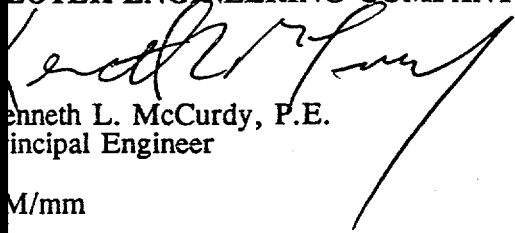
Sample No.	37	38	39
Date Sampled	8-9-95	8-9-95	8-10-95
Location	10' S of G.P. 235	10' S of G.P. 207	10' S of G.P. 258
Lift Number	2	5	1
Dry Density, Nuclear Gauge (pcf)	100.8	95.7	95.7
Moisture Content, Nuclear Gauge	23.2	27.7	26.8
Moisture Content, Oven Drying	23.1	18.4*	24.2
1-PT Proctor Dry Density (pcf)	98.0	-	96.1
Moisture Content, 1-PT Proctor Sample	23.1	-	24.2
Liquid Limit	48.8	-	46.8
Plasticity Index	25.1	-	24.1
Description	SILTY CLAY w/chert, reddish brown tan, fine sand traces	SITY CLAY w/chert, reddish brown tan, fine sand traces	SILTY CLAY w/chert, reddish brown tan, fine sand traces

* suspect that sample may have partially dried prior to laboratory testing

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

M/mm

mes13.ltr.,167

Mr. Mickey Willoughby, L.M.E.S.

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September 11, 1995

ATTN: Mr. Paul Waldschlager

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Placement of Fill

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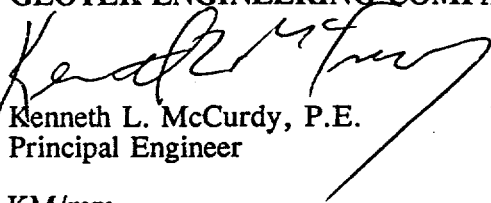
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	40	41
Date Sampled	8-11-95	8-11-95
Location	10' S of G.P. 225	10' S of G.P. 229
Lift Number	4	3
Dry Density, Nuclear Gauge (pcf)	96.0	97.4
Moisture Content, Nuclear Gauge	26.6	24.6
Moisture Content, Oven Drying	27.1	22.1
1-PT Proctor Dry Density (pcf)	93.6	-
Moisture Content, 1-PT Proctor Sample	27.1	-
Liquid Limit	46.2	-
Plasticity Index	24.9	-
Description	SILTY CLAY w/chert, reddish brown tan, fine sand traces	SILTY CLAY w/chert, reddish brown tan, fine sand traces

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:\mmes14.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

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September 11, 1995

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Placement of Fill

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Please find below the laboratory test results on the compacted fill for the above-referenced project.

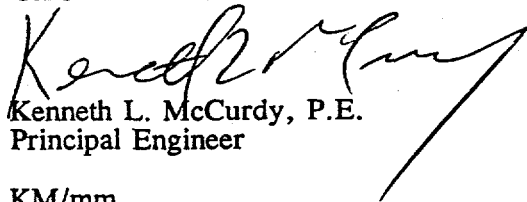
Sample No.	42	43
Date Sampled	8-12-95	8-12-95
Location	10' S of G.P. 258	10' S of G.P. 221
Lift Number	1	5
Dry Density, Nuclear Gauge (pcf)	90.9	95.7
Moisture Content, Nuclear Gauge	29.0	25.6
Moisture Content, Oven Drying	27.2	19.0*
1-PT Proctor Dry Density (pcf)	92.5	-
Moisture Content, 1-PT Proctor Sample	27.2	-
Liquid Limit	46.8	-
Plasticity Index	25.0	-
Description	SILTY CLAY w/chert, reddish brown tan, fine sand traces	SILTY CLAY w/chert, reddish brown tan, fine sand traces,

* suspect that sample may have partially dried prior to laboratory testing

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.



Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:\mmes15.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
TIMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

September 11, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

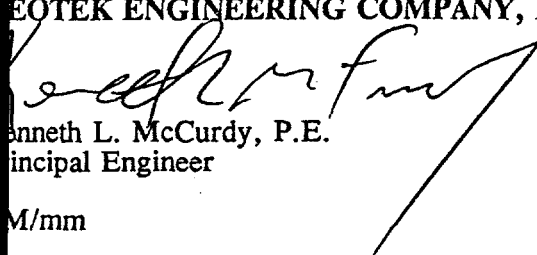
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	44	45	46
Date Sampled	8-17-95	8-15-95	8-17-95
Location	20' S of G.P. 235	30' S of G.P. 235	10' S of G.P. 244
Lift Number	4	5	5
Dry Density, Nuclear Gauge (pcf)	99.1	97.3	102.2
Moisture Content, Nuclear Gauge	23.6	23.6	21.2
Moisture Content, Oven Drying	23.7	25.5	21.0
1-PT Proctor Dry Density (pcf)	96.8	97.2	100.5
Moisture Content, 1-PT Proctor Sample	23.7	25.5	21.0
Liquid Limit	51.3	57.3	49
Plasticity Index	25.6	28.1	27.6
Description	CLAY w/silt, reddish brown tan, chert, fine sand traces	CLAY w/silty chert, reddish brown tan, fine sand traces	SILTY CLAY w/chert, reddish brown tan, fine sand traces

If you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

M/mm

ames16.ltr.,167

Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

September 15, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

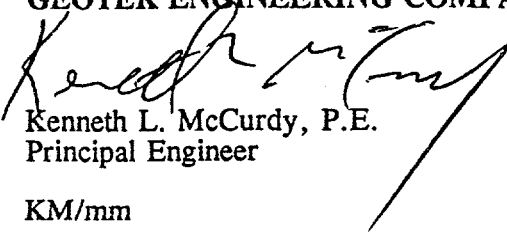
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	47	48
Date Sampled	8-18-95	8-21-95
Location	40' SW of G.P. 262	40' SW of G.P. 265
Lift Number	2	2
Dry Density, Nuclear Gauge (pcf)	94.1	94.7
Moisture Content, Nuclear Gauge	26.2	25.6
Moisture Content, Oven Drying	26.4	26.1
1-PT Proctor Dry Density (pcf)	94.0	95.9
Moisture Content, 1-PT Proctor Sample	26.4	26.1
Liquid Limit	50.7	48.6
Plasticity Index	28.9	25.5
Description	CLAY w/silt, yellowish red tan, chert	SILTY CLAY w/chert, yellowish red tan

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:\mmes20.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

September 26, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

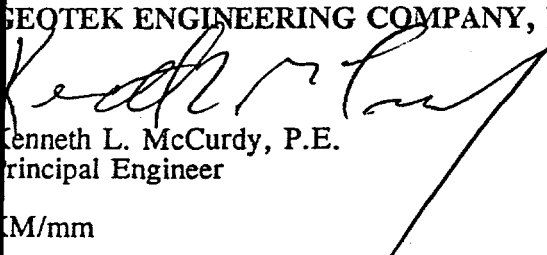
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	49	50	51
Date Sampled	8-22-95	8-23-95	8-24-95
Location	45' SW of G.P. 254	40' SW of G.P. 258	10' S of G.P. 264
Lift Number	3	3	3
Dry Density, Nuclear Gauge (pcf)	89.5	93.6	91.6
Moisture Content, Nuclear Gauge	29.3	26.3	27.4
Moisture Content, Oven Drying	32.1	27.2	28.6
1-PT Proctor Dry Density (pcf)	88.9	93.6	93.1
Moisture Content, 1-PT Proctor Sample	32.1	27.2	28.6
Liquid Limit	54.3	50.9	51.6
Plasticity Index	26.2	25.1	24.9
Description	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

MM/mm

mmes22.ltr.,167

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

September 26, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

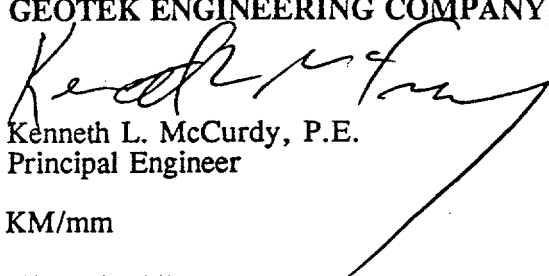
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	52	53
Date Sampled	8-25-95	8-25-95
Location	10' S of GP 253	10' S of GP 251
Lift Number	4	4
Dry Density, Nuclear Gauge (pcf)	98.4	88.1
Moisture Content, Nuclear Gauge	22.5	32.1
Moisture Content, Oven Drying	26.6	33.8
1-PT Proctor Dry Density (pcf)	92.7	-
Moisture Content, 1-PT Proctor Sample	26.6	-
Liquid Limit	57.2	-
Plasticity Index	27.4	-
Description	CLAY w/silt, yellowish tan, fine sand, chert, ferrous oxide nodules	CLAY w/silt, yellowish tan, fine sand traces, ferrous oxide nodules

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.



Kenneth L. McCurdy, P.E.
Principal Engineer

KM/mm

a:\lmes2.ltr.,169

cc: Mr. Mickey Willoughby, L.M.E.S.

GEOTEK

Geotek Engineering Company, Inc. • 8321 Oak Ridge Hwy., Suite B • Knoxville, Tennessee 37931
(615) 690-0128 • Fax (615) 691-9858

Lockheed Martin Energy Systems, Inc.
P.O. Box 2006
MMES Building 9204-1, MS 8053
Oak Ridge, TN 37830

September 26, 1995

ATTN: Mr. Paul Waldschlager

SUBJ: Sanitary Landfill II, Phase II Closure (FY94-20)
Placement of Fill

Dear Mr. Waldschlager:

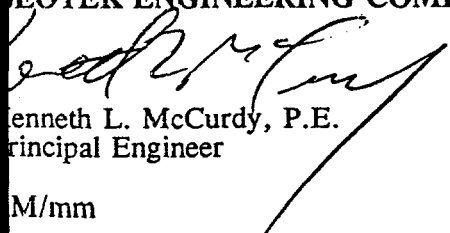
Please find below the laboratory test results on the compacted fill for the above-referenced project.

Sample No.	54	55	56
Date Sampled	8-28-95	8-28-95	8-29-95
Location	10' S of GP 248	10' S of GP 268	10' S of GP 260
Lift Number	5	5	6
Dry Density, Nuclear Gauge (pcf)	88.0	88.7	88.9
Moisture Content, Nuclear Gauge	30.5	30.5	31.1
Moisture Content, Oven Drying	30.7	31.2	31.1
1-PT Proctor Dry Density (pcf)	91.3	-	88.9
Moisture Content, 1-PT Proctor Sample	30.7	-	31.1
Liquid Limit	53.1	-	58.8
Plasticity Index	23.6	-	25.6
Description	CLAY w/silt, yellowish tan, chert, ferrous oxide nodules	CLAY w/silt, yellowish tan, chert	CLAY w/silt, yellowish red tan, chert

Should you have any questions or need additional information, please feel free to contact us.

Sincerely,

GEOTEK ENGINEERING COMPANY, INC.


Kenneth L. McCurdy, P.E.
Principal Engineer

M/mm

lmes3.ltr.,169

cc: Mr. Mickey Willoughby, L.M.E.S.

APPENDIX D

1

A

B

N 27000

51750

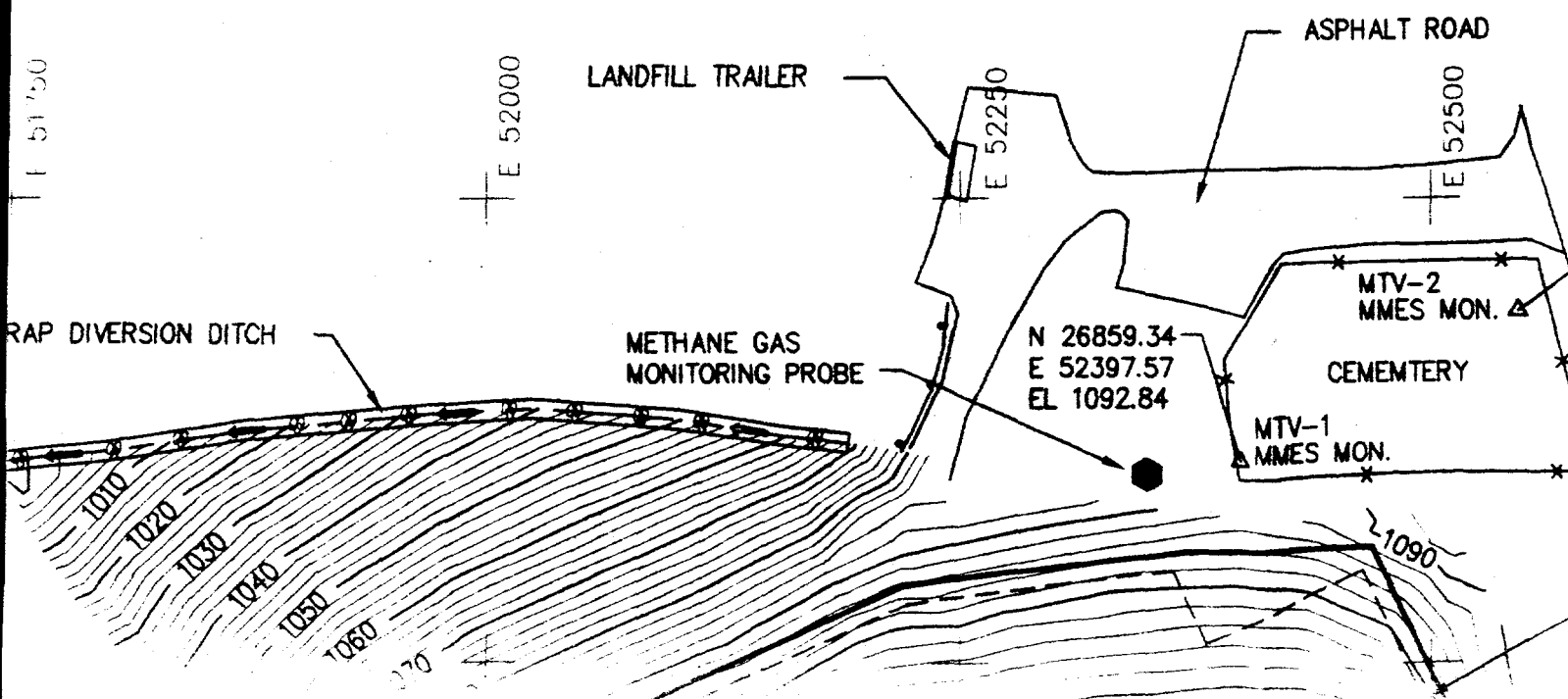
RIPRAP



N 26750

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ROAD

E 52500

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RY

N 26939.34
E 52545.42
EL. 1081.62

E 52750

E 53000

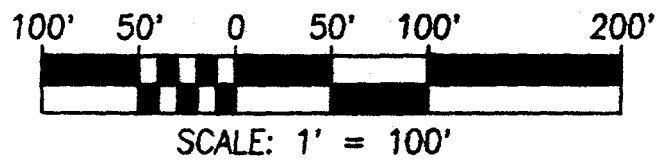
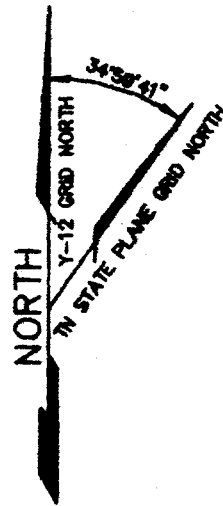
APPROX. LIMITS OF WASTE FILL

5

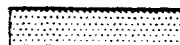
|

6

6



LEGEND



SODDED AREA

C

N 26250

APPROX. LIMITS OF W.

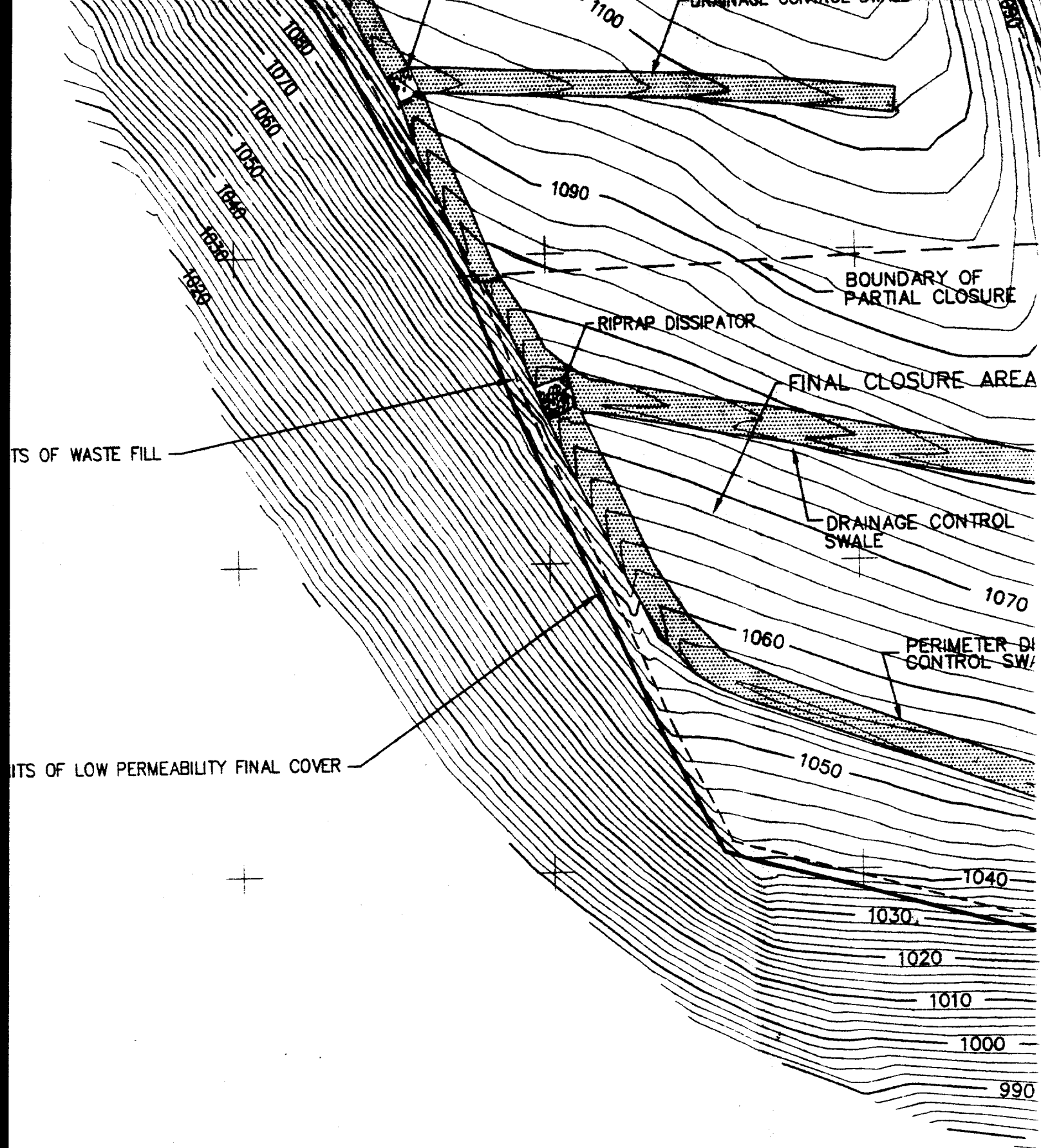
N 26000

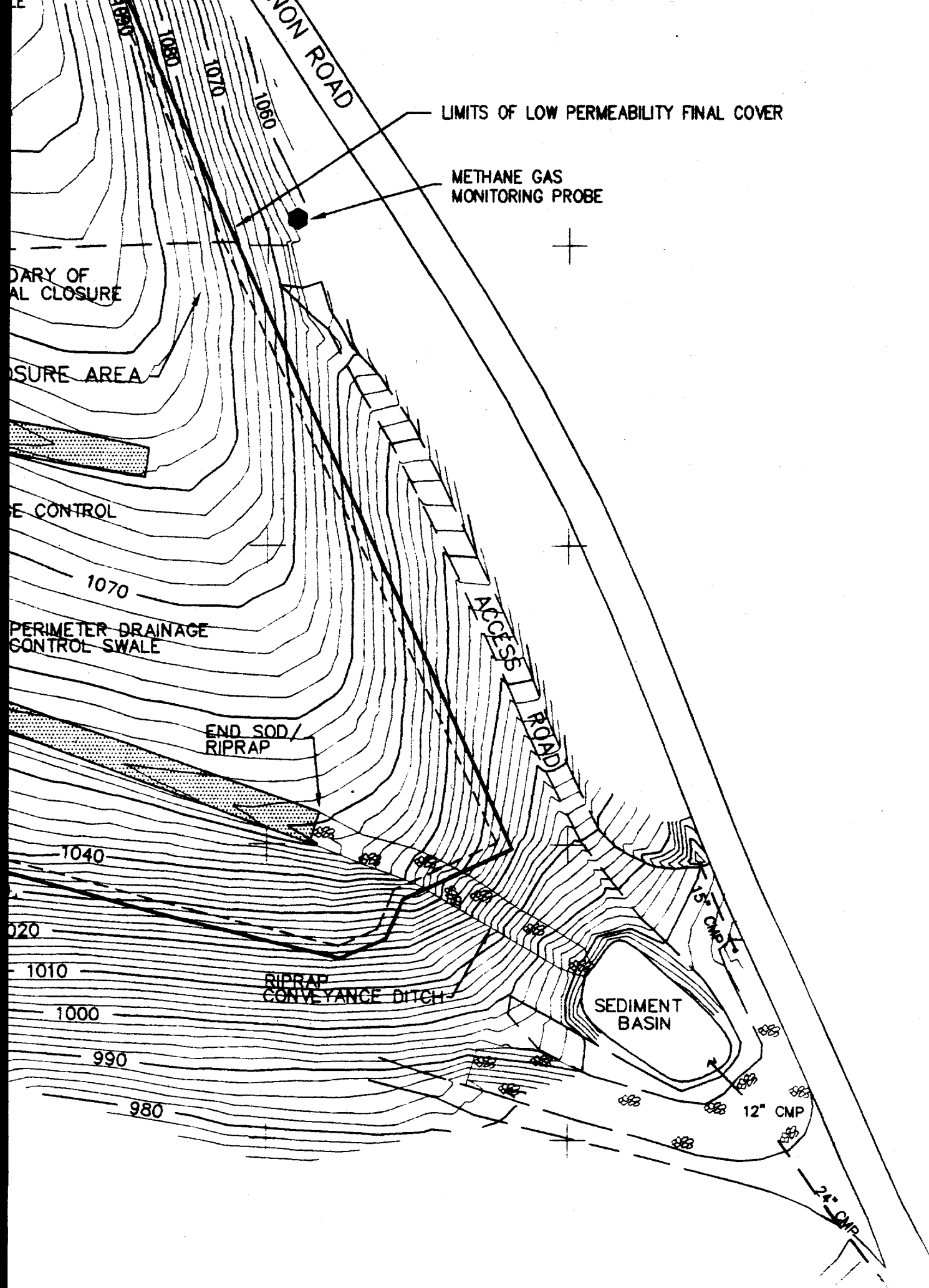
LIMITS OF LC

D

N 25750

N 25500







W
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OF

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origin
R-

I HEREBY CERTIFY THAT AN ACTUAL
SURVEY WAS PERFORMED ON THE

NOVEMBER 7, 1995

**ADAMS ARCHITECTS
CRAFT ENGINEERS
HERZ PLANNERS
WALKER SURVEYORS**
OAK RIDGE TENNESSEE

**Y-12 CENTRALIZED
SANITARY LANDFILL II**

**AS-BUILT CLOSURE
OF SANITARY LANDFILL II**

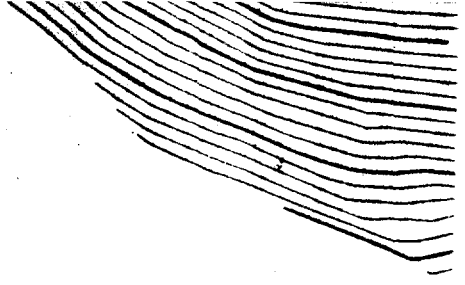
issue	drawn by	checked by	date	approval
original	SKS	SRB	10-27-95	BSA
R-1	SKS	<i>RB</i>	11-16-95	<i>BSA</i>

CERTIFY THAT AN ACTUAL
WAS PERFORMED ON THE

N 25500

E

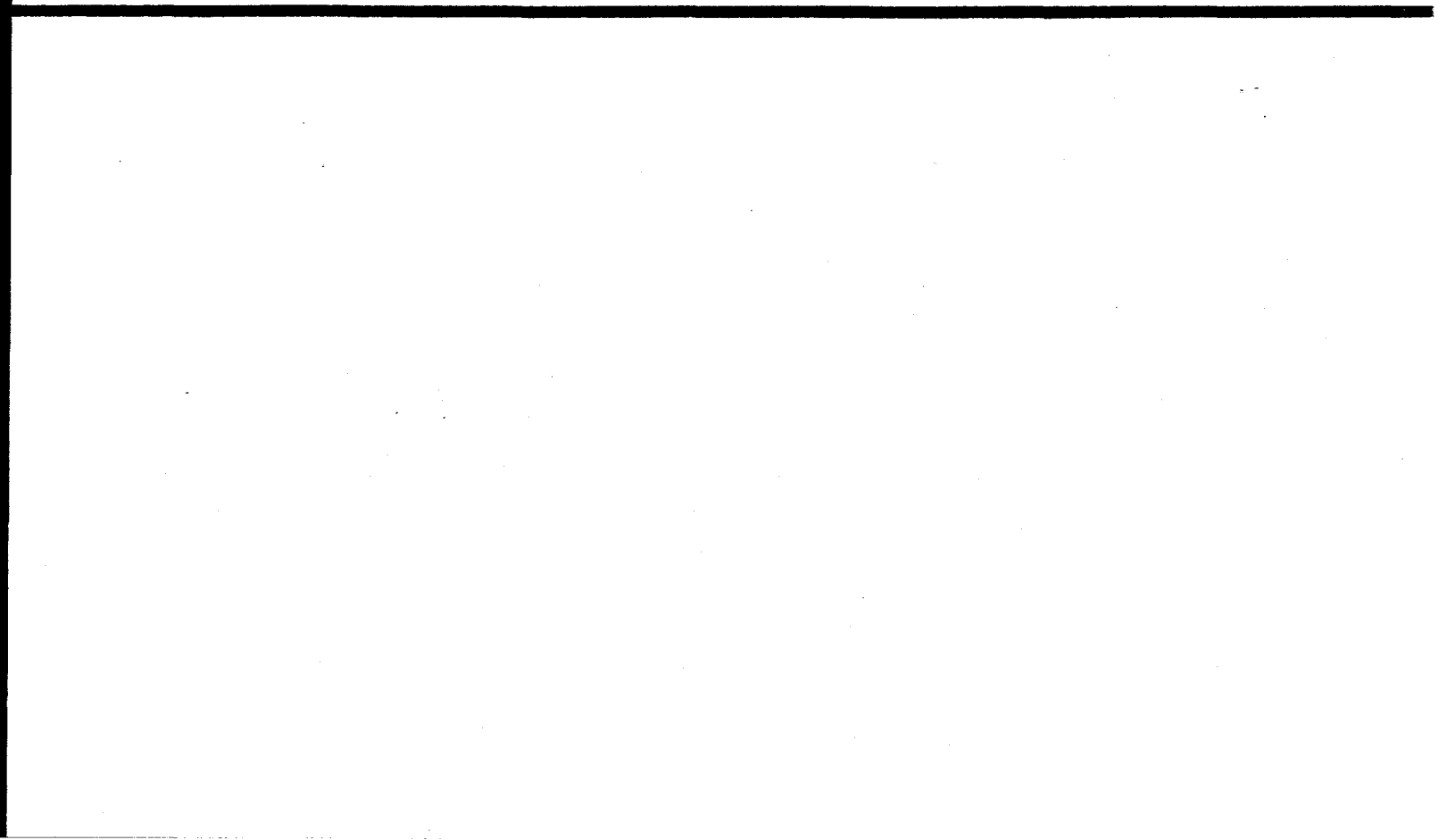
N 25250

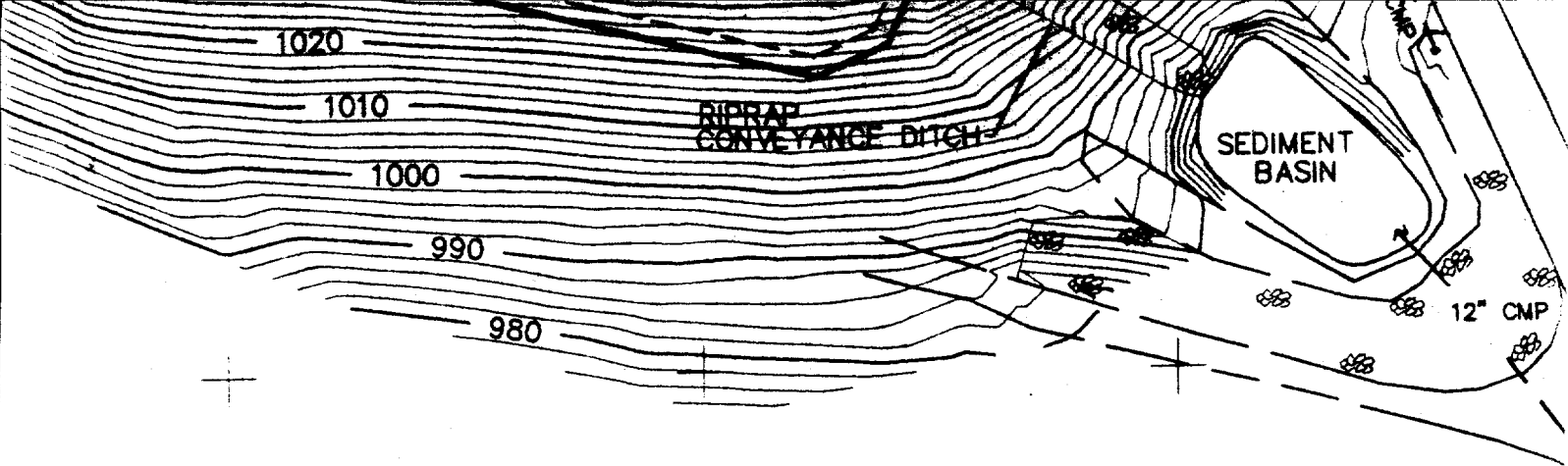


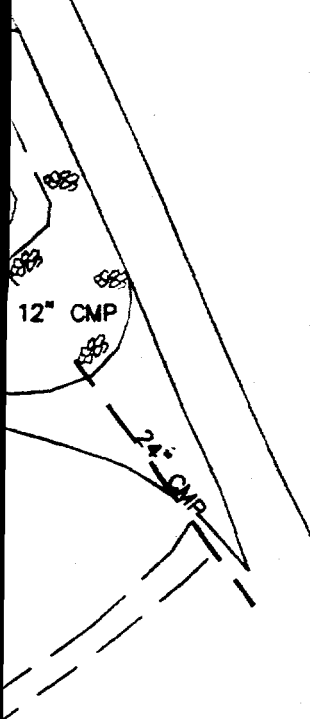
25500



25250

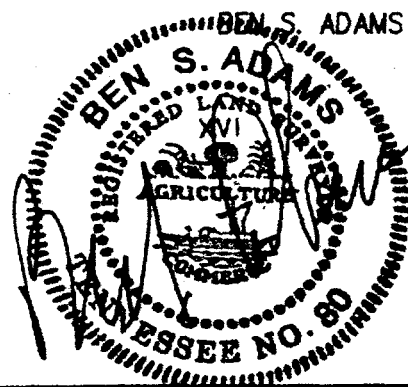






I HEREBY CERTIFY THAT AN ACTUAL
SURVEY WAS PERFORMED ON THE
REFERENCED PROJECT, AND THAT
THE INFORMATION SHOWN IS CORRECT
TO THE BEST OF MY KNOWLEDGE.

Ben S. Adams

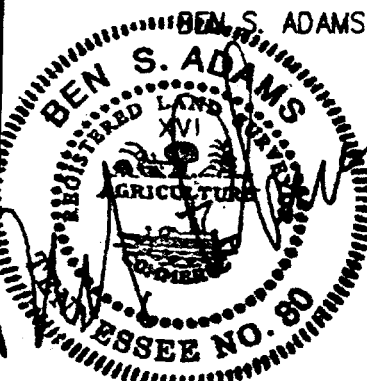


AS-BUILT CLOSURE OF SANITARY LANDFILL II

issue	drawn by	checked by	date	approval
original	SKS	SRB	10-27-95	BSA
R-1	SKS	SRB	11-16-95	BSA

CERTIFY THAT AN ACTUAL
WAS PERFORMED ON THE
ED PROJECT, AND THAT
RMATION SHOWN IS CORRECT
BEST OF MY KNOWLEDGE.

Ben S. Adams



94908CP2

file dwg. no.

94908

field book no.

job no.

CP-2

drawing number