Westinghouse

Westinghouse Electric Company
Hematite Facility
3300 State Road P
Festus, MO 63028

June 24, 2003

Mr. George M. McCann
U.S. Nuclear Regulatory Commission
Region III
801 Warrenville Road
Lisle, IL 60532-4351

Subject: Description of Duel's Mountain Removal Activities to Support Interference Removal Activities, License Number SNM-33, Docket No. 070-036

References: (1) Teleconference between A. J. Nardi, K. Craig and G. M. McCann on February 28, 2003

Dear Mr. McCann:

The Westinghouse Electric Corporation is preparing to begin certain activities associated with the decommissioning of the site. As such, we have prepared this letter and the attached description to explain the Duel's Mountain removal activities that are to be conducted.

Based on our phone conversation (Reference 1) you requested information regarding the planned Duel's Mountain removal activities. Westinghouse has prepared the attached document in response to that request. The goal of the removal of Duel's Mountain is to enable identification of possible burial pits beneath the pile. The intent is not to remove or disturb any of the underlying soil. Activities include removal of the dirt and possible building debris located in the pile above grade. Material removed from Duel's Mountain will be sorted and segregated for waste disposal to Envirocare or another licensed disposal site. Westinghouse considers this approach not to be an intrusive approach within the waste material and does not require a specific license amendment.

It is Westinghouse's position that these activities are within the authorized scope of the current license and are asking for concurrence from the USNRC based on the attached discussion. Westinghouse will work closely and in a timely fashion with the USNRC to assure that the terms and conditions of the existing license are met and that the project is conducted without impacting the safety of the public or employees.

If you have any questions concerning the information provided in this letter, please contact me at the above address or call me at (412) 374-4652

Sincerely,

A. Joseph Nardi, Supervisory Engineer
Environment, Health and Safety

Attachment: Description of Duel's Mountain Removal Activities

cc: Hematite Document Control

Rec'd 4/9/04

Document Number: 03-148

Westinghouse

DESCRIPTION OF WORK
Duel's Mountain Removal
Westinghouse Former Fuel Cycle Facility D&D Project

Introduction

The Westinghouse Electric Corporation is preparing to begin site decommissioning activities associated with interference removal. Specifically this includes the removal, segregation, packaging and disposal of Duel's Mountain. Sorting and segregating will be accomplished to determine which disposal options applies. No soil will be free released. Only soil being disposed of at licensed facility will be transported off-site.

Duel's Mountain is a pile of soil and possible building debris equating to an approximate 1,100 cubic yards of waste currently located within the southeast corner of the fenced portion of the Facility. The Duel's Mountain footprint is approximately 90-feet by 68-feet, with an average height of 7.5 feet. The soil pile is believed to have originated from the construction of a truck bay associated with Building 256, on the far north side of the Facility, by a previous owner/operator of the Facility. The pile appears to be primarily native soil, but also includes some rubble including rock and building debris (cement and/or asphalt). Seasonally, the pile supports heavy vegetation, which consists primarily of brush and poison oak.

The goal of the removal is to safely and efficiently characterize, segregate, package and dispose of Duel's Mountain to a licensed facility. The purpose of the removal is to facilitate an investigation of the area underneath the pile. Based on available information, it is possible that Duel's Mountain is atop an area that was used for subsurface burial in waste pits. The waste pits are an area of concern for the currently planned Remedial Investigation. Duel's Mountain is interference to the comprehensive conduct of the Remedial Investigation. In order to perform the work in accordance with the terms and conditions of the existing license, both administrative and engineering controls will be utilized.

A limited characterization of Duel's Mountain was conducted in September 2002. Based on historical information, the soils contained in Duel's mountain were expected to contain U^{238}, U^{235}, and U^{234}. Analytical results from samples collected during the characterization confirmed the presence of U^{238}, U^{235} and U^{234}. Characterization activities confirmed these contaminates. No other isotopes were detected. Results from this characterization are included as Appendix A.

Planning

Activities associated with Duel's Mountain shall not be performed without proper planning. Planning is the first step to ensure that work is performed safely and that doses to the worker, public and environment remain ALARA. Planning shall include relevant persons engaged in the work and will include hazard identification and control processes. Workers shall be properly trained prior to removal activities. Before activities start the following shall be considered:

- Development of a characterization and segregation work plan to included erosion and sediment controls, storm water runoff controls, dust suppression measures, establishment of soil stockpile areas and decontamination measures.
- An assessment of the risks involved in performing the work.
  - Potential ADD due to worker
  - Containers & Spec. of Boxes.
  - Confirm sampling of Box material

Need that

- The most appropriate method to prevent any risk of injury and to ensure proper contamination control.
- An assessment of the ground conditions and working environment including risks to health and safety from contamination and chemicals present.
- Providing a suitable and safe access to and from the work place including the work area.
- The area of work is clearly defined by barricades and warning signs.
- Security and control during work and if left unattended.
- An assessment of the potential climatic/environmental conditions

Project Controls

Materials that may present a physical, chemical and/or biological risk to human health include uranium, TCE, and CCE. Necessary prevention or protection measures shall be taken to ensure the health and safety of persons who may be exposed to material containing a contaminant.

Where there is a risk of inhalation of harmful airborne substances such as dust from contaminated soil, proper airborne monitoring shall be performed and necessary respiratory protection provided as appropriate.

PPE shall be considered only after administrative and engineering controls are implemented. PPE shall be selected based on site work conditions and clearly specified on the RWP. Employees shall be trained in the proper selection, use and maintenance of the PPE. PPE used by persons during activities shall be regularly inspected and replaced as necessary. PPE to be employed as appropriate include:

- Hard hats
- Steel toed shoes
- Eye protection
- Hearing protection
- Safety gloves
- Protection from the sun
- High visibility garments
- Clothing for protection against chemicals
- Respiratory protective equipment

Administrative and engineering controls shall be relied upon to ensure work activities are performed safely and that dose and exposure to workers, the public and the environment are maintained ALARA.

The administrative controls that will be used include:

- Pre-job surveys shall be performed by a qualified health physics technician prior to work beginning.

- Contamination and radiation levels will be verified to be within the radiological work permit limits prior to commencing work.
- Radiological work permits shall be used to ensure site conditions are clearly presented and that workers fully understand the site conditions and work controls
- Airborne radioactivity levels will be monitored during work activities to ensure that levels remain within the limits specified on the applicable radiological work permit.
- Only necessary materials and equipment will be taken into the work area to minimize the amount of contaminated material and radioactive waste generated.
- Work shall be performed in compliance with work plans and procedures. Compliance, by contractor, with site Health and Safety Plan (HASP), Radiation Protection Plan (RPP) and Quality Assurance (QA) Policies.
- Daily work briefings shall be conducted to brief workers of site conditions and proper safety techniques.

The engineering controls that will be used include:

- Methods to minimize the disturbance of underlying soil.
- Restoration of Duel's Mountain footprint to original grade as determined by surrounding topography.
- Activities that ensure stormwater drainage is not adversely affected.
- Activities to establish erosion and sedimentation controls as required.
- Daily inspection of engineering controls.
- Any removed material tracked onto adjacent areas will be removed the same day
- Waste containers will be pre-staged to package removed material. This material will be packaged appropriately and staged for ultimate disposal. Runoff control shall be maintained by limiting the work during inclement weather.
- If required, dust mitigation shall be performed by both wetting (not soaking) materials while being excavated.

Additional control measures shall depend on the type and amount of contamination and shall included as appropriate,

- Extracting dust at the point of generation and collecting it in such a manner so as not to affect the health and safety of persons at the workplace
- Using water, detergents or other substances to suppress dust at the point of generation
- Using tools fitted with dust extraction or with a water attachment
- Using low pressure water sprays sufficient to suppress dust
- Fitting water applicators onto machinery rather than hand holding them
- Fitting appropriate air filtering systems to the air conditioning units of excavators and other machinery
- Limiting exposure to dust
- Using respirators that are capable of preventing the inhalation of airborne contaminants

A hazard that is often overlooked on contaminated sites is the risk for dust built-up within the cabs of site vehicles. Cabs shall be monitored for dust buildup. Rubber door-seals shall be inspected periodically for wear or damage. Vacuum cleaning of equipment surfaces using high efficiency particulate air (HEPA) filter equipment shall be used when appropriate.

Implementation Activities

Sorting and segregation of the soil will be based on radiological surveys and onsite sampling results. Soil stockpiles of segregated material will be by potential disposal options or radiological contamination levels. Stockpile areas will be bermed and lined to prevent runoff and to limit the potential spread of contamination.

A walk-over survey of the perimeter of the stockpiles will be conducted prior to the start of work and routinely during work activities. Stockpiles will be covered at the end of each workday and during any period of inclement weather.

Waste containers will be loaded and packaged based on the waste disposition and in accordance with the proposed disposal site requirements. Waste containers will be sealed, inspected and cleaned of exterior loose material. Bulk Survey for Disposal (BSFD) will be utilized.

Conclusion

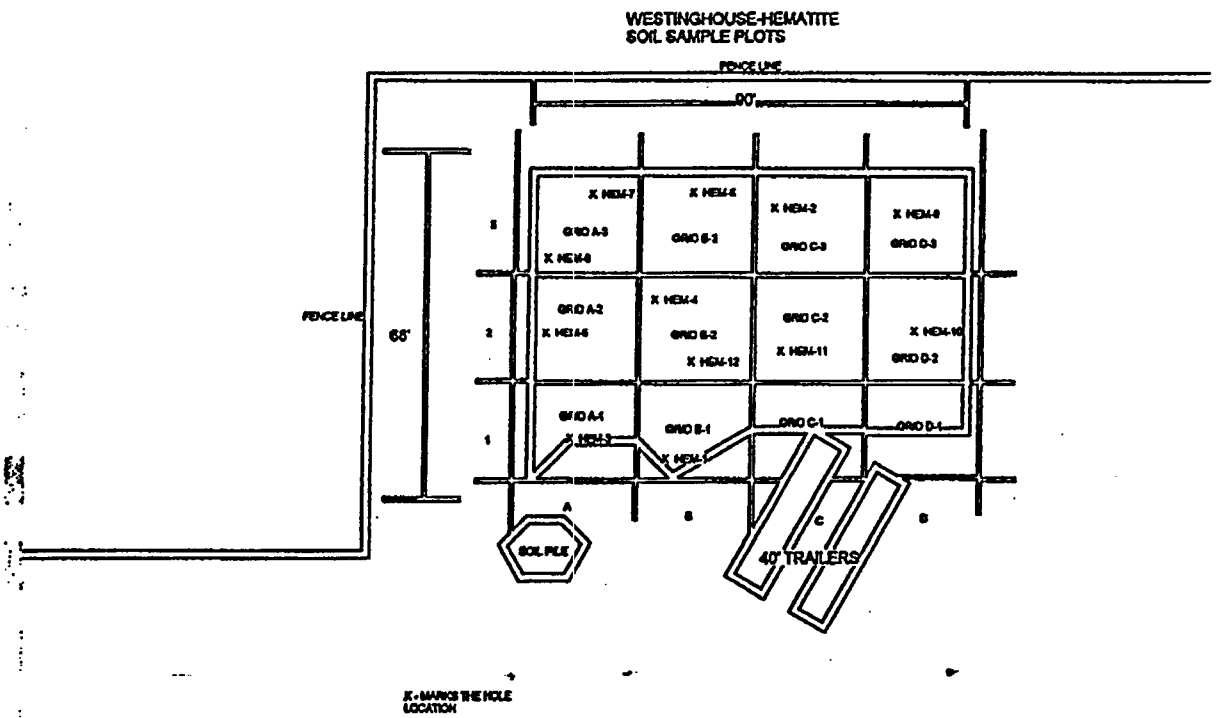
It is Westinghouse's position that the characterization, segregation, packaging and disposal of Duel's Mountain is an authorized activity per our current license. In summary, the planned activities:

1. Involve techniques that have been used during other cleanup or maintenance operations;
2. Do not require workers to enter areas where surface contaminate and radiation levels are significantly higher than could be encountered during other licensed operations;
3. Would not result in significantly greater airborne concentrations of radioactive materials than could be present during other licensed operations; and,
4. Would not result in significantly greater releases of radioactive material to the environment than those associated with other licensed operations.

Thus, a separate license amendment to conduct the planned activity is not required.

APPENDIX A

Duel's Mountain Characterization Data


WESTINGHOUSE-HEMATITE
SOIL SAMPLE PLOTS
FENCE LINE
90'
FENCE LINE
65'
X HEM-7
X HEM-6
X HEM-2
X HEM-9
GRID A-3
GRID B-3
GRID C-3
GRID D-3
X HEM-8
GRID A-2
X HEM-4
GRID C-2
X HEM-10
X HEM-5
GRID B-2
X HEM-11
GRID D-2
X HEM-12
GRID A-1
GRID B-1
GRID C-1
GRID D-1
X HEM-3
X HEM-1
A
B
C
D
SOIL PILE
40' TRAILERS
X - MARKS THE HOLE LOCATION

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133

US Ecology
109 Flint Road
Oak Ridge TN 37830
Attn: Darrel Ray

Report of Analysis/Certificate of Conformance

11/20/02

LIMS #:	L19691
Project ID#:	US607-3EREGFS-02
Received:	11/12/02
Delivery Date:	11/15/02
P.O. # :	1099
Release #:	FS-MO-02-06
SDG #:	N/A

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133

Cross Reference Table

Client ID	Laboratory ID	TI#
HEM 1 1FT.	L19691-1	83290
HEM 1 2FT.	L19691-2	83291
HEM 1 3FT.	L19691-3	83292
HEM 2 1FT.	L19691-4	83293
HEM 2 2FT.	L19691-5	83294
HEM 2 3FT.	L19691-6	83295
HEM 3 1FT.	L19691-7	83296
HEM 3 3FT.	L19691-8	83297
HEM 3 5FT.	L19691-9	83298
HEM 4 1FT.	L19691-10	83299
HEM 4 2FT.	L19691-11	83300
HEM 4 3FT.	L19691-12	83301
HEM 5 1FT.	L19691-13	83302
HEM 5 2FT.	L19691-14	83303
HEM 5 3FT.	L19691-15	83304
HEM 6 1FT.	L19691-16	83305
HEM 6 2FT.	L19691-17	83306
HEM 6 3FT.	L19691-18	83307
HEM 7 1FT.	L19691-19	83308
HEM 7 2FT.	L19691-20	83309
HEM 7 3FT.	L19691-21	83310
HEM 8 1FT.	L19691-22	83311
HEM 8 2FT.	L19691-23	83312
HEM 8 3FT.	L19691-24	83313
HEM 9 1FT.	L19691-25	83314
HEM 9 2FT.	L19691-26	83315
HEM 9 3FT.	L19691-27	83316
HEM 10 1FT.	L19691-28	83317
HEM 10 2FT.	L19691-29	83318
HEM 10 3FT.	L19691-30	83319
HEM 11 1FT.	L19691-31	83320
HEM 11 2FT.	L19691-32	83321
HEM 11 3FT.	L19691-33	83322
HEM 12 1FT.	L19691-34	83323
HEM 12 2FT.	L19691-35	83324
HEM 12 3FT.	L19691-36	83325

Report of Analysis

11/20/02 10:54:11AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Darrel Ray

Sample ID: HEM 1 1FT.
Station:
Description:
LIMS Number: L19691-1 (83290)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.38E+001	1.11E+000	2.21E-001	pCi/G	303.000	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	9.96E-002	3.98E-002	1.90E-002	pCi/G	303.000	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
RA-226	042-5	6.26E-001	7.21E-002	4.33E-001	pCi/G	303.000	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
TH-232	042-5	7.17E-001	6.67E-002	6.25E-002	pCi/G	303.000	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	9.59E-001	2.46E-001	1.34E-001	pCi/G	303.000	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	3.14E+000	2.61E+000	3.53E+000	pCi/G	303.000	G wet	11/12/02 12:00	11/13/02	6,000	Seconds			No

Comments:

Sample ID: HEM 1 2FT.
Station:
Description:
LIMS Number: L19691-2 (83291)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.32E+001	1.33E+000	2.48E-001	pCi/G	312.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	4.28E-002	2.74E-002	3.67E-002	pCi/G	312.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	*		No
RA-226	042-5	8.10E-001	8.27E-002	6.87E-001	pCi/G	312.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
TH-232	042-5	7.20E-001	8.53E-002	7.49E-002	pCi/G	312.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	2.79E+000	3.41E-001	2.27E-001	pCi/G	312.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	4.77E+000	3.23E+000	4.54E+000	pCi/G	312.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bold xt in :s re ble v

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 1 3FT.
Station:
Description:
LIMS Number: L19691-3 (83292)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.33E+001	1.22E+000	3.82E-001	pCi/G	340.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	5.02E-002	7.12E-002	5.11E-002	pCi/G	340.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
RA-226	042-5	6.72E-001	7.45E-002	1.11E+000	pCi/G	340.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	6.46E-001	7.21E-002	1.29E-001	pCi/G	340.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	1.63E+000	3.20E-001	3.58E-001	pCi/G	340.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	9.28E+000	6.01E+000	4.70E+000	pCi/G	340.100	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-233/234 (AS)	062-110	2.20E+001	2.90E+000	7.72E-002	pCi/g	0.501	g		11/17/02	60,003	seconds	+		
U-235 (AS)	062-110	9.48E-001	2.89E-001	2.74E-002	pCi/g	0.501	g		11/17/02	60,003	seconds	+		
U-238 (AS)	062-110	3.95E+000	6.83E-001	5.46E-002	pCi/g	0.501	g		11/17/02	60,003	seconds	+		

Comments:

Sample ID: HEM 2 1FT.
Station:
Description:
LIMS Number: L19691-4 (83293)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.72E+001	2.02E+000	5.85E-001	pCi/G	253.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	2.73E-002	6.25E-002	1.07E-001	pCi/G	253.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	8.09E-001	1.30E-001	2.02E+000	pCi/G	253.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	9.28E-001	1.15E-001	2.72E-001	pCi/G	253.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	3.61E+000	5.69E-001	6.64E-001	pCi/G	253.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bol[illegible]xt in [illegible]es re[illegible]ble value

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 2 1FT.
Station:
Description:
LIMS Number: L19691-4 (83293)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
U-238	042-5	3.95E+000	6.47E+000	1.14E+001	pCi/G	253.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No

Comments:

Sample ID: HEM 2 2FT.
Station:
Description:
LIMS Number: L19691-5 (83294)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.97E+001	1.70E+000	5.55E-001	pCi/G	259.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	7.33E-002	4.56E-002	8.59E-002	pCi/G	259.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	7.88E-001	9.69E-002	1.27E+000	pCi/G	259.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	1.10E+000	1.07E-001	2.05E-001	pCi/G	259.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	1.42E+000	3.82E-001	4.12E-001	pCi/G	259.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	8.60E+000	5.14E+000	9.70E+000	pCi/G	259.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No

Comments:

Sample ID: HEM 2 3FT.
Station:
Description:
LIMS Number: L19691-6 (83295)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bold xt in s re ble v

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 2 3FT.
Station:
Description:
LIMS Number: L19691-6 (83295)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values			
K-40	042-5	1.57E+001	1.40E+000	2.10E-001	pCi/G	300.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+			Yes
CS-137	042-5	2.19E-001	7.73E-002	3.44E-002	pCi/G	300.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+			Yes
RA-226	042-5	6.16E-001	9.78E-002	8.37E-001	pCi/G	300.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds				Yes
TH-232	042-5	7.17E-001	1.08E-001	9.44E-002	pCi/G	300.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+			Yes
U-235	042-5	4.53E+000	4.98E-001	2.73E-001	pCi/G	300.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+			Yes
U-238	042-5	6.64E+000	6.05E+000	3.21E+000	pCi/G	300.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds				Yes

Comments:

Sample ID: HEM 3 1FT.
Station:
Description:
LIMS Number: L19691-7 (83296)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values			
K-40	042-5	1.71E+001	1.85E+000	2.53E-001	pCi/G	279.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+			Yes
CS-137	042-5	7.43E-002	5.76E-002	9.49E-002	pCi/G	279.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds				Yes
RA-226	042-5	8.83E-001	1.21E-001	1.65E+000	pCi/G	279.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds				Yes
TH-232	042-5	9.11E-001	1.00E-001	1.84E-001	pCi/G	279.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+			Yes
U-235	042-5	3.00E-001	3.39E-001	5.87E-001	pCi/G	279.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds				No
U-238	042-5	-1.03E+000	5.74E+000	9.36E+000	pCi/G	279.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds				No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bold text indicates reportable value

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 3 3FT.
Station:
Description:
LIMS Number: L19691-8 (83297)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.66E+001	1.28E+000	3.95E-001	pCi/G	331.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	1.06E-001	4.79E-002	5.39E-002	pCi/G	331.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
RA-226	042-5	9.40E-001	7.62E-002	1.07E+000	pCi/G	331.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	8.36E-001	7.19E-002	1.29E-001	pCi/G	331.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	7.63E-001	3.15E-001	3.44E-001	pCi/G	331.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	5.36E+000	3.36E+000	6.35E+000	pCi/G	331.000	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Sample ID: HEM 3 5FT.
Station:
Description:
LIMS Number: L19691-9 (83298)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.56E+001	1.21E+000	4.28E-001	pCi/G	309.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	-2.90E-003	2.64E-002	4.76E-002	pCi/G	309.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No
RA-226	042-5	6.21E-001	7.17E-002	1.05E+000	pCi/G	309.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	8.18E-001	7.83E-002	1.30E-001	pCi/G	309.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	1.58E+000	2.89E-001	3.37E-001	pCi/G	309.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	-2.00E-001	3.48E+000	6.31E+000	pCi/G	309.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bold text in results reportable value

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 4 1FT.
Station:
Description:
LIMS Number: L19691-10 (83299)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.17E+001	9.31E-001	1.82E-001	pCi/G	352.600	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	8.20E-002	3.30E-002	1.76E-002	pCi/G	352.600	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
RA-226	042-5	5.11E-001	6.12E-002	5.04E-001	pCi/G	352.600	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
TH-232	042-5	6.15E-001	6.52E-002	5.29E-002	pCi/G	352.600	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	7.44E+000	3.54E-001	1.86E-001	pCi/G	352.600	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	7.55E+000	5.67E+000	2.01E+000	pCi/G	352.600	G wet	11/12/02 12:00	11/13/02	6,000	Seconds			Yes

Comments:

Sample ID: HEM 4 2FT.
Station:
Description:
LIMS Number: L19691-11 (83300)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.58E+001	1.49E+000	2.00E-001	pCi/G	257.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	4.14E-002	3.40E-002	4.37E-002	pCi/G	257.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	6.84E-001	9.81E-002	8.83E-001	pCi/G	257.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	8.50E-001	1.14E-001	8.49E-002	pCi/G	257.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	4.87E+000	8.86E-001	6.37E-001	pCi/G	257.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	4.06E+000	3.47E+000	4.83E+000	pCi/G	257.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bold text indicates reportable value

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 4 3FT.
Station:
Description:
LIMS Number: L19691-12 (83301)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	7.63E+000	9.04E-001	2.94E-001	pCi/G	423.300	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	1.39E-002	2.43E-002	4.24E-002	pCi/G	423.300	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No
RA-226	042-5	4.45E-001	6.02E-002	8.25E-001	pCi/G	423.300	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	4.08E-001	5.40E-002	1.16E-001	pCi/G	423.300	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	6.81E-001	3.47E-001	3.41E-001	pCi/G	423.300	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	5.00E+000	2.93E+000	5.63E+000	pCi/G	423.300	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Sample ID: HEM 5 1FT.
Station:
Description:
LIMS Number: L19691-13 (83302)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.73E+001	1.84E+000	6.49E-001	pCi/G	261.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	8.91E-003	6.07E-002	1.01E-001	pCi/G	261.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No
RA-226	042-5	9.59E-001	1.15E-001	1.68E+000	pCi/G	261.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	8.74E-001	1.09E-001	2.28E-001	pCi/G	261.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	8.28E-001	3.98E-001	5.44E-001	pCi/G	261.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	6.96E+000	6.45E+000	1.18E+001	pCi/G	261.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 5 2FT.
Station:
Description:
LIMS Number: L19691-14 (83303)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	9.69E+000	1.02E+000	4.11E-001	pCi/G	342.000	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	5.92E-002	3.53E-002	6.67E-002	pCi/G	342.000	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	4.57E-001	6.97E-002	9.23E-001	pCi/G	342.000	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	4.99E-001	5.92E-002	1.48E-001	pCi/G	342.000	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	3.92E+000	3.29E-001	3.68E-001	pCi/G	342.000	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	9.55E+000	6.59E+000	4.87E+000	pCi/G	342.000	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes

Comments:

Sample ID: HEM 5 3FT.
Station:
Description:
LIMS Number: L19691-15 (83304)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
SAMPLE		NOT RECEIVED												

Comments:

Sample ID: HEM 6 1FT.
Station:
Description:
LIMS Number: L19691-16 (83305)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 6 1FT.
Station:
Description:
LIMS Number: L19691-16 (83305)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.21E+001	1.36E+000	2.54E-001	pCi/G	272.200	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	1.63E-002	2.71E-002	3.50E-002	pCi/G	272.200	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No
RA-226	042-5	4.96E-001	9.75E-002	6.77E-001	pCi/G	272.200	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	5.86E-001	1.20E-001	8.21E-002	pCi/G	272.200	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	6.68E-001	3.72E-001	2.24E-001	pCi/G	272.200	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	1.42E+000	3.62E+000	4.47E+000	pCi/G	272.200	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Sample ID: HEM 6 2FT.
Station:
Description:
LIMS Number: L19691-17 (83306)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.02E+001	1.35E+000	4.85E-001	pCi/G	269.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	1.15E-001	6.72E-002	8.24E-002	pCi/G	269.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
RA-226	042-5	7.74E-001	9.94E-002	1.78E+000	pCi/G	269.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	5.39E-001	9.30E-002	1.87E-001	pCi/G	269.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	3.90E+000	5.71E-001	6.21E-001	pCi/G	269.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	8.45E+000	8.74E+000	5.53E+000	pCi/G	269.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 6 3FT.
Station:
Description:
LIMS Number: L19691-18 (83307)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
SAMPLE		NOT RECEIVED												

Comments:

Sample ID: HEM 7 1FT.
Station:
Description:
LIMS Number: L19691-19 (83308)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	9.55E+000	9.81E-001	3.86E-001	pCi/G	350.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	9.87E-002	6.16E-002	4.22E-002	pCi/G	350.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
RA-226	042-5	8.07E-001	7.09E-002	1.16E+000	pCi/G	350.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	5.86E-001	6.23E-002	1.36E-001	pCi/G	350.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	3.32E+000	3.49E-001	3.78E-001	pCi/G	350.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	7.21E+000	5.99E+000	4.69E+000	pCi/G	350.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes

Comments:

Sample ID: HEM 7 2FT.
Station:
Description:
LIMS Number: L19691-20 (83309)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 7 2FT.
Station:
Description:
LIMS Number: L19691-20 (83309)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.58E+001	1.16E+000	3.87E-001	pCi/G	324.900	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	9.30E-002	3.96E-002	5.53E-002	pCi/G	324.900	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
RA-226	042-5	8.18E-001	7.09E-002	1.18E+000	pCi/G	324.900	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	8.29E-001	7.90E-002	1.39E-001	pCi/G	324.900	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	3.25E+000	3.42E-001	3.80E-001	pCi/G	324.900	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	1.14E+001	4.64E+000	5.70E+000	pCi/G	324.900	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-233/234 (AS)	062-110	4.42E+001	4.03E+000	4.34E-002	pCi/g	0.593	g		11/17/02	60,003	seconds	+		
U-235 (AS)	062-110	1.59E+000	2.71E-001	1.26E-002	pCi/g	0.593	g		11/17/02	60,003	seconds	+		
U-238 (AS)	062-110	6.16E+000	6.80E-001	4.34E-002	pCi/g	0.593	g		11/17/02	60,003	seconds	+		

Comments:

Sample ID: HEM 7 3FT.
Station:
Description:
LIMS Number: L19691-21 (83310)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.71E+001	1.19E+000	1.79E-001	pCi/G	327.900	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	1.70E-002	2.28E-002	2.84E-002	pCi/G	327.900	G wet	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	5.98E-001	6.56E-002	4.60E-001	pCi/G	327.900	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
TH-232	042-5	7.59E-001	7.16E-002	5.93E-002	pCi/G	327.900	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	1.41E+000	2.47E-001	1.27E-001	pCi/G	327.900	G wet	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 7 3FT.
Station:
Description:
LIMS Number: L19691-21 (83310)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
U-238	042-5	3.92E+000	2.62E+000	3.58E+000	pCi/G	327.900	G wet	11/12/02 12:00	11/13/02	6.000	Seconds			No
U-233/234 (AS)	062-110	4.18E+001	4.62E+000	9.37E-002	pCi/g	0.555	g		11/17/02	60.004	seconds	+		
U-235 (AS)	062-110	1.46E+000	3.18E-001	6.68E-002	pCi/g	0.555	g		11/17/02	60.004	seconds	+		
U-238 (AS)	062-110	4.87E+000	6.87E-001	6.62E-002	pCi/g	0.555	g		11/17/02	60.004	seconds	+		

Comments:

Sample ID: HEM 8 1FT.
Station:
Description:
LIMS Number: L19691-22 (83311)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.63E+001	1.50E+000	3.10E-001	pCi/G	275.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	3.92E-002	3.65E-002	4.54E-002	pCi/G	275.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No
RA-226	042-5	6.96E-001	9.02E-002	7.76E-001	pCi/G	275.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	7.40E-001	8.24E-002	9.32E-002	pCi/G	275.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	2.82E+000	4.15E-001	2.39E-001	pCi/G	275.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	2.47E+000	3.93E+000	5.08E+000	pCi/G	275.500	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 8 2FT.
Station:
Description:
LIMS Number: L19691-23 (83312)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.76E+001	1.52E+000	4.87E-001	pCi/G	308.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	-2.64E-002	3.85E-002	5.96E-002	pCi/G	308.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	7.06E-001	8.62E-002	1.25E+000	pCi/G	308.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	1.00E+000	8.65E-002	1.94E-001	pCi/G	308.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	8.60E-001	3.55E-001	3.67E-001	pCi/G	308.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	3.88E+000	4.14E+000	7.39E+000	pCi/G	308.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
U-233/234 (AS)	062-110	1.43E+001	1.85E+000	2.00E-002	pCi/g	0.508	g		11/17/02	60,001	seconds	+		
U-235 (AS)	062-110	5.03E-001	1.92E-001	2.47E-002	pCi/g	0.508	g		11/17/02	60,001	seconds	+		
U-238 (AS)	062-110	1.75E+000	3.67E-001	2.00E-002	pCi/g	0.508	g		11/17/02	60,001	seconds	+		

Comments:

Sample ID: HEM 8 3FT.
Station:
Description:
LIMS Number: L19691-24 (83313)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.89E+001	1.95E+000	6.97E-001	pCi/G	268.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	2.01E-002	5.54E-002	9.43E-002	pCi/G	268.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	8.29E-001	1.24E-001	1.59E+000	pCi/G	268.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	9.69E-001	1.15E-001	2.35E-001	pCi/G	268.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	1.15E+000	6.44E-001	5.00E-001	pCi/G	268.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 8 3FT.
Station:
Description:
LIMS Number: L19691-24 (83313)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
U-238	042-5	-9.00E-001	5.79E+000	9.47E+000	pCi/G	268.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No

Comments:

Sample ID: HEM 9 1FT.
Station:
Description:
LIMS Number: L19691-25 (83314)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.11E+001	1.04E+000	3.97E-001	pCi/G	354.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	8.41E-002	4.73E-002	4.96E-002	pCi/G	354.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
RA-226	042-5	7.63E-001	7.62E-002	1.27E+000	pCi/G	354.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	5.46E-001	7.41E-002	1.48E-001	pCi/G	354.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	6.31E+000	4.16E-001	4.36E-001	pCi/G	354.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	3.05E+001	6.87E+000	5.22E+000	pCi/G	354.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes

Comments:

Sample ID: HEM 9 2FT.
Station:
Description:
LIMS Number: L19691-26 (83315)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 9 2FT.
Station:
Description:
LIMS Number: L19691-26 (83315)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	9.84E+000	1.21E+000	2.91E-001	pCi/G	336.300	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	2.41E-002	3.08E-002	3.95E-002	pCi/G	336.300	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	7.72E-001	9.53E-002	7.90E-001	pCi/G	336.300	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	5.07E-001	8.24E-002	7.84E-002	pCi/G	336.300	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	6.47E+000	4.83E-001	2.85E-001	pCi/G	336.300	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	3.35E+001	7.85E+000	2.53E+000	pCi/G	336.300	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes

Comments:

Sample ID: HEM 9 3FT.
Station:
Description:
LIMS Number: L19691-27 (83316)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.55E+001	1.75E+000	6.02E-001	pCi/G	343.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	1.96E-003	4.61E-002	7.60E-002	pCi/G	343.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	9.56E-001	1.04E-001	1.47E+000	pCi/G	343.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	8.17E-001	8.99E-002	1.83E-001	pCi/G	343.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	6.72E-001	4.00E-001	4.79E-001	pCi/G	343.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	3.75E+000	6.21E+000	6.21E+000	pCi/G	343.400	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 10 1FT.
Station:
Description:
LIMS Number: L19691-28 (83317)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	2.42E+000	5.16E-001	2.51E-001	pCi/G	344.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	-1.34E-003	2.08E-002	3.44E-002	pCi/G	344.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
RA-226	042-5	2.21E-001	5.02E-002	8.11E-001	pCi/G	344.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	1.21E-001	4.46E-002	8.61E-002	pCi/G	344.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	5.86E-001	2.20E-001	2.70E-001	pCi/G	344.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	6.41E-001	2.32E+000	3.90E+000	pCi/G	344.600	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
U-233/234 (AS)	062-110	5.51E+001	9.85E+000	3.22E-002	pCi/g	0.528	g		11/17/02	60,004	seconds	+		
U-235 (AS)	062-110	2.02E+000	4.64E-001	1.62E-002	pCi/g	0.528	g		11/17/02	60,004	seconds	+		
U-238 (AS)	062-110	3.64E+000	7.38E-001	3.22E-002	pCi/g	0.528	g		11/17/02	60,004	seconds	+		

Comments:

Sample ID: HEM 10 2FT.
Station:
Description:
LIMS Number: L19691-29 (83318)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	6.68E+000	8.39E-001	3.79E-001	pCi/G	318.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	1.18E-001	4.87E-002	4.03E-002	pCi/G	318.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
RA-226	042-5	3.63E-001	6.01E-002	1.04E+000	pCi/G	318.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	4.25E-001	5.30E-002	1.10E-001	pCi/G	318.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	2.59E+000	2.78E-001	3.31E-001	pCi/G	318.800	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 10 2FT.
Station:
Description:
LIMS Number: L19691-29 (83318)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
U-238	042-5	9.09E+000	4.60E+000	4.89E+000	pCi/G	318.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes

Comments:

Sample ID: HEM 10 3FT.
Station:
Description:
LIMS Number: L19691-30 (83319)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.07E+001	1.07E+000	2.12E-001	pCi/G	314.900	G wet	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	6.50E-002	5.25E-002	2.05E-002	pCi/G	314.900	G wet	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
RA-226	042-5	4.66E-001	5.94E-002	4.75E-001	pCi/G	314.900	G wet	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	5.08E-001	6.16E-002	5.47E-002	pCi/G	314.900	G wet	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	2.00E+000	2.88E-001	1.43E-001	pCi/G	314.900	G wet	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	5.68E+000	4.34E+000	2.35E+000	pCi/G	314.900	G wet	11/12/02 12:00	11/13/02	6.000	Seconds			Yes

Comments:

Sample ID: HEM 11 1FT.
Station:
Description:
LIMS Number: L19691-31 (83320)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 11 1FT.
Station:
Description:
LIMS Number: L19691-31 (83320)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.68E+001	1.35E+000	1.75E-001	pCi/G	329.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	6.98E-002	3.12E-002	4.29E-002	pCi/G	329.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	*		No
RA-226	042-5	6.52E-001	8.10E-002	5.36E-001	pCi/G	329.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
TH-232	042-5	8.06E-001	7.55E-002	6.93E-002	pCi/G	329.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	6.26E-001	3.07E-001	1.93E-001	pCi/G	329.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	2.21E+000	2.78E+000	3.71E+000	pCi/G	329.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Sample ID: HEM 11 2FT.
Station:
Description:
LIMS Number: L19691-32 (83321)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.64E+001	1.42E+000	4.10E-001	pCi/G	329.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	1.21E-002	3.94E-002	6.65E-002	pCi/G	329.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No
RA-226	042-5	6.98E-001	8.75E-002	1.06E+000	pCi/G	329.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	9.56E-001	8.62E-002	1.41E-001	pCi/G	329.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	7.24E-001	6.11E-001	4.51E-001	pCi/G	329.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
U-238	042-5	2.69E+000	4.03E+000	6.98E+000	pCi/G	329.700	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 11 3FT.
Station:
Description:
LIMS Number: L19691-33 (83322)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.39E+001	1.52E+000	4.66E-001	pCi/G	367.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	5.00E-002	5.70E-002	7.50E-002	pCi/G	367.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
RA-226	042-5	7.15E-001	9.22E-002	1.32E+000	pCi/G	367.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	7.45E-001	8.44E-002	1.73E-001	pCi/G	367.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	1.93E+000	5.50E-001	6.69E-001	pCi/G	367.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-238	042-5	5.55E+000	5.45E+000	9.81E+000	pCi/G	367.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			No
U-233/234 (AS)	062-110	5.51E+001	6.87E+000	7.14E-002	pCi/g	0.538	g		11/17/02	60,001	seconds	+		
U-235 (AS)	062-110	2.20E+000	4.71E-001	2.53E-002	pCi/g	0.538	g		11/17/02	60,001	seconds	+		
U-238 (AS)	062-110	1.24E+001	1.71E+000	5.05E-002	pCi/g	0.538	g		11/17/02	60,001	seconds	+		

Comments:

Sample ID: HEM 12 1FT.
Station:
Description:
LIMS Number: L19691-34 (83323)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.23E+001	1.11E+000	3.43E-001	pCi/G	343.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
CS-137	042-5	2.43E-002	4.33E-002	5.89E-002	pCi/G	343.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
RA-226	042-5	5.68E-001	7.65E-002	9.99E-001	pCi/G	343.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds			Yes
TH-232	042-5	6.69E-001	6.76E-002	1.44E-001	pCi/G	343.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes
U-235	042-5	7.45E-001	2.41E-001	3.29E-001	pCi/G	343.200	G WET	11/12/02 12:00	11/13/02	6,000	Seconds	+		Yes

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 12 1FT.
Station:
Description:
LIMS Number: L19691-34 (83323)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
U-238	042-5	2.26E+000	3.88E+000	6.71E+000	pCi/G	343.200	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Sample ID: HEM 12 2FT.
Station:
Description:
LIMS Number: L19691-35 (83324)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	1.21E+001	1.23E+000	3.10E-001	pCi/G	340.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	6.06E-002	5.41E-002	2.99E-002	pCi/G	340.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
RA-226	042-5	6.70E-001	8.41E-002	6.65E-001	pCi/G	340.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
TH-232	042-5	6.99E-001	8.38E-002	8.85E-002	pCi/G	340.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	7.33E-001	5.31E-001	2.91E-001	pCi/G	340.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
U-238	042-5	1.99E+000	2.79E+000	3.59E+000	pCi/G	340.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			No

Comments:

Sample ID: HEM 12 3FT.
Station:
Description:
LIMS Number: L19691-36 (83325)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

11/20/02 10:54:42AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM 12 3FT.
Station:
Description:
LIMS Number: L19691-36 (83325)
% Moisture:

L19691
US Ecology
US607-3EREGFS-02

Collect Start: 11/12/02 0:00
Collect Stop:
Received: 11/12/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
K-40	042-5	6.36E+000	7.62E-001	2.71E-001	pCi/G	372.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
CS-137	042-5	4.83E-002	3.18E-002	4.55E-002	pCi/G	372.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
RA-226	042-5	3.77E-001	5.13E-002	1.87E+000	pCi/G	372.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds			Yes
TH-232	042-5	8.36E-001	7.26E-002	9.44E-002	pCi/G	372.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-235	042-5	2.28E+001	5.84E-001	6.53E-001	pCi/G	372.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes
U-238	042-5	9.78E+000	3.61E+000	4.29E+000	pCi/G	372.800	G WET	11/12/02 12:00	11/13/02	6.000	Seconds	+		Yes

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133

US Ecology
109 Flint Road
Oak Ridge TN 37830
Attn: Darrel Ray

Report of Analysis/Certificate of Conformance

10/22/02

LIMS #: L19308
Project ID#: US607-3EREGFS-02
Received: 10/4/02
Delivery Date: 10/19/02
P.O. # : 1099
Release #: FS-MO-02-06
SDG #: N/A

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	TI#
HEM-8-3FT	L19308-1	80701
HEM-4-3FT	L19308-2	80702
HEM-6-3FT	L19308-3	80703
HEM-5-3FT	L19308-4	80704

TELEDYNE BROWN ENGINEERING

Client Sample ID: 80701

TCLP Metals

Lot-Sample #...: H2J080251-001 Matrix.....: SOLID
Date Sampled...: 09/22/02 Date Received..: 10/08/02
Leach Date.....: 10/14/02 Leach Batch #..: P228702

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2288367						
Arsenic	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K051AA
		Dilution Factor: 1		Analysis Time..: 11:09		
Barium	ND	10.0	mg/L	SW846 6010B	10/16-10/17/02	E9K051AC
		Dilution Factor: 1		Analysis Time..: 11:09		
Cadmium	ND	0.10	mg/L	SW846 6010B	10/16-10/17/02	E9K051AD
		Dilution Factor: 1		Analysis Time..: 11:09		
Chromium	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K051AE
		Dilution Factor: 1		Analysis Time..: 11:09		
Lead	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K051AF
		Dilution Factor: 1		Analysis Time..: 11:09		
Selenium	ND	0.25	mg/L	SW846 6010B	10/16-10/17/02	E9K051AG
		Dilution Factor: 1		Analysis Time..: 11:09		
Silver	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K051AH
		Dilution Factor: 1		Analysis Time..: 11:09		
Prep Batch #...: 2290257						
Mercury	ND	0.0020	mg/L	SW846 7470A	10/17/02	E9K051AJ
		Dilution Factor: 1		Analysis Time..: 15:21		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

TELEDYNE BROWN ENGINEERING

Client Sample ID: 80702

TCLP Metals

Lot-Sample #...: H2J080251-002 Matrix.....: SOLID
Date Sampled...: 09/22/02 Date Received..: 10/08/02
Leach Date.....: 10/14/02 Leach Batch #..: P228702

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2288367						
Arsenic	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1A1AA
		Dilution Factor: 1		Analysis Time..: 11:27		
Barium	ND	10.0	mg/L	SW846 6010B	10/16-10/17/02	E9K1A1AC
		Dilution Factor: 1		Analysis Time..: 11:27		
Cadmium	ND	0.10	mg/L	SW846 6010B	10/16-10/17/02	E9K1A1AD
		Dilution Factor: 1		Analysis Time..: 11:27		
Chromium	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1A1AE
		Dilution Factor: 1		Analysis Time..: 11:27		
Lead	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1A1AF
		Dilution Factor: 1		Analysis Time..: 11:27		
Selenium	ND	0.25	mg/L	SW846 6010B	10/16-10/17/02	E9K1A1AG
		Dilution Factor: 1		Analysis Time..: 11:27		
Silver	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1A1AH
		Dilution Factor: 1		Analysis Time..: 11:27		
Prep Batch #...: 2290257						
Mercury	ND	0.0020	mg/L	SW846 7470A	10/17/02	E9K1A1AJ
		Dilution Factor: 1		Analysis Time..: 15:23		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

TELEDYNE BROWN ENGINEERING

Client Sample ID: 80703

TCLP Metals

Lot-Sample #...: H2J080251-003 Matrix.....: SOLID
Date Sampled...: 09/22/02 Date Received..: 10/08/02
Leach Date.....: 10/14/02 Leach Batch #..: P228702

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2288367						
Arsenic	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1C1AA
		Dilution Factor: 1		Analysis Time..: 11:31		
Barium	ND	10.0	mg/L	SW846 6010B	10/16-10/17/02	E9K1C1AC
		Dilution Factor: 1		Analysis Time..: 11:31		
Cadmium	ND	0.10	mg/L	SW846 6010B	10/16-10/17/02	E9K1C1AD
		Dilution Factor: 1		Analysis Time..: 11:31		
Chromium	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1C1AE
		Dilution Factor: 1		Analysis Time..: 11:31		
Lead	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1C1AF
		Dilution Factor: 1		Analysis Time..: 11:31		
Selenium	ND	0.25	mg/L	SW846 6010B	10/16-10/17/02	E9K1C1AG
		Dilution Factor: 1		Analysis Time..: 11:31		
Silver	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1C1AH
		Dilution Factor: 1		Analysis Time..: 11:31		
Prep Batch #...: 2290257						
Mercury	ND	0.0020	mg/L	SW846 7470A	10/17/02	E9K1C1AJ
		Dilution Factor: 1		Analysis Time..: 15:29		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

TELEDYNE BROWN ENGINEERING

Client Sample ID: 80704

TCLP Metals

Lot-Sample #...: H2J080251-004 Matrix.....: SOLID
Date Sampled...: 09/22/02 Date Received..: 10/08/02
Leach Date.....: 10/14/02 Leach Batch #..: P228702

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2288367						
Arsenic	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1D1AA
		Dilution Factor: 1		Analysis Time..: 11:36		
Barium	ND	10.0	mg/L	SW846 6010B	10/16-10/17/02	E9K1D1AC
		Dilution Factor: 1		Analysis Time..: 11:36		
Cadmium	ND	0.10	mg/L	SW846 6010B	10/16-10/17/02	E9K1D1AD
		Dilution Factor: 1		Analysis Time..: 11:36		
Chromium	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1D1AE
		Dilution Factor: 1		Analysis Time..: 11:36		
Lead	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1D1AF
		Dilution Factor: 1		Analysis Time..: 11:36		
Selenium	ND	0.25	mg/L	SW846 6010B	10/16-10/17/02	E9K1D1AG
		Dilution Factor: 1		Analysis Time..: 11:36		
Silver	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E9K1D1AH
		Dilution Factor: 1		Analysis Time..: 11:36		
Prep Batch #...: 2290257						
Mercury	ND	0.0020	mg/L	SW846 7470A	10/17/02	E9K1D1AJ
		Dilution Factor: 1		Analysis Time..: 15:31		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: H2J080251 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: H2J140000-133 Prep Batch #...: 2288367						
Leach Date.....: 10/14/02 Leach Batch #..: P228702						
Arsenic	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E90AW1AA
		Dilution Factor: 1				
		Analysis Time..: 11:00				
Barium	ND	10.0	mg/L	SW846 6010B	10/16-10/17/02	E90AW1AC
		Dilution Factor: 1				
		Analysis Time..: 11:00				
Cadmium	ND	0.10	mg/L	SW846 6010B	10/16-10/17/02	E90AW1AD
		Dilution Factor: 1				
		Analysis Time..: 11:00				
Chromium	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E90AW1AE
		Dilution Factor: 1				
		Analysis Time..: 11:00				
Lead	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E90AW1AF
		Dilution Factor: 1				
		Analysis Time..: 11:00				
Selenium	ND	0.25	mg/L	SW846 6010B	10/16-10/17/02	E90AW1AG
		Dilution Factor: 1				
		Analysis Time..: 11:00				
Silver	ND	0.50	mg/L	SW846 6010B	10/16-10/17/02	E90AW1AH
		Dilution Factor: 1				
		Analysis Time..: 11:00				
MB Lot-Sample #: H2J140000-133 Prep Batch #...: 2290257						
Leach Date.....: 10/14/02 Leach Batch #..: P228702						
Mercury	ND	0.0020	mg/L	SW846 7470A	10/17/02	E90AW1AJ
		Dilution Factor: 1				
		Analysis Time..: 15:17				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: H2J080251 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: H2J150000-367 Prep Batch #...: 2288367					
Arsenic	97	(80 - 120)	SW846 6010B	10/16-10/17/02	E925T1AA
		Dilution Factor: 10	Analysis Time..: 11:05		
Barium	93	(80 - 120)	SW846 6010B	10/16-10/17/02	E925T1AC
		Dilution Factor: 10	Analysis Time..: 11:05		
Cadmium	97	(80 - 120)	SW846 6010B	10/16-10/17/02	E925T1AD
		Dilution Factor: 10	Analysis Time..: 11:05		
Chromium	96	(80 - 120)	SW846 6010B	10/16-10/17/02	E925T1AE
		Dilution Factor: 10	Analysis Time..: 11:05		
Lead	98	(80 - 120)	SW846 6010B	10/16-10/17/02	E925T1AF
		Dilution Factor: 10	Analysis Time..: 11:05		
Selenium	95	(80 - 120)	SW846 6010B	10/16-10/17/02	E925T1AG
		Dilution Factor: 10	Analysis Time..: 11:05		
Silver	93	(80 - 120)	SW846 6010B	10/16-10/17/02	E925T1AH
		Dilution Factor: 10	Analysis Time..: 11:05		
LCS Lot-Sample#: H2J170000-257 Prep Batch #...: 2290257					
Mercury	100	(80 - 120)	SW846 7470A	10/17/02	E97A71AA
		Dilution Factor: 1	Analysis Time..: 15:19		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TCLP Metals

Client Lot #...: H2J080251 Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: H2J150000-367 Prep Batch #...: 2288367							
Arsenic	5.00	4.83	mg/L	97	SW846 6010B	10/16-10/17/02	E925T1AA
			Dilution Factor: 10		Analysis Time..: 11:05		
Barium	50.0	46.7	mg/L	93	SW846 6010B	10/16-10/17/02	E925T1AC
			Dilution Factor: 10		Analysis Time..: 11:05		
Cadmium	1.00	0.973	mg/L	97	SW846 6010B	10/16-10/17/02	E925T1AD
			Dilution Factor: 10		Analysis Time..: 11:05		
Chromium	5.00	4.80	mg/L	96	SW846 6010B	10/16-10/17/02	E925T1AE
			Dilution Factor: 10		Analysis Time..: 11:05		
Lead	5.00	4.88	mg/L	98	SW846 6010B	10/16-10/17/02	E925T1AF
			Dilution Factor: 10		Analysis Time..: 11:05		
Selenium	1.00	0.954	mg/L	95	SW846 6010B	10/16-10/17/02	E925T1AG
			Dilution Factor: 10		Analysis Time..: 11:05		
Silver	1.00	0.934	mg/L	93	SW846 6010B	10/16-10/17/02	E925T1AH
			Dilution Factor: 10		Analysis Time..: 11:05		
LCS Lot-Sample#: H2J170000-257 Prep Batch #...: 2290257							
Mercury	0.00500	0.00502	mg/L	100	SW846 7470A	10/17/02	E97A71AA
			Dilution Factor: 1		Analysis Time..: 15:19		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133

US Ecology
109 Flint Road
Oak Ridge TN 37830
Attn: Darrel Ray

Report of Analysis/Certificate of Conformance

10/14/02

LIMS #: L19307
Project ID#: US607-3EREGFS-02
Received: 10/4/02
Delivery Date: 10/14/02
P.O. # : 1099
Release #: FS-MO-02-06
SDG #: N/A

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	TI#.
HEM-8-3FT	L19307-1	80697
HEM-4-3FT	L19307-2	80698
HEM-6-3FT	L19307-3	80699
HEM-5-3FT	L19307-4	80700

Report of Analysis

10/14/02 7:31:10AM

BROWN ENGINEERING
A Teledyne Technologies Company

arrel Ray

Sample ID: HEM-8-3FT
Station:
Description:
LIMS Number: L19307-1 (80697)
% Moisture:

L19307
US Ecology
US607-3EREGFS-02

Collect Start: 09/22/02 0:00
Collect Stop:
Received: 10/04/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
J-233/234 (AS)	062-110	1.60E+001	1.23E+000		pCi/g	0.500	g		10/10/02	60,002	seconds	+		
J-235 (AS)	062-110	4.18E-001	1.06E-001		pCi/g	0.500	g		10/10/02	60,002	seconds	+		
J-238 (AS)	062-110	1.29E+000	1.84E-001		pCi/g	0.500	g		10/10/02	60,002	seconds	+		

Comments:

Sample ID: HEM-4-3FT
Station:
Description:
LIMS Number: L19307-2 (80698)
% Moisture:

L19307
US Ecology
US607-3EREGFS-02

Collect Start: 09/22/02 0:00
Collect Stop:
Received: 10/04/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
U-233/234 (AS)	062-110	1.42E+001	1.16E+000		pCi/g	0.500	g		10/10/02	60,003	seconds	+		
U-235 (AS)	062-110	4.37E-001	1.14E-001		pCi/g	0.500	g		10/10/02	60,003	seconds	+		
U-238 (AS)	062-110	2.28E+000	2.78E-001		pCi/g	0.500	g		10/10/02	60,003	seconds	+		

Comments:

Sample ID: HEM-6-3FT Co
Station:
Description:
LIMS Number: L19307-3 (80699)
% Moisture: 9.17

L19307
US Ecology
US607-3EREGFS-02

Collect Start: 09/22/02 0:00
Collect Stop:
Received: 10/04/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
BE-7	042-5	<		2.07E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
K-40	042-5	1.04E+001	4.90E-001		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

10/14/02 7:31:27AM

BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM-6-3FT
Station:
Description:
LIMS Number: L19307-3 (80699)
% Moisture: 9.17

L19307
US Ecology
US607-3EREGFS-02

Collect Start: 09/22/02 0:00
Collect Stop:
Received: 10/04/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
CR-51	042-5	<		2.54E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
MN-54	042-5	<		2.19E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CO-57	042-5	9.92E-002	2.51E-002		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
CO-58	042-5	<		2.26E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
FE-59	042-5	<		5.45E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CO-60	042-5	<		1.74E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
ZN-65	042-5	<		4.78E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SE-75	042-5	<		2.80E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SR-85	042-5	<		2.86E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
Y-88	042-5	<		2.00E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
NB-94	042-5	<		1.94E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
NB-95	042-5	<		3.62E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
ZR-95	042-5	<		4.22E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
MO-99	042-5	<		2.58E+000	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
RU-103	042-5	<		2.52E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
RU-106	042-5	<		1.83E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CD-109	042-5	<		9.30E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
AG-110M	042-5	<		2.08E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SN-113	042-5	<		2.81E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SB-124	042-5	<		2.35E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SB-125	042-5	<		5.57E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
TE-129M	042-5	<		3.15E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
I-131	042-5	<		8.90E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM-6-3FT
Station:
Description:
LIMS Number: L19307-3 (80699)
% Moisture: 9.17

L19307
US Ecology
US607-3EREGFS-02

Collect Start: 09/22/02 0:00
Collect Stop:
Received: 10/04/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
BA-133	042-5	<		2.56E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CS-134	042-5	<		1.88E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CS-136	042-5	<		4.77E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CS-137	042-5	1.12E-001	2.05E-002		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
CE-139	042-5	<		3.16E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
BA-140	042-5	<		1.71E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
LA-140	042-5	<		4.76E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CE-141	042-5	<		1.07E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
CE-144	042-5	<		2.09E-001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
EU-152	042-5	<		5.92E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
EU-154	042-5	<		5.91E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
HG-203	042-5	<		2.68E-002	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
RA-226	042-5	6.66E-001	3.56E-002		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
AC-228	042-5	6.17E-001	8.67E-002		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
TH-228	042-5	5.64E-001	7.78E-002		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
TH-232	042-5	5.59E-001	3.78E-002		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
U-235	042-5	6.49E+000	1.71E-001		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
U-238	042-5	2.28E+001	3.43E+000		pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
NP-239	042-5	<		2.67E+001	pCi/G	310.300	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM-5-3FT
Station:
Description:
LIMS Number: L19307-4 (80700)
% Moisture: 8.51

L19307
US Ecology
US607-3EREGFS-02

Collect Start: 09/22/02 0:00
Collect Stop:
Received: 10/04/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
BE-7	042-5	<		1.50E-001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
K-40	042-5	1.15E+001	3.79E-001		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
CR-51	042-5	<		1.72E-001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
MN-54	042-5	<		1.60E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CO-57	042-5	4.20E-002	1.38E-002		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
CO-58	042-5	<		1.67E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
FE-59	042-5	<		3.85E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CO-60	042-5	<		1.52E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
ZN-65	042-5	<		3.50E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SE-75	042-5	<		2.03E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SR-85	042-5	<		2.05E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
Y-88	042-5	<		1.50E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
NB-94	042-5	<		1.38E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
NB-95	042-5	<		2.01E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
ZR-95	042-5	<		3.17E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
MO-99	042-5	<		1.63E+000	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
RU-103	042-5	<		1.88E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
RU-106	042-5	<		1.30E-001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CD-109	042-5	<		5.59E-001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
AG-110M	042-5	<		1.42E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SN-113	042-5	<		1.97E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SB-124	042-5	<		1.56E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
SB-125	042-5	<		3.93E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

Report of Analysis

10/14/02 7:31:27AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Sample ID: HEM-5-3FT
Station:
Description:
LIMS Number: L19307-4 (80700)
% Moisture: 8.51

L19307
US Ecology
US607-3EREGFS-02

Collect Start: 09/22/02 0:00
Collect Stop:
Received: 10/04/02
Matrix: Solids (SD)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
TE-129M	042-5	<		2.22E-001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
I-131	042-5	<		6.46E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
BA-133	042-5	<		1.83E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CS-134	042-5	<		1.34E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CS-136	042-5	<		3.31E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
CS-137	042-5	6.80E-002	1.47E-002		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
CE-139	042-5	<		1.88E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
BA-140	042-5	<		1.28E-001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
LA-140	042-5	<		4.20E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
CE-141	042-5	<		6.15E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No
CE-144	042-5	<		1.35E-001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
EU-152	042-5	<		4.20E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
EU-154	042-5	<		3.61E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
HG-203	042-5	<		1.96E-002	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds			No
RA-226	042-5	5.83E-001	2.74E-002		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
AC-228	042-5	1.03E+000	1.51E-001		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
TH-228	042-5	6.03E-001	5.85E-002		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
TH-232	042-5	5.67E-001	2.87E-002		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
U-235	042-5	3.19E+000	1.03E-001		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
U-238	042-5	4.34E+000	1.93E+000		pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	+		Yes
NP-239	042-5	<		1.63E+001	pCi/G	303.100	G	09/22/02 12:00	10/10/02	60,000	Seconds	*		No

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133

US Ecology
109 Flint Road
Oak Ridge TN 37830
Attn: Darrel Ray

Report of Analysis/Certificate of Conformance

11/6/02

LIMS #:	L19473
Project ID#:	US607-3EREGFS-02
Received:	10/22/02
Delivery Date:	11/6/02
P.O. # :	1099
Release #:	FS-MO-02-06
SDG #:	N/A

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	TI#
BKG-1	L19473-1	81808

Report of Analysis

11/6/02 11:03:57AM

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Darrel Ray

Sample ID: BKG-1
Station:
Description:
LIMS Number: L19473-1 (81808)
% Moisture:

L19473
US Ecology
US607-3EREGFS-02

Collect Start:
Collect Stop:
Received: 10/22/02
Matrix: Soil (S)
Volume:

Radionuclide	SOP #	Activity Conc	Uncertainty (2 Sigma)	MDC	Units	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Time Units	Flag Values		
U-233/234 (AS)	062-110	5.92E-001	2.17E-001		pCi/g	0.600	g		11/05/02	60.001	seconds	+		
U-235 (AS)	062-110	<		2.95E-002	pCi/g	0.600	g		11/05/02	60.001	seconds			
U-238 (AS)	062-110	7.70E-001	2.51E-001		pCi/g	0.600	g		11/05/02	60.001	seconds	+		

Comments:

Flag Values
+ = Activity concentration exceeds MDC and 3 sigma and peak identified(gamma only)
* = Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
Bolded text indicates reportable value.

**** Results are reported on an as received basis unless otherwise noted

TELEDYNE BROWN ENGINEERING
A Teledyne Technologies Company

Analysis Request Chain of Custody

E - Environmental: ____

P - 10CFR61, 10CFR50, Other high level: ____

Turn-around-time: 15 days days

Purchase order: ES-MO-02-016

LIMS #: ____

Variance Report: ____

(for lab use)

Project Number:

Client name: US Ecology/FieldServices

Client address: 109 Flint Rd.
Oak Ridge TN 37830

Phone Number 865-220-5238

Fax Number: 865-220-5365

Contact: Rob Miller

T.L. Number (for lab use)	Client Sample ID	Description	Station	Collection Date/Time Start	Collection Date/Time Stop	Volume	Units	Matrix or type	Analysis Request
02T0K-02M2	BKG-1-81808	Soil		✓	✓	✓	✓		Isotopic Uranium

Special Instructions: ____

Relinquished by:	Date:	Relinquished by:	Date:	Relinquished by:	Date:
Received by: W Smith Jacobs	Date: 10/22/02	Received by:	Date:	Received by:	Date: