

**SEMI-ANNUAL RADIOACTIVE
EFFLUENT RELEASE REPORT
JANUARY 1, 2011 THROUGH JUNE 30, 2011
URENCO USA
FACILITY OPERATING LICENSE SNM-2010
LEA COUNTY, NEW MEXICO**

by

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for

**URENCO USA
Lea County, New Mexico**

**File No. 37262-016
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LIST OF ACRONYMS AND ABBREVIATIONS

NRC	Nuclear Regulatory Commission
CAB	Centrifuge Assembly Building
CFR	Code of Federal Regulations
CTPMF	Centrifuge Test and Post Mortem Facilities
EFS	Exhaust Filtration System
GEVS	Gaseous Effluent Vent System
HEPA	High Efficiency Particulate Air
HF	Hydrogen Fluoride
LLD	Lower Level of Detection
MDA	Minimum Detectable Activity
mm	Millimeter
SBM	Separations Building Module
UF6	Uranium Hexafluoride
uCi/mL	MicroCurie per Milliliter

1. INTRODUCTION

This *Semi-Annual Radioactive Effluent Release Report* was prepared for the reporting period of January 1, 2011 through June 30, 2011 for the URENCO USA facility in Lea County, New Mexico (Figure 1), in accordance with 10 CFR 70.59, "Effluent Monitoring Reporting Requirements" and pursuant to NRC Regulatory Guide 4.16, "Monitoring and Reporting Radioactive Materials in Liquid and Gaseous Effluents from Nuclear Fuel Cycle Facilities, Revision 2" dated December 2010. A semi-annual Radioactive Effluent Release Report is required under 10 CFR 70.59 to report the "quantity of each of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents during the previous six months of operation...".

The URENCO USA facility uses a gas centrifuge process to enrich uranium-235 using natural uranium hexafluoride feed material. Uranium hexafluoride was located within the cylinders on the Uranium Byproduct Cylinder (UBC) storage pads, within the Centrifuge Assembly Building (CAB), and within the Separations Building Module-1001 (SBM-1001) (Figure 2) during the reporting period. Potential releases of radioactive effluents would have originated from gaseous (exhaust systems) or liquid (domestic wastewater/sewage) effluents from the CAB and SBM-1001.

The gaseous and liquid effluent data indicate there were no releases to the public during the reporting period that exceeded the requirements set forth in 10 CFR 20.1301, 10 CFR 20.1302, and 10 CFR 20.1101(d), as described in NRC Regulatory Guide 4.20 "Constraint on Releases of Airborne Radioactive Materials to the Environment for Licensees Other Than Power Reactors" dated December 1996.

2. GASEOUS EFFLUENT RELEASE LOCATIONS

2.1 Centrifuge Test and Post Mortem Facilities Exhaust Filtration System

Gaseous effluent from the Centrifuge Test and Post Mortem Facilities (CTPMF) is released through the Exhaust Filtration System (EFS), located in the Centrifuge Assembly Building (CAB) and monitored from the Control Room (Figure 2). The system ensures the CTPMF is maintained at a negative pressure.

The total air flow to be handled by the EFS is adequate to maintain negative pressure in the CTPMF. The EFS consists of a duct network that serves the CTPMF and operates at negative pressure. The ductwork is connected to a filter station that can handle 100% of the effluent. Work applications that require the EFS to be operational can be manually shut down if the EFS shuts down.

The minimum required EFS filter configuration is one pre-filter, one potassium carbonate impregnated activated carbon filter, and one high-efficiency particulate air (HEPA) filter. Additional filters may be used to provide adequate airflow. The pre-filter removes dust and debris, the potassium carbonate impregnated activated carbon filter removes hydrogen fluoride (HF), and the HEPA filter removes remaining uranic particles from the air stream. After filtration, the clean gases pass through a fan which maintains the negative pressure upstream of the filter station. The clean gases are then discharged through the monitored (alpha and HF) stack on the CAB.

The ABPM201S (alpha particulate monitor) is located adjacent to the filter train in the CTPMF EFS exhaust stack and receives a stream of air from the downstream side of the filters. The filter assembly is equipped with an isokinetic nozzle and is located within the exhaust stack to ensure turbulent flow. This ensures that particulate matter being collected on the filter is representative of particulate matter being released to the environment. The sample volume is pulled through a 47 mm Millipore® 3.0 micron, FSLW alpha profile filter paper to collect particulate matter. The filters are changed out on a weekly basis and submitted to Eberline Services of Oak Ridge, Tennessee under chain-of-custody for gross alpha, gross beta, and a quarterly composite isotopic uranium analysis. Gross alpha and gross beta were analyzed using method LANL MLR-100 Modified; isotopic uranium was analyzed using method EML U-02 Modified.

CTPMF EFS gaseous effluent results for gross alpha, gross beta, and isotopic uranium analyses for the reporting period are presented in Tables 1, 2, and 3, respectively. Analytical laboratory data sheets are provided in Appendix A.

The CTPMF EFS gaseous effluent gross alpha results (Table 1) were below the minimum detectable activity (MDA) except for three weekly samples:

Date	Sample	Gross Alpha Activity (uCi/mL)	MDA (uCi/mL)	Gross Alpha License Basis Lower Level of Detection (LLD) (uCi/mL)
03/02/11	1300-562-1MA1 110302	1.99E-16	1.50E-16	1.0E-14
03/30/11	1300-562-1MA1 110330	3.76E-16	1.41E-16	1.0E-14
06/23/11	11-226 110623	6.76E-16	4.46E-16	1.0E-14

All the gross alpha MDAs and detected activity results were less than the license basis lower level of detection (LLD) of 1.0E-14 microCuries per milliliter (uCi/mL) as defined in the Environmental Report Revision 19c (UUSA, 2011).

The CTPMF EFS gaseous effluent gross beta results (Table 2) were below the minimum detectable activity (MDA) except for four weekly samples:

Date	Sample	Gross Beta Activity (uCi/mL)	MDA (uCi/mL)	Gross Beta Procedural Lower Level of Detection (LLD) (uCi/mL)
04/20/11	1300-562-1MA1 110420	3.09E-15	2.21E-15	1.0E-14
06/23/11	11-226 110623	7.26E-15	1.02E-15	1.0E-14
06/29/11	1300-562-1MA1 110629	1.12E-14	6.73E-15	1.0E-14
06/30/11	11-232 110630	6.44E-15	1.01E-15	1.0E-14

All the gross beta MDAs and detected activity results, except 1300-562-1MA1 110629, were less than the URENCO USA Radiological Effluent minimum procedurally allowed LLD of 1.0E-14 uCi/mL (UUSA, 2010).

As described in Section 2.4, the PIS canister was installed improperly on 06/22/11. Consequently, the quantity released (Ci) calculated for sample period 06/22/11 – 06/29/11 (sample 1300-562-1MA1 110629) may not be representative. As an alternative measurement of gross alpha and gross beta release during this week, local area air filters 11-226 and 11-232 were analyzed. These local air filters were collected from the CTPMF in the area that services as inlet to the Special Filtration Unit.

Isotopic uranium results for the CTPMF EFS gaseous effluent samples collected during the first quarter of 2011 (Table 3) were below the minimum detectable activities (MDA) for Uranium-234 and Uranium-238. The first quarter Uranium-235 activity was well below (i.e., 0.0004%) the value in 10 CFR 20, Appendix B, Table 2. CTPMF EFS gaseous effluent isotopic uranium results for the second quarter of 2011 were also well below reporting criteria (i.e., 0.005% of the values in 10 CFR 20, Appendix B, Table 2) for both Uranium-234 and Uranium-238. The second quarter Uranium-235 activity was below the MDA.

Appendix B to 10 CFR 20 is “Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage”. Table 2 provides effluent concentrations for both air and water. Per Table 2, the effluent concentrations for air, Class D, are U234=3E-12 uCi/mL; U235=3E-12 uCi/mL; U238=3E-12 uCi/mL.

Except for the gross beta result for 06/29/11, detected radionuclide activity values in the CTPMF EFS gaseous effluent samples were below the license basis lower level of detection (LLD) of 1.0E-14 uCi/mL (UUSA, 2011).

2.2 Separations Building Module-1001 Pumped Extract Gaseous Effluent Vent System

The Pumped Extract Gaseous Effluent Vent System (GEVS) is designed to route gaseous streams from the Separations Building Module-1001 (SBM-1001) through filters for treatment before discharge to the atmosphere. Pre-filters and high efficiency particulate air (HEPA) filters remove particulates and impregnated activated carbon filters are used for the removal of HF.

Radioactivity levels within the GEVS stack are continuously monitored from the Control Room. The Pumped Extract GEVS is a Safe-By-Design system located in the UF6 Handling Area of SBM-1001 that provides exhaust of potentially hazardous contaminants for the SBMs from all permanently connected vacuum pump and trap sets, as well as temporary connections used by maintenance and sampling rigs.

There are two redundant continuous air monitoring devices in the GEVS (1MA1 and 1MA2). Similar to the CTPMF vent system, the alpha particulate monitors are located adjacent to the filter train in the Pumped Extract GEVS exhaust stack and receive a stream of air from the downstream side of the filters. The filter assemblies are equipped with isokinetic nozzles and are located within the exhaust stack to ensure turbulent flow. This ensures that particulate matter being collected on the filter is representative of particulate matter being released to the environment. The sample volume is pulled through a 47 mm Millipore® 3.0 micron, FSLW alpha profile filter paper to collect particulate matter. The filters are changed out on a weekly basis and submitted to Eberline Services of Oak Ridge, Tennessee under chain-of-custody for gross alpha, gross beta, and isotopic uranium analysis. Gross alpha and gross beta were analyzed using method LANL MLR-100 Modified; isotopic uranium was analyzed using method EML U-02 Modified.

SBM-1001 GEVS gaseous effluent results for gross alpha, gross beta, and isotopic uranium analyses for the reporting period are presented in Tables 4, 5, and 6, respectively. Analytical laboratory data sheets are provided in Appendix A.

Except for six samples, the SBM-1001 GEVS gaseous effluent gross alpha and gross beta results for both 1MA1 and 1MA2 were below the MDA. All MDAs and detected activities in the samples were below the license basis gross alpha LLD and the URENCO USA minimum procedural gross beta LLD of 1.0E-14 uCi/mL (UUSA, 2010, 2011) except for the gross beta result for 02/23/11.

Date	Sample	Gross Alpha Activity (uCi/mL)	MDA (uCi/mL)	Gross Alpha License Basis Lower Level of Detection (LLD) (uCi/mL)
1MA1				
01/05/11	1001-562-1MA1 110105	2.22E-16	1.33E-16	1.0E-14
03/30/11	1001-562-1MA1 110330	1.32E-16	1.32E-16	1.0E-14
1MA2				
02/09/11	1001-562-1MA2 110209	5.14E-16	1.71E-16	1.0E-14
05/18/11	1001-562-1MA2 110518	9.69E-16	5.64E-16	1.0E-14

Date	Sample	Gross Beta Activity (uCi/mL)	MDA (uCi/mL)	Gross Beta Procedural Lower Level of Detection (LLD) (uCi/mL)
1MA1				
05/04/11	1001-562-1MA1 110504	2.71E-15	1.76E-15	1.0E-14
1MA2				
02/23/11	1001-562-1MA2 110223	1.03E-14	2.14E-15	1.0E-14

Isotopic uranium results for the first and second quarters of 2011 ranged from below the MDA to 0.005% of the value in 10 CFR 20, Appendix B, Table 2 for both 1MA1 and 1MA2 (Table 6). Uranium-234 and Uranium-238 activities were above the MDA at 1MA1 during the second quarter, and were 0.005% and 0.004%, respectively, of the values in 10 CFR 20, Appendix B, Table 2. Uranium-234, -235, and -238 results at 1MA2 ranged from 0.0005% to 0.005% of the values in 10 CFR 20, Appendix B, Table 2.

Except for the gross beta result for 02/23/11, detected radionuclide activity values were below the license basis LLD of 1.0E-14 uCi/mL (UUSA, 2011).

2.3 Sampling Data Gaps

There were no sampling data gaps for the reporting period for either the pumped extract GEVS in the SBM-1001 or the EFS in the CTPMF. The vent systems were not active during planned power outages and down times, therefore no effluent was released during those instances. A summary of sampling program deviations and program adjustments is provided in Section 2.4.

2.4 Sampling Program Deviations

There was only one unplanned deviation to the sampling program during the reporting period, and it is described in the following table:

1300-562-1MA1 Alpha Monitor Exception Log	
Date Range	Reason for 7 Day Deviation
6/22/11@10:12 to 6/29/11@10:14	PIS canister was not properly installed by Operations on 6/22/11 and Chemistry was notified that the monitor was alarming. On 6/27/11 Chemistry investigated and properly installed the canister. The low filter volume and potential for non-representative sampling was identified. Local area Air filters # 11-226 110623 & 11-232 110630 were therefore sent for analysis to cover this time period for the alpha monitor. The Local area air filters are collected from the CTF in the area that services as inlet to the Special filtration Unit and therefore is not processed.

3. LIQUID EFFLUENT RELEASE LOCATION

3.1 Lift Station 1

Domestic wastewater (sewage) generated at the CAB and SBM-1001, along with other domestic wastewater generated at the URENCO USA facility, is discharged off site to the Eunice Waste Water Treatment Plant. Domestic wastewater is not expected to contain process water, as the facility design does not allow discharge of process liquid effluent to the domestic wastewater system. Domestic wastewater is sampled quarterly at Lift Station 1, which is a central collection point for all domestic waste generated at the URENCO USA facility prior to off-site discharge (Figure 2). The average estimated wastewater discharge to the Eunice Waste Water Treatment Plant is approximately 13,000 gallons per day (UUSA, 2011).

Wastewater samples were collected at Lift Station 1 on January 21, 2011 and April 12, 2011 and submitted to GEL Laboratories, LLC of Charleston, South Carolina under chain-of-custody for isotopic uranium analysis using method EML U-02 Modified.

Domestic wastewater effluent results for isotopic uranium analyses for the reporting period are presented in Table 7. Analytical laboratory data sheets are provided in Appendix A.

Uranium-234, -235, and -238 results in wastewater samples collected from Lift Station 1 during the first and second quarters of 2011 were above the MDA. Results of analyses for Uranium-234 ranged from 0.04% to 0.06% of the values in 10 CFR 20, Appendix B, Table 3. Uranium-235 ranged from 0.001% to 0.002% of the values in 10 CFR 20, Appendix B, Table 3. Uranium-238 ranged from 0.02% to 0.03% of the values in 10 CFR 20, Appendix B, Table 3.

All detected radionuclide activity values in sampled collected from Lift Station 1 were below the license basis lower level of detection (LLD) of $3.0\text{E-}9$ uCi/mL (UUSA, 2011).

3.2 Sampling Data Gaps

There were no sampling data gaps at Lift Station 1 during the reporting period.

3.3 Sampling Program Deviations and Program Adjustments

There were no sampling program deviations or program adjustments during the reporting period. Wastewater sample collection and analysis at Lift Station 1 was performed pursuant to the New Mexico Environment Department Discharge Permit DP-1481 (NMED 2007, 2008, 2011).

4. DOSE TO MEMBERS OF THE PUBLIC

Isotopic uranium activity in gaseous effluent was either below the MDA or less than 10% of values listed in 10 CFR 20, Appendix B, Table 2, "Effluent Concentrations – Class D Air" for U234, U235, and U238. This demonstrates compliance with 10 CFR 20.1301, 10 CFR 20.1302, and 10 CFR 20.1101(d), as described in NRC Regulatory Guide 4.20 "Constraint on Releases of Airborne Radioactive Materials to the Environment for Licensees other than Power Reactors" dated December 1996.

Domestic wastewater effluent activity ranged from 0.001% - 0.06% of the value listed in 10 CFR 20, Appendix B, Table 3, "Releases to Sewers".

This demonstrates compliance with 10 CFR 20.1301 and 10 CFR 20.1302.

REFERENCES

1. New Mexico Environment Department (NMED), 2007. *Discharge Permit DP-1481*. February 28, 2007.
2. New Mexico Environment Department (NMED), 2008. *Amendment to Discharge Permit DP-1481*. November 24, 2008.
3. New Mexico Environment Department (NMED), 2011. *Amendment to Discharge Permit DP-1481*. May 18, 2011.
4. URENCO USA (UUSA), 2010. *Radiological Effluent and Environmental Monitoring, Procedure EN-3-1000-02, Revision 5*. Effective date February 26, 2010.
5. URENCO USA (UUSA), 2011. *Environmental Report, Revision 19c*. Issue date June 7, 2011.
6. U.S. Nuclear Regulatory Commission, 1996. Regulatory Guide 4.20, *Constraint on Releases of Airborne Radioactive Materials to the Environment for Licensees Other Than Power Reactors*. December 1996.
7. U.S. Nuclear Regulatory Commission, 2010. Regulatory Guide 4.16, *Monitoring and Reporting Radioactive Materials in Liquid and Gaseous Effluents from Nuclear Fuel Cycle Facilities*. December 2010.
8. U.S. Nuclear Regulatory Commission. 10 CFR 20.1101. *Radiation Protection Programs*.
9. U.S. Nuclear Regulatory Commission. 10 CFR 20.1302. *Compliance with Dose Limits for Individual Members of the Public*.
10. U.S. Nuclear Regulatory Commission. 10 CFR 20.1301. *Dose Limits for Individual Members of the Public*.
11. U.S. Nuclear Regulatory Commission. 10 CFR 20. Appendix B. *Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage*. Tables 2 and 3.
12. U.S. Nuclear Regulatory Commission. 10 CFR 40.75. *Effluent Monitoring Reporting Requirements*.

TABLE 1
CENTRIFUGE TEST AND POST MORTEM FACILITIES (CTPMF)
EXHAUST FILTRATION SYSTEM GASEOUS EFFLUENT - GROSS ALPHA
 URENCO USA
 Lea County, New Mexico

Sample ID	Sample Date	Sample Period	Gross Alpha (uCi/mL)				Total CTPM Exhaust Filtration System Flow (m ³)	Quantity Released (Ci)
			Gross Alpha Results	Counting Uncertainty	Combined Standard Uncertainty (2-sigma)	Gross Alpha MDA		
1300-562-1MA1 110105	01/05/11 09:16	12/29/10 - 01/05/11	4.57E-17	1.55E-16	1.55E-16	5.05E-16	3.14E+06	Result below MDA
1300-562-1MA1 110112	01/12/11 09:35	01/05/11 - 01/12/11	4.93E-17	2.16E-16	2.16E-16	5.45E-16	3.14E+06	Result below MDA
1300-562-1MA1 110119	01/19/11 10:25	01/12/11 - 01/19/11	9.34E-17	3.42E-16	3.42E-16	8.92E-16	3.14E+06	Result below MDA
1300-562-1MA1 110126	01/26/11 10:10	01/19/11 - 01/26/11	4.86E-17	2.13E-16	2.13E-16	5.37E-16	3.14E+06	Result below MDA
1300-562-1MA1 110202	02/02/11 09:46	01/26/11 - 02/02/11	5.02E-16	3.63E-16	3.67E-16	1.17E-15	3.14E+06	Result below MDA
1300-562-1MA1 110209	02/09/11 09:35	02/02/11 - 02/09/11	1.40E-16	3.30E-16	3.30E-16	8.92E-16	3.14E+06	Result below MDA
1300-562-1MA1 110216	02/16/11 10:21	02/09/11 - 02/16/11	4.70E-17	2.06E-16	2.06E-16	5.20E-16	3.17E+06	Result below MDA
1300-562-1MA1 110223	02/23/11 10:10	02/16/11 - 02/23/11	2.12E-16	4.16E-16	4.17E-16	1.12E-15	3.11E+06	Result below MDA
1300-562-1MA1 110302	03/02/11 10:21	02/23/11 - 03/02/11	1.99E-16	1.95E-16	1.97E-16	1.50E-16	3.14E+06	6.27E-10
1300-562-1MA1 110309	03/09/11 10:09	03/02/11 - 03/09/11	2.76E-16	2.85E-16	2.87E-16	8.79E-16	3.11E+06	Result below MDA
1300-562-1MA1 110316	03/16/11 09:18	03/09/11 - 03/16/11	1.91E-16	2.65E-16	2.66E-16	8.11E-16	3.09E+06	Result below MDA
1300-562-1MA1 110323	03/23/11 10:07	03/16/11 - 03/23/11	9.36E-17	2.25E-16	2.25E-16	6.74E-16	3.09E+06	Result below MDA
1300-562-1MA1 110330	03/30/11 09:50	03/23/11 - 03/30/11	3.76E-16	2.60E-16	2.64E-16	1.41E-16	3.11E+06	1.17E-09
1300-562-1MA1 110406	04/06/11 10:08	03/30/11 - 04/06/11	2.71E-16	2.80E-16	2.82E-16	8.64E-16	3.11E+06	Result below MDA
1300-562-1MA1 110413	04/13/11 10:02	04/06/11 - 04/13/11	4.01E-16	3.81E-16	3.83E-16	1.08E-15	3.11E+06	Result below MDA
1300-562-1MA1 110420	04/20/11 09:36	04/13/11 - 04/20/11	3.77E-16	3.69E-16	3.72E-16	1.07E-15	3.11E+06	Result below MDA
1300-562-1MA1 110427	04/27/11 10:00	04/20/11 - 04/27/11	1.04E-16	2.49E-16	2.49E-16	5.73E-16	3.11E+06	Result below MDA
1300-562-1MA1 110504	05/04/11 14:29	04/27/11 - 05/04/11	3.63E-16	3.08E-16	3.10E-16	9.53E-16	3.20E+06	Result below MDA
1300-562-1MA1 110511	05/11/11 09:43	05/04/11 - 05/11/11	0.00E+00	2.14E-16	2.14E-16	6.04E-16	3.03E+06	Result below MDA
1300-562-1MA1 110518	05/18/11 09:56	05/11/11 - 05/18/11	4.59E-17	2.38E-16	2.38E-16	6.60E-16	3.11E+06	Result below MDA
1300-562-1MA1 110525	05/25/11 10:07	05/18/11 - 05/25/11	1.84E-16	3.61E-16	3.61E-16	9.67E-16	3.09E+06	Result below MDA
1300-562-1MA1 110601	06/01/11 10:07	05/25/11 - 06/01/11	4.75E-17	2.46E-16	2.47E-16	6.84E-16	3.09E+06	Result below MDA
1300-562-1MA1 110608	06/08/11 08:44	06/01/11 - 06/08/11	5.12E-16	3.70E-16	3.74E-16	1.20E-15	2.55E+06	Result below MDA
1300-562-1MA1 110615	06/15/11 10:14	06/08/11 - 06/15/11	4.80E-17	2.49E-16	2.49E-16	6.91E-16	3.06E+06	Result below MDA
1300-562-1MA1 110622	06/22/11 10:05	06/15/11 - 06/22/11	9.88E-17	3.06E-16	3.06E-16	7.11E-16	3.06E+06	Result below MDA
1300-562-1MA1 110629	06/29/11 10:14	06/22/11 - 06/29/11	2.59E-15	1.42E-15	1.44E-15	4.39E-15	3.03E+06	*Result below MDA
11-226 110623	06/23/11 13:11	06/23/11 - 06/30/11	6.76E-16	3.06E-16	3.15E-16	4.46E-16	3.03E+06	*2.05E-09
11-232 110630	06/30/11 16:00	06/23/11 - 06/30/11	2.94E-16	2.03E-16	2.06E-16	3.26E-16	3.03E+06	*Result below MDA

NOTES:

1. uCi/mL = microCuries per milliliter.
2. m³ = cubic meters.
3. MDA = minimum detectable activity.
4. Gross alpha analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).
6. * = See Section 2.4 for 1300-562-1MA1 Alpha Monitor Exception Log.

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TABLE 2
CENTRIFUGE TEST AND POST MORTEM FACILITIES (CTPMF)
EXHAUST FILTRATION SYSTEM GASEOUS EFFLUENT - GROSS BETA
 URENCO USA
 Lea County, New Mexico

Sample ID	Sample Date	Sample Period	Gross Beta (uCi/mL)				Total CTPM Exhaust Filtration System Flow (m ³)	Quantity Released (Ci)
			Gross Beta Results	Counting Uncertainty	Combined Standard Uncertainty (2-sigma)	Gross Beta MDA		
1300-562-1MA1 110105	01/05/11 09:16	12/29/10 - 01/05/11	-6.77E-16	9.84E-16	9.88E-16	2.18E-15	3.14E+06	Result below MDA
1300-562-1MA1 110112	01/12/11 09:35	01/05/11 - 01/12/11	1.46E-16	1.11E-15	1.11E-15	2.35E-15	3.14E+06	Result below MDA
1300-562-1MA1 110119	01/19/11 10:25	01/12/11 - 01/19/11	-1.40E-15	9.98E-16	1.02E-15	2.29E-15	3.14E+06	Result below MDA
1300-562-1MA1 110126	01/26/11 10:10	01/19/11 - 01/26/11	-8.20E-16	9.74E-16	9.81E-16	2.19E-15	3.14E+06	Result below MDA
1300-562-1MA1 110202	02/02/11 09:46	01/26/11 - 02/02/11	-3.59E-16	1.24E-15	1.24E-15	2.68E-15	3.14E+06	Result below MDA
1300-562-1MA1 110209	02/09/11 09:35	02/02/11 - 02/09/11	-1.12E-15	1.01E-15	1.02E-15	2.29E-15	3.14E+06	Result below MDA
1300-562-1MA1 110216	02/16/11 10:21	02/09/11 - 02/16/11	-5.95E-16	9.54E-16	9.57E-16	2.11E-15	3.17E+06	Result below MDA
1300-562-1MA1 110223	02/23/11 10:10	02/16/11 - 02/23/11	-1.15E-15	1.13E-15	1.15E-15	2.55E-15	3.11E+06	Result below MDA
1300-562-1MA1 110302	03/02/11 10:21	02/23/11 - 03/02/11	-7.30E-16	1.07E-15	1.08E-15	2.37E-15	3.14E+06	Result below MDA
1300-562-1MA1 110309	03/09/11 10:09	03/02/11 - 03/09/11	-2.39E-16	8.83E-16	8.83E-16	1.92E-15	3.11E+06	Result below MDA
1300-562-1MA1 110316	03/16/11 09:18	03/09/11 - 03/16/11	1.05E-15	9.03E-16	9.14E-16	1.80E-15	3.09E+06	Result below MDA
1300-562-1MA1 110323	03/23/11 10:07	03/16/11 - 03/23/11	7.43E-16	8.54E-16	8.60E-16	1.74E-15	3.09E+06	Result below MDA
1300-562-1MA1 110330	03/30/11 09:50	03/23/11 - 03/30/11	5.60E-17	9.14E-16	9.14E-16	1.96E-15	3.11E+06	Result below MDA
1300-562-1MA1 110406	04/06/11 10:08	03/30/11 - 04/06/11	1.29E-15	1.01E-15	1.03E-15	2.02E-15	3.11E+06	Result below MDA
1300-562-1MA1 110413	04/13/11 10:02	04/06/11 - 04/13/11	5.63E-16	9.99E-16	1.00E-15	2.07E-15	3.11E+06	Result below MDA
1300-562-1MA1 110420	04/20/11 09:36	04/13/11 - 04/20/11	3.09E-15	1.18E-15	1.26E-15	2.21E-15	3.11E+06	9.62E-09
1300-562-1MA1 110427	04/27/11 10:00	04/20/11 - 04/27/11	1.52E-16	1.01E-15	1.01E-15	2.15E-15	3.11E+06	Result below MDA
1300-562-1MA1 110504	05/04/11 14:29	04/27/11 - 05/04/11	6.05E-16	1.09E-15	1.09E-15	2.26E-15	3.20E+06	Result below MDA
1300-562-1MA1 110511	05/11/11 09:43	05/04/11 - 05/11/11	-2.54E-16	1.07E-15	1.07E-15	2.33E-15	3.03E+06	Result below MDA
1300-562-1MA1 110518	05/18/11 09:56	05/11/11 - 05/18/11	-8.97E-16	9.70E-16	9.78E-16	2.17E-15	3.11E+06	Result below MDA
1300-562-1MA1 110525	05/25/11 10:07	05/18/11 - 05/25/11	-1.24E-15	9.97E-16	1.01E-15	2.26E-15	3.09E+06	Result below MDA
1300-562-1MA1 110601	06/01/11 10:07	05/25/11 - 06/01/11	2.29E-16	9.40E-16	9.40E-16	1.99E-15	3.09E+06	Result below MDA
1300-562-1MA1 110608	06/08/11 08:44	06/01/11 - 06/08/11	9.66E-16	1.08E-15	1.09E-15	2.20E-15	2.55E+06	Result below MDA
1300-562-1MA1 110615	06/15/11 10:14	06/08/11 - 06/15/11	3.88E-16	9.82E-16	9.83E-16	2.06E-15	3.06E+06	Result below MDA
1300-562-1MA1 110622	06/22/11 10:05	06/15/11 - 06/22/11	-1.47E-16	9.91E-16	9.92E-16	2.14E-15	3.06E+06	Result below MDA
1300-562-1MA1 110629	06/29/11 10:14	06/22/11 - 06/29/11	1.12E-14	3.73E-15	4.04E-15	6.73E-15	3.03E+06	*3.39E-08
11-226 110623	06/23/11 13:11	06/23/11 - 06/30/11	7.26E-15	7.87E-16	1.28E-15	1.02E-15	3.03E+06	*2.20E-08
11-232 110630	06/30/11 16:00	06/23/11 - 06/30/11	6.44E-15	7.57E-16	1.17E-15	1.01E-15	3.03E+06	*1.95E-08

NOTES:

1. uCi/mL = microCuries per milliliter.
2. m³ = cubic meters.
3. MDA = minimum detectable activity.
4. Gross beta analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.
5. * = See Section 2.4 for 1300-562-1MA1 Alpha Monitor Exception Log.

TABLE 3
CENTRIFUGE TEST AND POST MORTEM FACILITIES (CTPMF)
EXHAUST FILTRATION SYSTEM GASEOUS EFFLUENT
QUARTERLY FILTER COMPOSITE RESULTS - RADIONUCLIDES
 URENCO USA
 Lea County, New Mexico

Radionuclide / Sample ID	Sample Date	Sample Period	Results (uCi/mL)	Counting Uncertainty (uCi/mL)	Combined Standard Uncertainty (2-sigma) (uCi/mL)	MDA (uCi/mL)	Total CTPM Exhaust Filtration System Flow (m ³)	Quantity Released (Ci)	% of Table 2 of Appendix B to 10 CFR Part 20 Values
Uranium-234 / 1300-562-1MA1 QTR1 2011	03/30/11 09:50	12/29/10 - 03/30/11	1.54E-17	1.57E-17	1.57E-17	2.05E-17	4.07E+07	Result below MDA	Result below MDA
Uranium-234 / 1300-562-1MA1 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.63E-16	4.62E-17	4.76E-17	1.10E-17	3.97E+07	6.48E-09	0.005%
Uranium-235 / 1300-562-1MA1 QTR1 2011	03/30/11 09:50	12/29/10 - 03/30/11	1.27E-17	1.48E-17	1.48E-17	1.12E-17	4.07E+07	5.18E-10	0.0004%
Uranium-235 / 1300-562-1MA1 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.33E-17	1.35E-17	1.36E-17	1.77E-17	3.97E+07	Result below MDA	Result below MDA
Uranium-238 / 1300-562-1MA1 QTR1 2011	03/30/11 09:50	12/29/10 - 03/30/11	9.11E-18	1.20E-17	1.21E-17	1.84E-17	4.07E+07	Result below MDA	Result below MDA
Uranium-238 / 1300-562-1MA1 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.62E-16	4.60E-17	4.74E-17	1.28E-17	3.97E+07	6.43E-09	0.005%

NOTES:

1. uCi/mL = microCuries per milliliter.
2. m³ = cubic meters.
3. MDA = minimum detectable activity.
4. Radionuclides analyzed using method EML U-02 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).

TABLE 4
SEPARATION BUILDING MODULE-1001 (SBM-1001)
PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS ALPHA
 URENCO USA
 Lea County, New Mexico

Lea County, New Mexico			Gross Alpha (uCi/mL)				Total Vent System Flow (m³)	Quantity Released (Ci)
Sample ID	Sample Date	Sample Period	Gross Alpha Results	Counting Uncertainty	Combined Standard Uncertainty (2-sigma)	Gross Alpha MDA		
1001-562-1MA1								
1001-562-1MA1 110105	01/05/11 09:20	12/29/10 - 01/05/11	2.22E-16	1.95E-16	1.96E-16	1.33E-16	1.06E+05	2.35E-11
1001-562-1MA1 110112	01/12/11 11:22	01/05/11 - 01/12/11	0.00E+00	3.01E-16	3.01E-16	7.53E-16	1.08E+05	Result below MDA
1001-562-1MA1 110119	01/19/11 11:00	01/12/11 - 01/19/11	2.50E-16	3.05E-16	3.06E-16	5.99E-16	1.08E+05	Result below MDA
1001-562-1MA1 110126	01/26/11 09:37	01/19/11 - 01/26/11	-7.21E-16	4.33E-16	4.40E-16	1.28E-15	1.08E+05	Result below MDA
1001-562-1MA1 110202	02/02/11 13:36	01/26/11 - 02/02/11	4.33E-17	2.55E-16	2.55E-16	6.23E-16	1.11E+05	Result below MDA
1001-562-1MA1 110209	02/09/11 12:00	02/02/11 - 02/09/11	9.39E-17	1.30E-16	1.31E-16	1.41E-16	1.07E+05	Result below MDA
1001-562-1MA1 110216	02/16/11 07:39	02/09/11 - 02/16/11	1.89E-16	2.62E-16	2.63E-16	5.23E-16	1.05E+05	Result below MDA
1001-562-1MA1 110223	02/23/11 08:41	02/16/11 - 02/23/11	-3.80E-16	4.17E-16	4.19E-16	1.16E-15	1.07E+05	Result below MDA
1001-562-1MA1 110302	03/02/11 09:00	02/23/11 - 03/02/11	4.54E-17	8.90E-17	8.92E-17	1.36E-16	1.07E+05	Result below MDA
1001-562-1MA1 110309	03/09/11 11:29	03/02/11 - 03/09/11	-1.79E-16	3.04E-16	3.04E-16	8.55E-16	1.08E+05	Result below MDA
1001-562-1MA1 110316	03/16/11 10:53	03/09/11 - 03/16/11	-9.63E-17	2.98E-16	2.99E-16	8.17E-16	1.06E+05	Result below MDA
1001-562-1MA1 110323	03/23/11 08:23	03/16/11 - 03/23/11	1.40E-16	3.03E-16	3.04E-16	6.72E-16	1.05E+05	Result below MDA
1001-562-1MA1 110330	03/30/11 08:57	03/23/11 - 03/30/11	1.32E-16	1.49E-16	1.50E-16	1.32E-16	1.06E+05	1.40E-11
1001-562-1MA1 110406	04/06/11 09:08	03/30/11 - 04/06/11	-6.94E-16	3.74E-16	3.81E-16	1.19E-15	1.07E+05	Result below MDA
1001-562-1MA1 110413	04/13/11 14:45	04/06/11 - 04/13/11	-1.70E-16	3.32E-16	3.33E-16	8.91E-16	1.12E+05	Result below MDA
1001-562-1MA1 110420	04/20/11 13:19	04/13/11 - 04/20/11	1.32E-16	2.87E-16	2.87E-16	6.35E-16	1.07E+05	Result below MDA
1001-562-1MA1 110427	04/27/11 08:56	04/20/11 - 04/27/11	-9.05E-17	2.17E-16	2.17E-16	6.51E-16	1.06E+05	Result below MDA
1001-562-1MA1 110504	05/04/11 09:03	04/27/11 - 05/04/11	-5.92E-16	3.89E-16	3.94E-16	1.15E-15	1.09E+05	Result below MDA
1001-562-1MA1 110511	05/11/11 09:37	05/04/11 - 05/11/11	-1.38E-16	3.25E-16	3.25E-16	8.79E-16	1.08E+05	Result below MDA
1001-562-1MA1 110518	05/18/11 08:33	05/11/11 - 05/18/11	1.79E-16	3.04E-16	3.05E-16	6.46E-16	1.09E+05	Result below MDA
1001-562-1MA1 110525	05/25/11 10:16	05/18/11 - 05/25/11	-1.37E-16	2.00E-16	2.00E-16	6.56E-16	1.07E+05	Result below MDA
1001-562-1MA1 110601	06/01/11 10:17	05/25/11 - 06/01/11	2.30E-16	2.70E-16	2.71E-16	5.08E-16	1.09E+05	Result below MDA
1001-562-1MA1 110608	06/08/11 09:10	06/01/11 - 06/08/11	1.76E-16	2.43E-16	2.44E-16	4.85E-16	1.10E+05	Result below MDA
1001-562-1MA1 110615	06/15/11 08:52	06/08/11 - 06/15/11	-2.80E-16	2.89E-16	2.91E-16	8.92E-16	1.09E+05	Result below MDA
1001-562-1MA1 110622	06/22/11 09:58	06/15/11 - 06/22/11	-4.43E-17	3.37E-16	3.37E-16	8.48E-16	1.10E+05	Result below MDA
1001-562-1MA1 110629	06/29/11 08:37	06/22/11 - 06/29/11	-4.05E-16	3.85E-16	3.87E-16	1.10E-15	1.07E+05	Result below MDA

TABLE 4
SEPARATION BUILDING MODULE-1001 (SBM-1001)
PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS ALPHA
 URENCO USA
 Lea County, New Mexico

Lea County, New Mexico			Gross Alpha (uCi/mL)				Total Vent System Flow (m³)	Quantity Released (Ci)
Sample ID	Sample Date	Sample Period	Gross Alpha Results	Counting Uncertainty	Combined Standard Uncertainty (2-sigma)	Gross Alpha MDA		
1001-562-1MA2								
1001-562-1MA2 110105	01/05/11 09:12	12/29/10 - 01/05/11	1.24E-16	2.15E-16	2.16E-16	4.59E-16	1.11E+05	Result below MDA
1001-562-1MA2 110112	01/12/11 11:07	01/05/11 - 01/12/11	9.11E-17	1.26E-16	1.27E-16	1.37E-16	1.12E+05	Result below MDA
1001-562-1MA2 110119	01/19/11 10:57	01/12/11 - 01/19/11	-1.49E-16	2.53E-16	2.53E-16	7.11E-16	1.11E+05	Result below MDA
1001-562-1MA2 110126	01/26/11 09:33	01/19/11 - 01/26/11	-3.25E-16	2.60E-16	2.63E-16	9.19E-16	1.12E+05	Result below MDA
1001-562-1MA2 110202	02/02/11 13:33	01/26/11 - 02/02/11	-2.00E-16	1.96E-16	1.97E-16	7.20E-16	1.15E+05	Result below MDA
1001-562-1MA2 110209	02/09/11 12:03	02/02/11 - 02/09/11	5.14E-16	3.36E-16	3.41E-16	1.71E-16	1.12E+05	5.74E-11
1001-562-1MA2 110216	02/16/11 07:40	02/09/11 - 02/16/11	9.49E-17	2.94E-16	2.94E-16	6.83E-16	1.10E+05	Result below MDA
1001-562-1MA2 110223	02/23/11 08:40	02/16/11 - 02/23/11	-1.49E-16	4.02E-16	4.02E-16	1.05E-15	1.12E+05	Result below MDA
1001-562-1MA2 110302	03/02/11 08:58	02/23/11 - 03/02/11	-1.45E-16	2.12E-16	2.13E-16	6.97E-16	1.11E+05	Result below MDA
1001-562-1MA2 110309	03/09/11 11:28	03/02/11 - 03/09/11	4.34E-17	1.90E-16	1.90E-16	4.80E-16	1.12E+05	Result below MDA
1001-562-1MA2 110316	03/16/11 10:50	03/09/11 - 03/16/11	-6.22E-16	4.09E-16	4.14E-16	1.23E-15	1.11E+05	Result below MDA
1001-562-1MA2 110323	03/23/11 08:21	03/16/11 - 03/23/11	-9.32E-17	2.24E-16	2.24E-16	6.71E-16	1.10E+05	Result below MDA
1001-562-1MA2 110330	03/30/11 08:58	03/23/11 - 03/30/11	-2.64E-16	3.65E-16	3.67E-16	9.99E-16	1.11E+05	Result below MDA
1001-562-1MA2 110406	04/06/11 09:06	03/30/11 - 04/06/11	0.00E+00	2.52E-16	2.52E-16	6.53E-16	1.12E+05	Result below MDA
1001-562-1MA2 110413	04/13/11 14:44	04/06/11 - 04/13/11	-9.03E-17	3.31E-16	3.31E-16	8.64E-16	1.18E+05	Result below MDA
1001-562-1MA2 110420	04/20/11 13:17	04/13/11 - 04/20/11	-4.74E-16	3.48E-16	3.52E-16	1.05E-15	1.12E+05	Result below MDA
1001-562-1MA2 110427	04/27/11 08:58	04/20/11 - 04/27/11	-3.74E-16	3.67E-16	3.69E-16	1.06E-15	1.10E+05	Result below MDA
1001-562-1MA2 110504	05/04/11 09:01	04/27/11 - 05/04/11	-4.73E-17	1.60E-16	1.61E-16	5.23E-16	1.12E+05	Result below MDA
1001-562-1MA2 110511	05/11/11 09:38	05/04/11 - 05/11/11	-2.25E-16	3.42E-16	3.43E-16	9.46E-16	1.11E+05	Result below MDA
1001-562-1MA2 110518	05/18/11 08:32	05/11/11 - 05/18/11	9.69E-16	4.79E-16	4.91E-16	5.64E-16	1.06E+05	1.03E-10
1001-562-1MA2 110525	05/25/11 10:15	05/18/11 - 05/25/11	-8.84E-17	3.24E-16	3.24E-16	8.45E-16	1.11E+05	Result below MDA
1001-562-1MA2 110601	06/01/11 10:14	05/25/11 - 06/01/11	-3.94E-16	3.74E-16	3.77E-16	1.07E-15	1.14E+05	Result below MDA
1001-562-1MA2 110608	06/08/11 12:50	06/01/11 - 06/08/11	4.27E-17	2.51E-16	2.51E-16	6.14E-16	1.17E+05	Result below MDA
1001-562-1MA2 110615	06/15/11 08:50	06/08/11 - 06/15/11	-8.98E-17	3.29E-16	3.29E-16	8.58E-16	1.11E+05	Result below MDA
1001-562-1MA2 110622	06/22/11 09:55	06/15/11 - 06/22/11	-8.52E-17	3.12E-16	3.13E-16	8.14E-16	1.14E+05	Result below MDA
1001-562-1MA2 110629	06/29/11 08:39	06/22/11 - 06/29/11	-3.15E-16	4.04E-16	4.06E-16	1.10E-15	1.13E+05	Result below MDA

NOTES:

1. uCi/mL = microCuries per milliliter.
2. m³ = cubic meters.
3. MDA = minimum detectable activity.
4. Gross alpha analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).

Haley & Aldrich, Inc.

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TABLE 5
SEPARATION BUILDING MODULE-1001 (SBM-1001)
PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS BETA
URENCO USA
 Lea County, New Mexico

Lea County, New Mexico			Gross Beta (uCi/mL)				Total Vent System Flow (m³)	Quantity Released (Ci)
Sample ID	Sample Date	Sample Period	Gross Beta Results	Counting Uncertainty	Combined Standard Uncertainty (2-sigma)	Gross Beta MDA		
1001-562-1MA1								
1001-562-1MA1 110105	01/05/11 09:20	12/29/10 - 01/05/11	3.75E-16	9.26E-16	9.27E-16	1.94E-15	1.06E+05	Result below MDA
1001-562-1MA1 110112	01/12/11 11:22	01/05/11 - 01/12/11	4.87E-16	7.46E-16	7.49E-16	1.54E-15	1.08E+05	Result below MDA
1001-562-1MA1 110119	01/19/11 11:00	01/12/11 - 01/19/11	2.25E-16	7.86E-16	7.87E-16	1.66E-15	1.08E+05	Result below MDA
1001-562-1MA1 110126	01/26/11 09:37	01/19/11 - 01/26/11	2.39E-16	9.04E-16	9.05E-16	1.91E-15	1.08E+05	Result below MDA
1001-562-1MA1 110202	02/02/11 13:36	01/26/11 - 02/02/11	3.04E-16	8.07E-16	8.08E-16	1.70E-15	1.11E+05	Result below MDA
1001-562-1MA1 110209	02/09/11 12:00	02/02/11 - 02/09/11	-3.13E-16	1.18E-15	1.18E-15	2.54E-15	1.07E+05	Result below MDA
1001-562-1MA1 110216	02/16/11 07:39	02/09/11 - 02/16/11	-4.13E-16	9.29E-16	9.31E-16	2.04E-15	1.05E+05	Result below MDA
1001-562-1MA1 110223	02/23/11 08:41	02/16/11 - 02/23/11	-2.98E-16	9.97E-16	9.98E-16	2.16E-15	1.07E+05	Result below MDA
1001-562-1MA1 110302	03/02/11 09:00	02/23/11 - 03/02/11	-5.59E-16	9.82E-16	9.85E-16	2.16E-15	1.07E+05	Result below MDA
1001-562-1MA1 110309	03/09/11 11:29	03/02/11 - 03/09/11	-2.07E-16	8.60E-16	8.61E-16	1.87E-15	1.08E+05	Result below MDA
1001-562-1MA1 110316	03/16/11 10:53	03/09/11 - 03/16/11	1.00E-15	9.06E-16	9.16E-16	1.82E-15	1.06E+05	Result below MDA
1001-562-1MA1 110323	03/23/11 08:23	03/16/11 - 03/23/11	3.01E-16	8.23E-16	8.24E-16	1.73E-15	1.05E+05	Result below MDA
1001-562-1MA1 110330	03/30/11 08:57	03/23/11 - 03/30/11	-1.31E-16	8.45E-16	8.46E-16	1.83E-15	1.06E+05	Result below MDA
1001-562-1MA1 110406	04/06/11 09:08	03/30/11 - 04/06/11	-2.67E-16	9.03E-16	9.03E-16	1.97E-15	1.07E+05	Result below MDA
1001-562-1MA1 110413	04/13/11 14:45	04/06/11 - 04/13/11	4.72E-16	7.89E-16	7.92E-16	1.64E-15	1.12E+05	Result below MDA
1001-562-1MA1 110420	04/20/11 13:19	04/13/11 - 04/20/11	-3.57E-16	8.63E-16	8.65E-16	1.89E-15	1.07E+05	Result below MDA
1001-562-1MA1 110427	04/27/11 08:56	04/20/11 - 04/27/11	-1.62E-16	9.06E-16	9.06E-16	1.96E-15	1.06E+05	Result below MDA
1001-562-1MA1 110504	05/04/11 09:03	04/27/11 - 05/04/11	2.71E-15	9.66E-16	1.04E-15	1.76E-15	1.09E+05	2.95E-10
1001-562-1MA1 110511	05/11/11 09:37	05/04/11 - 05/11/11	1.37E-16	9.44E-16	9.44E-16	2.01E-15	1.08E+05	Result below MDA
1001-562-1MA1 110518	05/18/11 08:33	05/11/11 - 05/18/11	-1.01E-15	8.75E-16	8.86E-16	2.01E-15	1.09E+05	Result below MDA
1001-562-1MA1 110525	05/25/11 10:16	05/18/11 - 05/25/11	7.99E-16	9.49E-16	9.55E-16	1.94E-15	1.07E+05	Result below MDA
1001-562-1MA1 110601	06/01/11 10:17	05/25/11 - 06/01/11	-5.78E-16	8.95E-16	8.98E-16	1.98E-15	1.09E+05	Result below MDA
1001-562-1MA1 110608	06/08/11 09:10	06/01/11 - 06/08/11	-1.03E-16	8.34E-16	8.34E-16	1.80E-15	1.10E+05	Result below MDA
1001-562-1MA1 110615	06/15/11 08:52	06/08/11 - 06/15/11	-2.78E-16	1.00E-15	1.00E-15	2.17E-15	1.09E+05	Result below MDA
1001-562-1MA1 110622	06/22/11 09:58	06/15/11 - 06/22/11	3.35E-16	7.83E-16	7.85E-16	1.64E-15	1.10E+05	Result below MDA
1001-562-1MA1 110629	06/29/11 08:37	06/22/11 - 06/29/11	-4.02E-16	9.11E-16	9.13E-16	2.00E-15	1.07E+05	Result below MDA

TABLE 5
SEPARATION BUILDING MODULE-1001 (SBM-1001)
PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS BETA
URENCO USA
Lea County, New Mexico

Lea County, New Mexico			Gross Beta (uCi/mL)				Total Vent System Flow (m ³)	Quantity Released (Ci)
Sample ID	Sample Date	Sample Period	Gross Beta Results	Counting Uncertainty	Combined Standard Uncertainty (2-sigma)	Gross Beta MDA		
1001-562-1MA2								
1001-562-1MA2 110105	01/05/11 09:12	12/29/10 - 01/05/11	-7.66E-16	8.07E-16	8.14E-16	1.82E-15	1.11E+05	Result below MDA
1001-562-1MA2 110112	01/12/11 11:07	01/05/11 - 01/12/11	-4.80E-16	9.90E-16	9.92E-16	2.17E-15	1.12E+05	Result below MDA
1001-562-1MA2 110119	01/19/11 10:57	01/12/11 - 01/19/11	-4.95E-16	6.96E-16	7.00E-16	1.56E-15	1.11E+05	Result below MDA
1001-562-1MA2 110126	01/26/11 09:33	01/19/11 - 01/26/11	1.07E-15	1.02E-15	1.03E-15	2.05E-15	1.12E+05	Result below MDA
1001-562-1MA2 110202	02/02/11 13:33	01/26/11 - 02/02/11	7.05E-16	9.07E-16	9.12E-16	1.86E-15	1.15E+05	Result below MDA
1001-562-1MA2 110209	02/09/11 12:03	02/02/11 - 02/09/11	6.13E-16	1.14E-15	1.15E-15	2.38E-15	1.12E+05	Result below MDA
1001-562-1MA2 110216	02/16/11 07:40	02/09/11 - 02/16/11	2.98E-16	8.77E-16	8.78E-16	1.85E-15	1.10E+05	Result below MDA
1001-562-1MA2 110223	02/23/11 08:40	02/16/11 - 02/23/11	1.03E-14	1.45E-15	2.03E-15	2.14E-15	1.12E+05	1.15E-09
1001-562-1MA2 110302	03/02/11 08:58	02/23/11 - 03/02/11	2.49E-16	8.56E-16	8.57E-16	1.81E-15	1.11E+05	Result below MDA
1001-562-1MA2 110309	03/09/11 11:28	03/02/11 - 03/09/11	1.02E-16	8.44E-16	8.44E-16	1.80E-15	1.12E+05	Result below MDA
1001-562-1MA2 110316	03/16/11 10:50	03/09/11 - 03/16/11	-8.84E-16	8.68E-16	8.76E-16	1.98E-15	1.11E+05	Result below MDA
1001-562-1MA2 110323	03/23/11 08:21	03/16/11 - 03/23/11	-4.06E-16	8.50E-16	8.52E-16	1.88E-15	1.10E+05	Result below MDA
1001-562-1MA2 110330	03/30/11 08:58	03/23/11 - 03/30/11	-1.05E-16	8.58E-16	8.58E-16	1.85E-15	1.11E+05	Result below MDA
1001-562-1MA2 110406	04/06/11 09:06	03/30/11 - 04/06/11	2.65E-16	9.16E-16	9.17E-16	1.93E-15	1.12E+05	Result below MDA
1001-562-1MA2 110413	04/13/11 14:44	04/06/11 - 04/13/11	5.23E-16	9.69E-16	9.72E-16	2.02E-15	1.18E+05	Result below MDA
1001-562-1MA2 110420	04/20/11 13:17	04/13/11 - 04/20/11	1.55E-16	9.44E-16	9.44E-16	2.00E-15	1.12E+05	Result below MDA
1001-562-1MA2 110427	04/27/11 08:58	04/20/11 - 04/27/11	1.19E-15	1.09E-15	1.10E-15	2.19E-15	1.10E+05	Result below MDA
1001-562-1MA2 110504	05/04/11 09:01	04/27/11 - 05/04/11	-3.32E-16	8.94E-16	8.95E-16	1.96E-15	1.12E+05	Result below MDA
1001-562-1MA2 110511	05/11/11 09:38	05/04/11 - 05/11/11	6.28E-16	1.08E-15	1.09E-15	2.25E-15	1.11E+05	Result below MDA
1001-562-1MA2 110518	05/18/11 08:32	05/11/11 - 05/18/11	0.00E+00	1.01E-15	1.01E-15	2.17E-15	1.06E+05	Result below MDA
1001-562-1MA2 110525	05/25/11 10:15	05/18/11 - 05/25/11	7.70E-17	7.64E-16	7.64E-16	1.64E-15	1.11E+05	Result below MDA
1001-562-1MA2 110601	06/01/11 10:14	05/25/11 - 06/01/11	-5.47E-16	8.77E-16	8.80E-16	1.94E-15	1.14E+05	Result below MDA
1001-562-1MA2 110608	06/08/11 12:50	06/01/11 - 06/08/11	-4.82E-16	8.62E-16	8.64E-16	1.91E-15	1.17E+05	Result below MDA
1001-562-1MA2 110615	06/15/11 08:50	06/08/11 - 06/15/11	3.74E-16	9.35E-16	9.36E-16	1.96E-15	1.11E+05	Result below MDA
1001-562-1MA2 110622	06/22/11 09:55	06/15/11 - 06/22/11	-4.95E-17	7.29E-16	7.29E-16	1.58E-15	1.14E+05	Result below MDA
1001-562-1MA2 110629	06/29/11 08:39	06/22/11 - 06/29/11	-6.96E-16	8.94E-16	8.99E-16	2.00E-15	1.13E+05	Result below MDA

NOTES:

1. uCi/mL = microCuries per milliliter.
2. m³ = cubic meters.
3. MDA = minimum detectable activity.
4. Gross beta analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.

TABLE 6
SEPARATION BUILDING MODULE-1001 (SBM-1001)
PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM
QUARTERLY FILTER COMPOSITE RESULTS - RADIONUCLIDES
URENCO USA
Lea County, New Mexico

Radionuclide / Sample ID	Sample Date	Sample Period	Results (uCi/mL)	Counting Uncertainty	Combined Standard Uncertainty (2-sigma)	MDA (uCi/mL)	Total Flow (m ³)	Quantity Released (Ci)	% of Table 2 of Appendix B to 10 CFR Part 20 Values
1001-562-1MA1									
Uranium-234 / 1001-562-1MA1 QTR1 2011	03/30/11 09:50	12/29/10 - 03/30/11	1.03E-17	1.79E-17	1.79E-17	3.33E-17	1.39E+06	Result below MDA	Result below MDA
Uranium-234 / 1001-562-1MA1 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.45E-16	7.49E-17	7.56E-17	5.44E-17	1.41E+06	2.05E-10	0.005%
Uranium-235 / 1001-562-1MA1 QTR1 2011	03/30/11 09:50	12/29/10 - 03/30/11	-1.30E-18	2.61E-18	2.61E-18	3.50E-17	1.39E+06	Result below MDA	Result below MDA
Uranium-235 / 1001-562-1MA1 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	2.75E-17	3.65E-17	3.65E-17	5.55E-17	1.41E+06	Result below MDA	Result below MDA
Uranium-238 / 1001-562-1MA1 QTR1 2011	03/30/11 09:50	12/29/10 - 03/30/11	1.98E-18	1.31E-17	1.31E-17	4.01E-17	1.39E+06	Result below MDA	Result below MDA
Uranium-238 / 1001-562-1MA1 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.11E-16	6.51E-17	6.56E-17	5.42E-17	1.41E+06	1.57E-10	0.004%
1001-562-1MA2									
Uranium-234 / 1001-562-1MA2 QTR1 2011	03/30/11 08:58	12/29/10 - 03/30/11	1.63E-17	1.65E-17	1.65E-17	2.16E-17	1.45E+06	Result below MDA	Result below MDA
Uranium-234 / 1001-562-1MA2 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.53E-16	4.98E-17	5.10E-17	1.93E-17	1.46E+06	2.24E-10	0.005%
Uranium-235 / 1001-562-1MA2 QTR1 2011	03/30/11 08:58	12/29/10 - 03/30/11	2.60E-17	2.23E-17	2.23E-17	2.04E-17	1.45E+06	3.77E-11	0.0009%
Uranium-235 / 1001-562-1MA2 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.59E-17	1.61E-17	1.61E-17	1.05E-17	1.46E+06	2.32E-11	0.0005%
Uranium-238 / 1001-562-1MA2 QTR1 2011	03/30/11 08:58	12/29/10 - 03/30/11	-6.13E-19	1.23E-18	1.23E-18	1.65E-17	1.45E+06	Result below MDA	Result below MDA
Uranium-238 / 1001-562-1MA2 QTR2 2011	06/29/11 00:00	03/30/11 - 06/29/11	1.28E-16	4.51E-17	4.61E-17	2.36E-17	1.46E+06	1.87E-10	0.004%

NOTES:

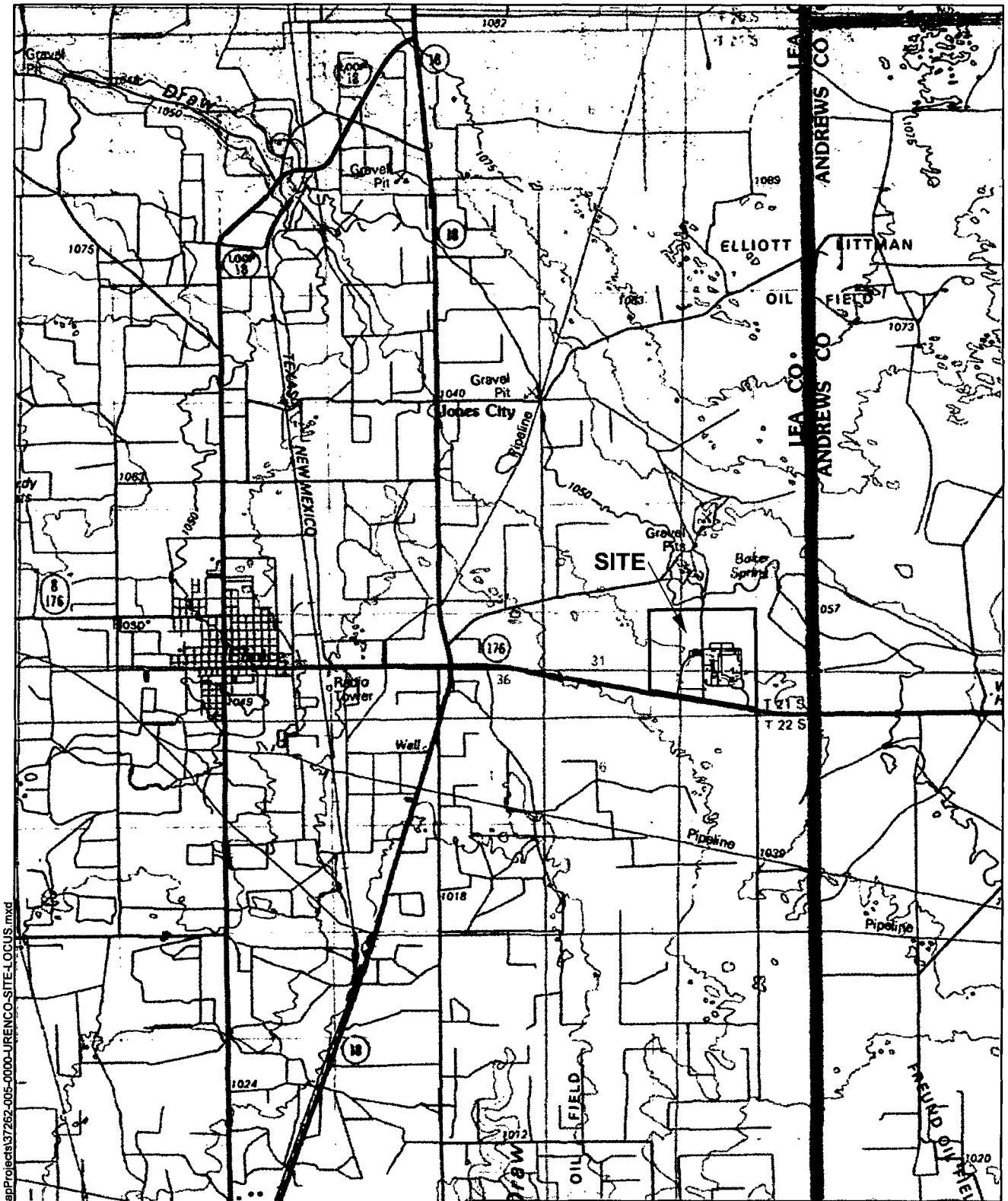
1. uCi/mL = microCuries per milliliter.
2. m³ = cubic meters.
3. MDA = minimum detectable activity.
4. Radionuclides analyzed using method EML U-02 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).

TABLE 7
LIFT STATION 1 WASTEWATER EFFLUENT - RADIONUCLIDES
 URENCO USA
 Lea County, New Mexico

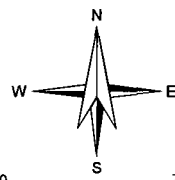
Radionuclide	Sample Date	Sample Period	Total Time (days)	Results (uCi/mL)	Counting Uncertainty (uCi/mL)	Combined Standard Uncertainty (2-sigma) (uCi/mL)	MDA (uCi/mL)	Total Flow (gallons/day)*	Quantity Released (Ci)	% of Table 3 of Appendix B to 10 CFR Part 20 Values - Monthly Average Releases to Sewers
LIFT STATION 1 - Q1 2011										
Uranium - 234	01/21/11 09:36	10/12/10 - 01/21/11	101	1.70E-09	1.78E-10	—	1.45E-11	13,000	8.48E-06	0.06%
Uranium - 235	01/21/11 09:36	10/12/10 - 01/21/11	101	5.39E-11	3.52E-11	—	1.80E-11	13,000	2.69E-07	0.002%
Uranium - 238	01/21/11 09:36	10/12/10 - 01/21/11	101	7.90E-10	1.22E-10	—	3.71E-11	13,000	3.94E-06	0.03%
LIFT STATION 1 - Q2 2011										
Uranium - 234	04/12/11 11:58	01/21/11 - 04/12/11	81	1.10E-09	1.97E-10	2.48E-10	9.76E-11	13,000	4.39E-06	0.04%
Uranium - 235	04/12/11 11:58	01/21/11 - 04/12/11	81	4.36E-11	4.27E-11	4.32E-11	3.27E-11	13,000	1.74E-07	0.001%
Uranium - 238	04/12/11 11:58	01/21/11 - 04/12/11	81	6.53E-10	1.53E-10	1.77E-10	8.45E-11	13,000	2.61E-06	0.02%

NOTES:

1. uCi/mL = microCuries per milliliter.
2. MDA = minimum detectable activity.
3. Radionuclides analyzed using method EML U-02 Modified by GEL Laboratories, LLC of Charleston, SC.
4. All detected activity values were less than the facility-required lower level detection limit of 3.0E-9 uCi/mL for liquid effluent samples (UUSA, 2011).
5. * = Table 3.4-4 "Anticipated Normal Plant Water Consumption" lists "Total Personnel Water Use" as approximately 13,000 gallons per day (UUSA, 2011).
6. — = Combined Standard Uncertainty (2-sigma) not reported during Quarter 1, 2011.



SITE COORDINATES: 32.436181 103.0821



0 7000
SCALE IN FEET

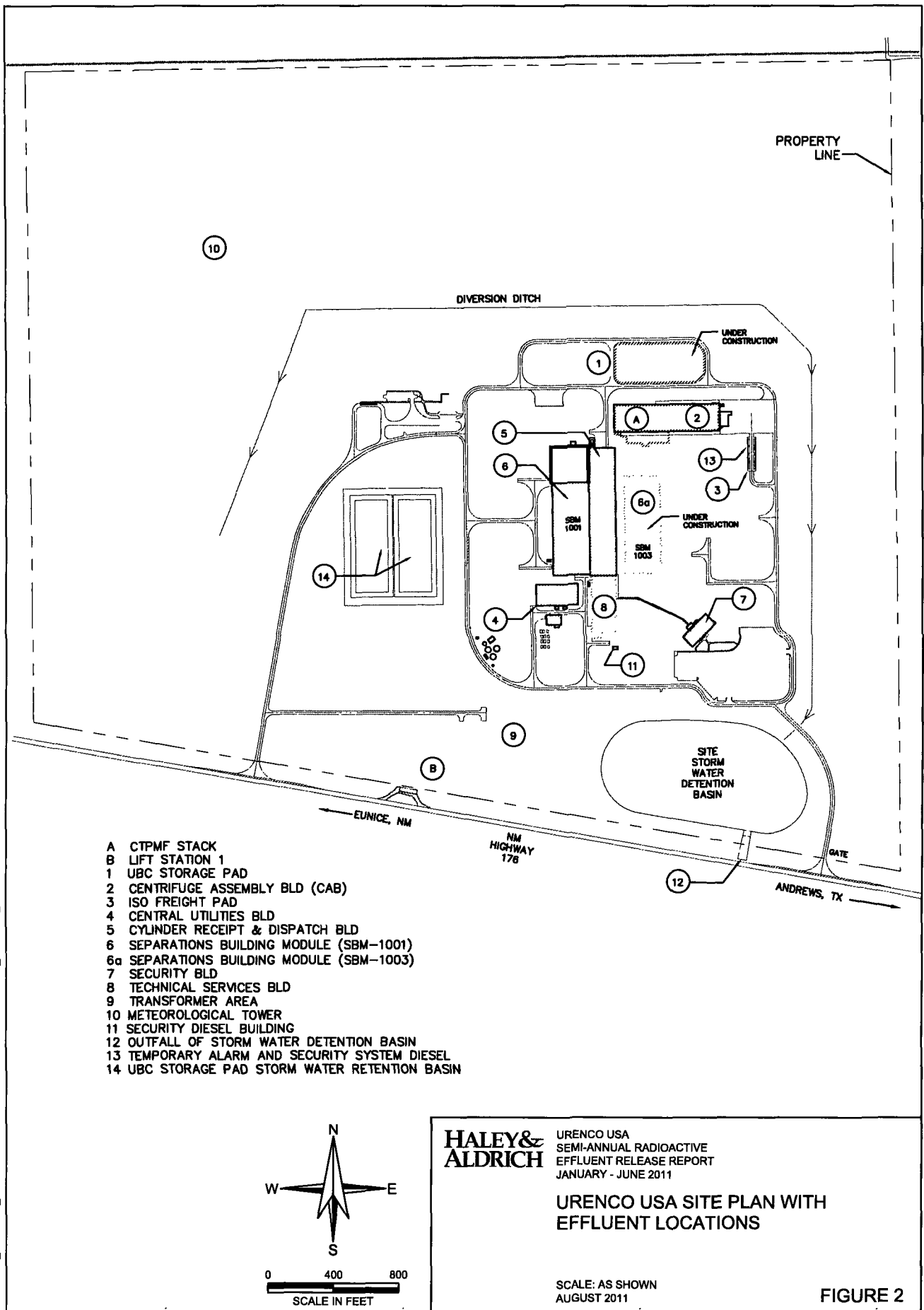
HALEY & ALDRICH

URENCO USA
SEMI-ANNUAL RADIOACTIVE
EFFLUENT RELEASE REPORT
EUNICE, NEW MEXICO

SITE LOCATION MAP

SCALE: AS SHOWN
AUGUST 2011

FIGURE 1



APPENDIX A
Lab Data Sheets

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:					
			Debra Edwards						SDG:	11-04056				
			Urenco USA						Purchase Order:	LES-GSA-3080				
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL				
			Eunice, NM 88231						Sample Matrix:	AF				
Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Volume (ml)	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-04056-01	LCS	KNOWN	04/12/11 00:00	4/8/2011	4/13/2011		11-04056	Gross Alpha	LANL MLR-100 Modified	3.14E-04	1.35E-05			uCi/ml
11-04056-01	LCS	SPIKE	04/12/11 00:00	4/8/2011	4/13/2011		11-04056	Gross Alpha	LANL MLR-100 Modified	3.00E-04	7.85E-06	3.36E-05	3.76E-07	uCi/ml
11-04056-02	MBL	BLANK	04/12/11 00:00	4/8/2011	4/13/2011		11-04056	Gross Alpha	LANL MLR-100 Modified	0.00E+00	2.53E-16	2.53E-16	6.56E-16	uCi/ml
11-04056-03	DUP	1001-562-1MA2 110105	01/05/11 09:12	4/8/2011	4/13/2011	3.21E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-3.21E-16	3.15E-16	3.16E-16	9.12E-16	uCi/ml
11-04056-04	DO	1001-562-1MA2 110105	01/05/11 09:12	4/8/2011	4/13/2011	3.21E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	1.24E-16	2.15E-16	2.16E-16	4.59E-16	uCi/ml
11-04056-05	TRG	1001-562-1MA2 110112	01/12/11 11:07	4/8/2011	4/13/2011	2.92E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	9.11E-17	1.26E-16	1.27E-16	1.37E-16	uCi/ml
11-04056-06	TRG	1001-562-1MA2 110119	01/19/11 10:57	4/8/2011	4/13/2011	3.56E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-1.49E-16	2.53E-16	2.53E-16	7.11E-16	uCi/ml
11-04056-07	TRG	1001-562-1MA2 110126	01/26/11 09:33	4/8/2011	4/13/2011	2.47E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-3.25E-16	2.60E-16	2.63E-16	9.19E-16	uCi/ml
11-04056-08	TRG	1001-562-1MA2 110202	02/02/11 13:33	4/8/2011	4/13/2011	2.64E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-2.00E-16	1.96E-16	1.97E-16	7.20E-16	uCi/ml
11-04056-09	TRG	1001-562-1MA2 110209	02/09/11 12:03	4/8/2011	4/13/2011	2.31E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	5.14E-16	3.36E-16	3.41E-16	1.71E-16	uCi/ml
11-04056-10	TRG	1001-562-1MA2 110216	02/16/11 07:40	4/8/2011	4/13/2011	2.77E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	9.49E-17	2.94E-16	2.94E-16	6.83E-16	uCi/ml
11-04056-11	TRG	1001-562-1MA2 110223	02/23/11 08:40	4/8/2011	4/13/2011	2.84E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-1.49E-16	4.02E-16	4.02E-16	1.05E-15	uCi/ml
11-04056-12	TRG	1001-562-1MA2 110302	03/02/11 08:58	4/8/2011	4/13/2011	2.79E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-1.45E-16	2.12E-16	2.13E-16	6.97E-16	uCi/ml
11-04056-13	TRG	1001-562-1MA2 110309	03/09/11 11:28	4/8/2011	4/13/2011	2.96E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	4.34E-17	1.90E-16	1.90E-16	4.80E-16	uCi/ml
11-04056-14	TRG	1001-562-1MA2 110316	03/16/11 10:50	4/8/2011	4/13/2011	2.71E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-6.22E-16	4.09E-16	4.14E-16	1.23E-15	uCi/ml
11-04056-15	TRG	1001-562-1MA2 110323	03/23/11 08:21	4/8/2011	4/13/2011	2.78E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-9.32E-17	2.24E-16	2.24E-16	6.71E-16	uCi/ml
11-04056-16	TRG	1001-562-1MA2 110330	03/30/11 08:58	4/8/2011	4/13/2011	2.93E+08	11-04056	Gross Alpha	LANL MLR-100 Modified	-2.64E-16	3.65E-16	3.67E-16	9.99E-16	uCi/ml
11-04056-01	LCS	KNOWN	04/12/11 00:00	4/8/2011	4/13/2011		11-04056	Gross Beta	LANL MLR-100 Modified	2.32E-04	6.96E-06			uCi/ml
11-04056-01	LCS	SPIKE	04/12/11 00:00	4/8/2011	4/13/2011		11-04056	Gross Beta	LANL MLR-100 Modified	2.47E-04	5.96E-06	3.46E-05	8.02E-07	uCi/ml
11-04056-02	MBL	BLANK	04/12/11 00:00	4/8/2011	4/13/2011		11-04056	Gross Beta	LANL MLR-100 Modified	-2.65E-16	8.40E-16	8.41E-16	1.84E-15	uCi/ml
11-04056-03	DUP	1001-562-1MA2 110105	01/05/11 09:12	4/8/2011	4/13/2011	3.21E+08	11-04056	Gross Beta	LANL MLR-100 Modified	-7.16E-17	7.84E-16	7.84E-16	1.69E-15	uCi/ml
11-04056-04	DO	1001-562-1MA2 110105	01/05/11 09:12	4/8/2011	4/13/2011	3.21E+08	11-04056	Gross Beta	LANL MLR-100 Modified	-7.66E-16	8.07E-16	8.14E-16	1.82E-15	uCi/ml
11-04056-05	TRG	1001-562-1MA2 110112	01/12/11 11:07	4/8/2011	4/13/2011	2.92E+08	11-04056	Gross Beta	LANL MLR-100 Modified	-4.80E-16	9.90E-16	9.92E-16	2.17E-15	uCi/ml
11-04056-06	TRG	1001-562-1MA2 110119	01/19/11 10:57	4/8/2011	4/13/2011	3.56E+08	11-04056	Gross Beta	LANL MLR-100 Modified	-4.95E-16	6.96E-16	7.00E-16	1.56E-15	uCi/ml
11-04056-07	TRG	1001-562-1MA2 110126	01/26/11 09:33	4/8/2011	4/13/2011	2.47E+08	11-04056	Gross Beta	LANL MLR-100 Modified	1.07E-15	1.02E-15	1.03E-15	2.05E-15	uCi/ml
11-04056-08	TRG	1001-562-1MA2 110202	02/02/11 13:33	4/8/2011	4/13/2011	2.64E+08	11-04056	Gross Beta	LANL MLR-100 Modified	7.05E-16	9.07E-16	9.12E-16	1.86E-15	uCi/ml
11-04056-09	TRG	1001-562-1MA2 110209	02/09/11 12:03	4/8/2011	4/13/2011	2.31E+08	11-04056	Gross Beta	LANL MLR-100 Modified	6.13E-16	1.14E-15	1.15E-15	2.38E-15	uCi/ml
11-04056-10	TRG	1001-562-1MA2 110216	02/16/11 07:40	4/8/2011	4/13/2011	2.77E+08	11-04056	Gross Beta	LANL MLR-100 Modified	2.98E-16	8.77E-16	8.78E-16	1.85E-15	uCi/ml
11-04056-11	TRG	1001-562-1MA2 110223	02/23/11 08:40	4/8/2011	4/13/2011	2.84E+08	11-04056	Gross Beta	LANL MLR-100 Modified	1.03E-14	1.45E-15	2.03E-15	2.14E-15	uCi/ml
11-04056-12	TRG	1001-562-1MA2 110302	03/02/11 08:58	4/8/2011	4/13/2011	2.79E+08	11-04056	Gross Beta	LANL MLR-100 Modified	2.49E-16	8.56E-16	8.57E-16	1.81E-15	uCi/ml
11-04056-13	TRG	1001-562-1MA2 110309	03/09/11 11:28	4/8/2011	4/13/2011	2.96E+08	11-04056	Gross Beta	LANL MLR-100 Modified	1.02E-16	8.44E-16	8.44E-16	1.80E-15	uCi/ml
11-04056-14	TRG	1001-562-1MA2 110316	03/16/11 10:50	4/8/2011	4/13/2011	2.71E+08	11-04056	Gross Beta	LANL MLR-100 Modified	-8.84E-16	8.68E-16	8.76E-16	1.98E-15	uCi/ml
11-04056-15	TRG	1001-562-1MA2 110323	03/23/11 08:21	4/8/2011	4/13/2011	2.78E+08	11-04056	Gross Beta	LANL MLR-100 Modified	-4.06E-16	8.50E-16	8.52E-16	1.88E-15	uCi/ml
11-04056-16	TRG	1001-562-1MA2 110330	03/30/11 08:58	4/8/2011	4/13/2011	2.93E+08	11-04056	Gross Beta	LANL MLR-100 Modified	-1.05E-16	8.58E-16	8.58E-16	1.85E-15	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical Final Report of Analysis			Report To:		Work Order Details:				
			Debra Edwards		11-04057				
			Urenco USA		LES-GSA-3080				
			275 Hwy 176		ENVIRONMENTAL				
			Eunice, NM 88231		AF				
Lab ID	Sample Type	Client ID	Sample Date	Analyte	Result	CU	CSU	MDA	Report Units
11-04057-01	LCS	KNOWN	04/12/11 00:00	Gross Alpha	3.14E-04	1.35E-05			uCi/ml
11-04057-01	LCS	SPIKE	04/12/11 00:00	Gross Alpha	3.04E-04	7.67E-06	3.41E-05	2.95E-07	uCi/ml
11-04057-02	MBL	BLANK	04/12/11 00:00	Gross Alpha	-4.43E-17	2.88E-16	2.88E-16	7.51E-16	uCi/ml
11-04057-03	DUP	1001-562-1MA1 110105	01/05/11 09:20	Gross Alpha	-6.53E-16	3.52E-16	3.59E-16	1.12E-15	uCi/ml
11-04057-04	DO	1001-562-1MA1 110105	01/05/11 09:20	Gross Alpha	2.22E-16	1.95E-16	1.96E-16	1.33E-16	uCi/ml
11-04057-05	TRG	1001-562-1MA1 110112	01/12/11 11:22	Gross Alpha	0.00E+00	3.01E-16	3.01E-16	7.53E-16	uCi/ml
11-04057-06	TRG	1001-562-1MA1 110119	01/19/11 11:00	Gross Alpha	2.50E-16	3.05E-16	3.06E-16	5.99E-16	uCi/ml
11-04057-07	TRG	1001-562-1MA1 110126	01/26/11 09:37	Gross Alpha	-7.21E-16	4.33E-16	4.40E-16	1.28E-15	uCi/ml
11-04057-08	TRG	1001-562-1MA1 110202	02/02/11 13:36	Gross Alpha	4.33E-17	2.55E-16	2.55E-16	6.23E-16	uCi/ml
11-04057-09	TRG	1001-562-1MA1 110209	02/09/11 12:00	Gross Alpha	9.39E-17	1.30E-16	1.31E-16	1.41E-16	uCi/ml
11-04057-10	TRG	1001-562-1MA1 110216	02/16/11 07:39	Gross Alpha	1.89E-16	2.62E-16	2.63E-16	5.23E-16	uCi/ml
11-04057-11	TRG	1001-562-1MA1 110223	02/23/11 08:41	Gross Alpha	-3.80E-16	4.17E-16	4.19E-16	1.16E-15	uCi/ml
11-04057-12	TRG	1001-562-1MA1 110302	03/02/11 09:00	Gross Alpha	4.54E-17	8.90E-17	8.92E-17	1.36E-16	uCi/ml
11-04057-13	TRG	1001-562-1MA1 110309	03/09/11 11:29	Gross Alpha	-1.79E-16	3.04E-16	3.04E-16	8.55E-16	uCi/ml
11-04057-14	TRG	1001-562-1MA1 110316	03/16/11 10:53	Gross Alpha	-9.63E-17	2.98E-16	2.99E-16	8.17E-16	uCi/ml
11-04057-15	TRG	1001-562-1MA1 110323	03/23/11 08:23	Gross Alpha	1.40E-16	3.03E-16	3.04E-16	6.72E-16	uCi/ml
11-04057-16	TRG	1001-562-1MA1 110330	03/30/11 08:57	Gross Alpha	1.32E-16	1.49E-16	1.50E-16	1.32E-16	uCi/ml
11-04057-01	LCS	KNOWN	04/12/11 00:00	Gross Beta	2.32E-04	6.97E-06			uCi/ml
11-04057-01	LCS	SPIKE	04/12/11 00:00	Gross Beta	2.51E-04	5.87E-06	3.51E-05	9.07E-07	uCi/ml
11-04057-02	MBL	BLANK	04/12/11 00:00	Gross Beta	-3.11E-16	8.91E-16	8.92E-16	1.95E-15	uCi/ml
11-04057-03	DUP	1001-562-1MA1 110105	01/05/11 09:20	Gross Beta	-3.93E-16	8.73E-16	8.75E-16	1.92E-15	uCi/ml
11-04057-04	DO	1001-562-1MA1 110105	01/05/11 09:20	Gross Beta	3.75E-16	9.26E-16	9.27E-16	1.94E-15	uCi/ml
11-04057-05	TRG	1001-562-1MA1 110112	01/12/11 11:22	Gross Beta	4.87E-16	7.46E-16	7.49E-16	1.54E-15	uCi/ml
11-04057-06	TRG	1001-562-1MA1 110119	01/19/11 11:00	Gross Beta	2.25E-16	7.86E-16	7.87E-16	1.66E-15	uCi/ml
11-04057-07	TRG	1001-562-1MA1 110126	01/26/11 09:37	Gross Beta	2.39E-16	9.04E-16	9.05E-16	1.91E-15	uCi/ml
11-04057-08	TRG	1001-562-1MA1 110202	02/02/11 13:36	Gross Beta	3.04E-16	8.07E-16	8.08E-16	1.70E-15	uCi/ml
11-04057-09	TRG	1001-562-1MA1 110209	02/09/11 12:00	Gross Beta	-3.13E-16	1.18E-15	1.18E-15	2.54E-15	uCi/ml
11-04057-10	TRG	1001-562-1MA1 110216	02/16/11 07:39	Gross Beta	-4.13E-16	9.29E-16	9.31E-16	2.04E-15	uCi/ml
11-04057-11	TRG	1001-562-1MA1 110223	02/23/11 08:41	Gross Beta	-2.98E-16	9.97E-16	9.98E-16	2.16E-15	uCi/ml
11-04057-12	TRG	1001-562-1MA1 110302	03/02/11 09:00	Gross Beta	-5.59E-16	9.82E-16	9.85E-16	2.16E-15	uCi/ml
11-04057-13	TRG	1001-562-1MA1 110309	03/09/11 11:29	Gross Beta	-2.07E-16	8.60E-16	8.61E-16	1.87E-15	uCi/ml
11-04057-14	TRG	1001-562-1MA1 110316	03/16/11 10:53	Gross Beta	1.00E-15	9.06E-16	9.16E-16	1.82E-15	uCi/ml
11-04057-15	TRG	1001-562-1MA1 110323	03/23/11 08:23	Gross Beta	3.01E-16	8.23E-16	8.24E-16	1.73E-15	uCi/ml
11-04057-16	TRG	1001-562-1MA1 110330	03/30/11 08:57	Gross Beta	-1.31E-16	8.45E-16	8.46E-16	1.83E-15	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:					
			Debra Edwards						SDG:	11-04058				
			Urenco USA						Purchase Order:	LES-GSA-3080				
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL				
			Eunice, NM 88231						Sample Matrix:	AF				
Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Volume (ml)	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-04058-01	LCS	KNOWN	04/12/11 00:00	4/8/2011	4/13/2011		11-04058	Gross Alpha	LANL MLR-100 Modified	3.15E-04	1.35E-05			uCi/ml
11-04058-01	LCS	SPIKE	04/12/11 00:00	4/8/2011	4/13/2011		11-04058	Gross Alpha	LANL MLR-100 Modified	2.90E-04	7.55E-06	3.26E-05	5.64E-07	uCi/ml
11-04058-02	MBL	BLANK	04/12/11 00:00	4/8/2011	4/13/2011		11-04058	Gross Alpha	LANL MLR-100 Modified	-2.09E-16	2.89E-16	2.90E-16	8.85E-16	uCi/ml
11-04058-03	DUP	1300-562-1MA1 110105	01/05/11 09:16	4/8/2011	4/13/2011	2.76E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-6.47E-16	3.84E-16	3.91E-16	1.19E-15	uCi/ml
11-04058-04	DO	1300-562-1MA1 110105	01/05/11 09:16	4/8/2011	4/13/2011	2.76E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-4.57E-17	1.55E-16	1.55E-16	5.05E-16	uCi/ml
11-04058-05	TRG	1300-562-1MA1 110112	01/12/11 09:35	4/8/2011	4/13/2011	2.56E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	4.93E-17	2.16E-16	2.16E-16	5.45E-16	uCi/ml
11-04058-06	TRG	1300-562-1MA1 110119	01/19/11 10:25	4/8/2011	4/13/2011	2.77E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-9.34E-17	3.42E-16	3.42E-16	8.92E-16	uCi/ml
11-04058-07	TRG	1300-562-1MA1 110126	01/26/11 10:10	4/8/2011	4/13/2011	2.69E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	4.86E-17	2.13E-16	2.13E-16	5.37E-16	uCi/ml
11-04058-08	TRG	1300-562-1MA1 110202	02/02/11 09:46	4/8/2011	4/13/2011	2.57E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-5.02E-16	3.63E-16	3.67E-16	1.17E-15	uCi/ml
11-04058-09	TRG	1300-562-1MA1 110209	02/09/11 09:35	4/8/2011	4/13/2011	2.77E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-1.40E-16	3.30E-16	3.30E-16	8.92E-16	uCi/ml
11-04058-10	TRG	1300-562-1MA1 110216	02/16/11 10:21	4/8/2011	4/13/2011	2.78E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	4.70E-17	2.06E-16	2.06E-16	5.20E-16	uCi/ml
11-04058-11	TRG	1300-562-1MA1 110223	02/23/11 10:10	4/8/2011	4/13/2011	2.70E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-2.12E-16	4.16E-16	4.17E-16	1.12E-15	uCi/ml
11-04058-12	TRG	1300-562-1MA1 110302	03/02/11 10:21	4/8/2011	4/13/2011	2.67E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	1.99E-16	1.95E-16	1.97E-16	1.50E-16	uCi/ml
11-04058-13	TRG	1300-562-1MA1 110309	03/09/11 10:09	4/8/2011	4/13/2011	2.88E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-2.76E-16	2.85E-16	2.87E-16	8.79E-16	uCi/ml
11-04058-14	TRG	1300-562-1MA1 110316	03/16/11 09:18	4/8/2011	4/13/2011	2.80E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-1.91E-16	2.65E-16	2.66E-16	8.11E-16	uCi/ml
11-04058-15	TRG	1300-562-1MA1 110323	03/23/11 10:07	4/8/2011	4/13/2011	2.82E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	-9.36E-17	2.25E-16	2.25E-16	6.74E-16	uCi/ml
11-04058-16	TRG	1300-562-1MA1 110330	03/30/11 09:50	4/8/2011	4/13/2011	2.81E+08	11-04058	Gross Alpha	LANL MLR-100 Modified	3.76E-16	2.60E-16	2.64E-16	1.41E-16	uCi/ml
11-04058-01	LCS	KNOWN	04/12/11 00:00	4/8/2011	4/13/2011		11-04058	Gross Beta	LANL MLR-100 Modified	2.33E-04	6.98E-06			uCi/ml
11-04058-01	LCS	SPIKE	04/12/11 00:00	4/8/2011	4/13/2011		11-04058	Gross Beta	LANL MLR-100 Modified	2.45E-04	5.88E-06	3.44E-05	8.55E-07	uCi/ml
11-04058-02	MBL	BLANK	04/12/11 00:00	4/8/2011	4/13/2011		11-04058	Gross Beta	LANL MLR-100 Modified	3.05E-17	1.07E-15	1.07E-15	2.29E-15	uCi/ml
11-04058-03	DUP	1300-562-1MA1 110105	01/05/11 09:16	4/8/2011	4/13/2011	2.76E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-1.11E-16	9.44E-16	9.45E-16	2.04E-15	uCi/ml
11-04058-04	DO	1300-562-1MA1 110105	01/05/11 09:16	4/8/2011	4/13/2011	2.76E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-6.77E-16	9.84E-16	9.88E-16	2.18E-15	uCi/ml
11-04058-05	TRG	1300-562-1MA1 110112	01/12/11 09:35	4/8/2011	4/13/2011	2.56E+08	11-04058	Gross Beta	LANL MLR-100 Modified	1.46E-16	1.11E-15	1.11E-15	2.35E-15	uCi/ml
11-04058-06	TRG	1300-562-1MA1 110119	01/19/11 10:25	4/8/2011	4/13/2011	2.77E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-1.40E-15	9.98E-16	1.02E-15	2.29E-15	uCi/ml
11-04058-07	TRG	1300-562-1MA1 110126	01/26/11 10:10	4/8/2011	4/13/2011	2.69E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-8.20E-16	9.74E-16	9.81E-16	2.19E-15	uCi/ml
11-04058-08	TRG	1300-562-1MA1 110202	02/02/11 09:46	4/8/2011	4/13/2011	2.57E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-3.59E-16	1.24E-15	1.24E-15	2.68E-15	uCi/ml
11-04058-09	TRG	1300-562-1MA1 110209	02/09/11 09:35	4/8/2011	4/13/2011	2.77E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-1.12E-15	1.01E-15	1.02E-15	2.29E-15	uCi/ml
11-04058-10	TRG	1300-562-1MA1 110216	02/16/11 10:21	4/8/2011	4/13/2011	2.78E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-5.95E-16	9.54E-16	9.57E-16	2.11E-15	uCi/ml
11-04058-11	TRG	1300-562-1MA1 110223	02/23/11 10:10	4/8/2011	4/13/2011	2.70E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-1.15E-15	1.13E-15	1.15E-15	2.55E-15	uCi/ml
11-04058-12	TRG	1300-562-1MA1 110302	03/02/11 10:21	4/8/2011	4/13/2011	2.67E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-7.30E-16	1.07E-15	1.08E-15	2.37E-15	uCi/ml
11-04058-13	TRG	1300-562-1MA1 110309	03/09/11 10:09	4/8/2011	4/13/2011	2.88E+08	11-04058	Gross Beta	LANL MLR-100 Modified	-2.39E-16	8.83E-16	8.83E-16	1.92E-15	uCi/ml
11-04058-14	TRG	1300-562-1MA1 110316	03/16/11 09:18	4/8/2011	4/13/2011	2.80E+08	11-04058	Gross Beta	LANL MLR-100 Modified	1.05E-15	9.03E-16	9.14E-16	1.80E-15	uCi/ml
11-04058-15	TRG	1300-562-1MA1 110323	03/23/11 10:07	4/8/2011	4/13/2011	2.82E+08	11-04058	Gross Beta	LANL MLR-100 Modified	7.43E-16	8.54E-16	8.60E-16	1.74E-15	uCi/ml
11-04058-16	TRG	1300-562-1MA1 110330	03/30/11 09:50	4/8/2011	4/13/2011	2.81E+08	11-04058	Gross Beta	LANL MLR-100 Modified	5.60E-17	9.14E-16	9.14E-16	1.96E-15	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:					
			Debra Edwards						SDG:	11-04100				
			Urenco USA						Purchase Order:	LES-GSA-3080				
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL				
			Eunice, NM 88231						Sample Matrix:	AF				
Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Volume (ml)	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-04100-01	LCS	KNOWN	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-234	EML U-02 Modified	8.17E-06	2.94E-07			uCi/ml
11-04100-01	LCS	SPIKE	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-234	EML U-02 Modified	7.23E-06	1.18E-06	1.29E-06	7.15E-08	uCi/ml
11-04100-02	MBL	BLANK	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-234	EML U-02 Modified	2.05E-18	6.39E-18	6.39E-18	1.66E-17	uCi/ml
11-04100-03	DUP	1001-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	1.90E+09	11-04100	Uranium-234	EML U-02 Modified	3.42E-17	3.12E-17	3.13E-17	3.72E-17	uCi/ml
11-04100-04	DO	1001-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	1.90E+09	11-04100	Uranium-234	EML U-02 Modified	1.03E-17	1.79E-17	1.79E-17	3.33E-17	uCi/ml
11-04100-05	TRG	1001-562-1MA2 QTR1 2011	03/30/11 08:58	4/19/2011	4/22/2011	3.68E+09	11-04100	Uranium-234	EML U-02 Modified	1.63E-17	1.65E-17	1.65E-17	2.16E-17	uCi/ml
11-04100-06	TRG	1300-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	3.56E+09	11-04100	Uranium-234	EML U-02 Modified	1.54E-17	1.57E-17	1.57E-17	2.05E-17	uCi/ml
11-04100-01	LCS	SPIKE	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-235	EML U-02 Modified	9.25E-07	2.69E-07	2.77E-07	7.92E-08	uCi/ml
11-04100-02	MBL	BLANK	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-235	EML U-02 Modified	1.47E-17	1.55E-17	1.55E-17	1.75E-17	uCi/ml
11-04100-03	DUP	1001-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	1.90E+09	11-04100	Uranium-235	EML U-02 Modified	1.92E-17	2.72E-17	2.72E-17	4.59E-17	uCi/ml
11-04100-04	DO	1001-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	1.90E+09	11-04100	Uranium-235	EML U-02 Modified	-1.30E-18	2.61E-18	2.61E-18	3.50E-17	uCi/ml
11-04100-05	TRG	1001-562-1MA2 QTR1 2011	03/30/11 08:58	4/19/2011	4/22/2011	3.68E+09	11-04100	Uranium-235	EML U-02 Modified	2.60E-17	2.23E-17	2.23E-17	2.04E-17	uCi/ml
11-04100-06	TRG	1300-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	3.56E+09	11-04100	Uranium-235	EML U-02 Modified	1.27E-17	1.48E-17	1.48E-17	1.12E-17	uCi/ml
11-04100-01	LCS	KNOWN	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-238	EML U-02 Modified	7.96E-06	2.87E-07			uCi/ml
11-04100-01	LCS	SPIKE	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-238	EML U-02 Modified	6.96E-06	1.14E-06	1.25E-06	7.12E-08	uCi/ml
11-04100-02	MBL	BLANK	04/19/11 00:00	4/19/2011	4/22/2011		11-04100	Uranium-238	EML U-02 Modified	1.33E-17	1.41E-17	1.41E-17	2.00E-17	uCi/ml
11-04100-03	DUP	1001-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	1.90E+09	11-04100	Uranium-238	EML U-02 Modified	3.62E-17	3.09E-17	3.10E-17	2.84E-17	uCi/ml
11-04100-04	DO	1001-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	1.90E+09	11-04100	Uranium-238	EML U-02 Modified	1.98E-18	1.31E-17	1.31E-17	4.01E-17	uCi/ml
11-04100-05	TRG	1001-562-1MA2 QTR1 2011	03/30/11 08:58	4/19/2011	4/22/2011	3.68E+09	11-04100	Uranium-238	EML U-02 Modified	-6.13E-19	1.23E-18	1.23E-18	1.65E-17	uCi/ml
11-04100-06	TRG	1300-562-1MA1 QTR1 2011	03/30/11 09:50	4/19/2011	4/22/2011	3.56E+09	11-04100	Uranium-238	EML U-02 Modified	9.11E-18	1.20E-17	1.21E-17	1.84E-17	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

URENCO
URENCO
SDG: 270910 A

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Urenco USA
Address : Andrews 275 Hwy 176

Report Date: February 21, 2011

Contact: Eunice, New Mexico 88231
Project: Mr. Matthew Graves
URENCO

Client Sample ID: LS1-Wastewater-012111-01
Sample ID: 270910007
Matrix: Waste Water
Collect Date: 21-JAN-11 09:36
Receive Date: 22-JAN-11
Collector: Client

Project: UREN00111
Client ID: UREN001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec Analysis												
<i>Alphaspec U, Liquid "As Received"</i>												
Uranium-233/234		1.70E-09	+/-1.78E-10	1.45E-11	5.00E-11	uCi/mL		HAK	01/27/11	1601	1067519	1
Uranium-235/236		5.39E-11	+/-3.52E-11	1.80E-11	5.00E-11	uCi/mL		B				
Uranium-238		7.90E-10	+/-1.22E-10	3.71E-11	5.00E-11	uCi/mL						

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	DOE EML HASL-300, U-02-RC Modified		

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			89.1	(15%-125%)

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:						
			Wes Terry						SDG:	11-07057					
			URENCO USA						Purchase Order:	LES-GSA-3080					
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL					
			Eunice, NM 88231						Sample Matrix:	AF					
Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Volume (ml)	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units	
11-07057-01	LCS	KNOWN	07/11/11 00:00	7/8/2011	7/13/2011		11-07057	Gross Alpha	LANL MLR-100 Modified	3.12E-04	1.34E-05			uCi/ml	
11-07057-01	LCS	SPIKE	07/11/11 00:00	7/8/2011	7/13/2011		11-07057	Gross Alpha	LANL MLR-100 Modified	2.68E-04	3.69E-06	2.95E-05	2.52E-07	uCi/ml	
11-07057-02	MBL	BLANK	07/11/11 00:00	7/8/2011	7/13/2011		11-07057	Gross Alpha	LANL MLR-100 Modified	1.82E-16	3.09E-16	3.09E-16	6.54E-16	uCi/ml	
11-07057-03	DUP	1001-562-1MA2 110406	04/06/11 09:06	7/8/2011	7/13/2011	2.84E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	4.54E-17	2.67E-16	2.67E-16	6.53E-16	uCi/ml	
11-07057-04	DO	1001-562-1MA2 110406	04/06/11 09:06	7/8/2011	7/13/2011	2.84E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	0.00E+00	2.52E-16	2.52E-16	6.53E-16	uCi/ml	
11-07057-05	TRG	1001-562-1MA2 110413	04/13/11 14:44	7/8/2011	7/13/2011	2.80E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-9.03E-17	3.31E-16	3.31E-16	8.64E-16	uCi/ml	
11-07057-06	TRG	1001-562-1MA2 110420	04/20/11 13:17	7/8/2011	7/13/2011	2.90E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-4.74E-16	3.48E-16	3.52E-16	1.05E-15	uCi/ml	
11-07057-07	TRG	1001-562-1MA2 110427	04/27/11 08:58	7/8/2011	7/13/2011	2.84E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-3.74E-16	3.67E-16	3.69E-16	1.06E-15	uCi/ml	
11-07057-08	TRG	1001-562-1MA2 110504	05/04/11 09:01	7/8/2011	7/13/2011	2.83E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-4.73E-17	1.60E-16	1.61E-16	5.23E-16	uCi/ml	
11-07057-09	TRG	1001-562-1MA2 110511	05/11/11 09:38	7/8/2011	7/13/2011	2.89E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-2.25E-16	3.42E-16	3.43E-16	9.46E-16	uCi/ml	
11-07057-10	TRG	1001-562-1MA2 110518	05/18/11 08:32	7/8/2011	7/13/2011	2.69E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	9.69E-16	4.79E-16	4.91E-16	5.64E-16	uCi/ml	
11-07057-11	TRG	1001-562-1MA2 110525	05/25/11 10:15	7/8/2011	7/13/2011	2.93E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-8.84E-17	3.24E-16	3.24E-16	8.45E-16	uCi/ml	
11-07057-12	TRG	1001-562-1MA2 110601	06/01/11 10:14	7/8/2011	7/13/2011	2.94E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-3.94E-16	3.74E-16	3.77E-16	1.07E-15	uCi/ml	
11-07057-13	TRG	1001-562-1MA2 110608	06/08/11 12:50	7/8/2011	7/13/2011	3.08E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	4.27E-17	2.51E-16	2.51E-16	6.14E-16	uCi/ml	
11-07057-14	TRG	1001-562-1MA2 110615	06/15/11 08:50	7/8/2011	7/13/2011	2.94E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-8.98E-17	3.29E-16	3.29E-16	8.58E-16	uCi/ml	
11-07057-15	TRG	1001-562-1MA2 110622	06/22/11 09:55	7/8/2011	7/13/2011	3.04E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-8.52E-17	3.12E-16	3.13E-16	8.14E-16	uCi/ml	
11-07057-16	TRG	1001-562-1MA2 110629	06/29/11 08:39	7/8/2011	7/13/2011	2.86E+08	11-07057	Gross Alpha	LANL MLR-100 Modified	-3.15E-16	4.04E-16	4.06E-16	1.10E-15	uCi/ml	
11-07057-01	LCS	KNOWN	07/11/11 00:00	7/8/2011	7/13/2011		11-07057	Gross Beta	LANL MLR-100 Modified	2.30E-04	6.89E-06			uCi/ml	
11-07057-01	LCS	SPIKE	07/11/11 00:00	7/8/2011	7/13/2011		11-07057	Gross Beta	LANL MLR-100 Modified	2.59E-04	3.02E-06	3.59E-05	5.76E-07	uCi/ml	
11-07057-02	MBL	BLANK	07/11/11 00:00	7/8/2011	7/13/2011		11-07057	Gross Beta	LANL MLR-100 Modified	-2.57E-16	9.33E-16	9.34E-16	2.03E-15	uCi/ml	
11-07057-03	DUP	1001-562-1MA2 110406	04/06/11 09:06	7/8/2011	7/13/2011	2.84E+08	11-07057	Gross Beta	LANL MLR-100 Modified	9.03E-16	9.51E-16	9.59E-16	1.93E-15	uCi/ml	
11-07057-04	DO	1001-562-1MA2 110406	04/06/11 09:06	7/8/2011	7/13/2011	2.84E+08	11-07057	Gross Beta	LANL MLR-100 Modified	2.65E-16	9.16E-16	9.17E-16	1.93E-15	uCi/ml	
11-07057-05	TRG	1001-562-1MA2 110413	04/13/11 14:44	7/8/2011	7/13/2011	2.80E+08	11-07057	Gross Beta	LANL MLR-100 Modified	5.23E-16	9.69E-16	9.72E-16	2.02E-15	uCi/ml	
11-07057-06	TRG	1001-562-1MA2 110420	04/20/11 13:17	7/8/2011	7/13/2011	2.90E+08	11-07057	Gross Beta	LANL MLR-100 Modified	1.55E-16	9.44E-16	9.44E-16	2.00E-15	uCi/ml	
11-07057-07	TRG	1001-562-1MA2 110427	04/27/11 08:58	7/8/2011	7/13/2011	2.84E+08	11-07057	Gross Beta	LANL MLR-100 Modified	1.19E-15	1.09E-15	1.10E-15	2.19E-15	uCi/ml	
11-07057-08	TRG	1001-562-1MA2 110504	05/04/11 09:01	7/8/2011	7/13/2011	2.83E+08	11-07057	Gross Beta	LANL MLR-100 Modified	-3.32E-16	8.94E-16	8.95E-16	1.96E-15	uCi/ml	
11-07057-09	TRG	1001-562-1MA2 110511	05/11/11 09:38	7/8/2011	7/13/2011	2.89E+08	11-07057	Gross Beta	LANL MLR-100 Modified	6.28E-16	1.08E-15	1.09E-15	2.25E-15	uCi/ml	
11-07057-10	TRG	1001-562-1MA2 110518	05/18/11 08:32	7/8/2011	7/13/2011	2.69E+08	11-07057	Gross Beta	LANL MLR-100 Modified	0.00E+00	1.01E-15	1.01E-15	2.17E-15	uCi/ml	
11-07057-11	TRG	1001-562-1MA2 110525	05/25/11 10:15	7/8/2011	7/13/2011	2.93E+08	11-07057	Gross Beta	LANL MLR-100 Modified	7.70E-17	7.64E-16	7.64E-16	1.64E-15	uCi/ml	
11-07057-12	TRG	1001-562-1MA2 110601	06/01/11 10:14	7/8/2011	7/13/2011	2.94E+08	11-07057	Gross Beta	LANL MLR-100 Modified	-5.47E-16	8.77E-16	8.80E-16	1.94E-15	uCi/ml	
11-07057-13	TRG	1001-562-1MA2 110608	06/08/11 12:50	7/8/2011	7/13/2011	3.08E+08	11-07057	Gross Beta	LANL MLR-100 Modified	-4.82E-16	8.62E-16	8.64E-16	1.91E-15	uCi/ml	
11-07057-14	TRG	1001-562-1MA2 110615	06/15/11 08:50	7/8/2011	7/13/2011	2.94E+08	11-07057	Gross Beta	LANL MLR-100 Modified	3.74E-16	9.35E-16	9.36E-16	1.96E-15	uCi/ml	
11-07057-15	TRG	1001-562-1MA2 110622	06/22/11 09:55	7/8/2011	7/13/2011	3.04E+08	11-07057	Gross Beta	LANL MLR-100 Modified	-4.95E-17	7.29E-16	7.29E-16	1.58E-15	uCi/ml	
11-07057-16	TRG	1001-562-1MA2 110629	06/29/11 08:39	7/8/2011	7/13/2011	2.86E+08	11-07057	Gross Beta	LANL MLR-100 Modified	-6.96E-16	8.94E-16	8.99E-16	2.00E-15	uCi/ml	

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:					
			Wes Terry						SDG:	11-07058				
			URENCO USA						Purchase Order:	LES-GSA-3080				
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL				
			Eunice, NM 88231						Sample Matrix:	AF				
Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Volume (ml)	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-07058-01	LCS	KNOWN	07/11/11 00:00	7/8/2011	7/13/2011		11-07058	Gross Alpha	LANL MLR-100 Modified	3.15E-04	1.36E-05			uCi/ml
11-07058-01	LCS	SPIKE	07/11/11 00:00	7/8/2011	7/13/2011		11-07058	Gross Alpha	LANL MLR-100 Modified	2.47E-04	3.46E-06	2.72E-05	1.82E-07	uCi/ml
11-07058-02	MBL	BLANK	07/11/11 00:00	7/8/2011	7/13/2011		11-07058	Gross Alpha	LANL MLR-100 Modified	-1.76E-16	3.45E-16	3.46E-16	9.28E-16	uCi/ml
11-07058-03	DUP	1001-562-1MA1 110406	04/06/11 09:08	7/8/2011	7/13/2011	2.88E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-9.08E-17	2.18E-16	2.18E-16	6.53E-16	uCi/ml
11-07058-04	DO	1001-562-1MA1 110406	04/06/11 09:08	7/8/2011	7/13/2011	2.88E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-6.94E-16	3.74E-16	3.81E-16	1.19E-15	uCi/ml
11-07058-05	TRG	1001-562-1MA1 110413	04/13/11 14:45	7/8/2011	7/13/2011	3.14E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-1.70E-16	3.32E-16	3.33E-16	8.91E-16	uCi/ml
11-07058-06	TRG	1001-562-1MA1 110420	04/20/11 13:19	7/8/2011	7/13/2011	3.00E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	1.32E-16	2.87E-16	2.87E-16	6.35E-16	uCi/ml
11-07058-07	TRG	1001-562-1MA1 110427	04/27/11 08:56	7/8/2011	7/13/2011	2.96E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-9.05E-17	2.17E-16	2.17E-16	6.51E-16	uCi/ml
11-07058-08	TRG	1001-562-1MA1 110504	05/04/11 09:03	7/8/2011	7/13/2011	3.12E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-5.92E-16	3.89E-16	3.94E-16	1.15E-15	uCi/ml
11-07058-09	TRG	1001-562-1MA1 110511	05/11/11 09:37	7/8/2011	7/13/2011	2.87E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-1.38E-16	3.25E-16	3.25E-16	8.79E-16	uCi/ml
11-07058-10	TRG	1001-562-1MA1 110518	05/18/11 08:33	7/8/2011	7/13/2011	2.93E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	1.79E-16	3.04E-16	3.05E-16	6.46E-16	uCi/ml
11-07058-11	TRG	1001-562-1MA1 110525	05/25/11 10:16	7/8/2011	7/13/2011	2.83E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-1.37E-16	2.00E-16	2.00E-16	6.56E-16	uCi/ml
11-07058-12	TRG	1001-562-1MA1 110601	06/01/11 10:17	7/8/2011	7/13/2011	2.94E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	2.30E-16	2.70E-16	2.71E-16	5.08E-16	uCi/ml
11-07058-13	TRG	1001-562-1MA1 110608	06/08/11 09:10	7/8/2011	7/13/2011	2.93E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	1.76E-16	2.43E-16	2.44E-16	4.85E-16	uCi/ml
11-07058-14	TRG	1001-562-1MA1 110615	06/15/11 08:52	7/8/2011	7/13/2011	2.78E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-2.80E-16	2.89E-16	2.91E-16	8.92E-16	uCi/ml
11-07058-15	TRG	1001-562-1MA1 110622	06/22/11 09:58	7/8/2011	7/13/2011	2.92E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-4.43E-17	3.37E-16	3.37E-16	8.48E-16	uCi/ml
11-07058-16	TRG	1001-562-1MA1 110629	06/29/11 08:37	7/8/2011	7/13/2011	2.86E+08	11-07058	Gross Alpha	LANL MLR-100 Modified	-4.05E-16	3.85E-16	3.87E-16	1.10E-15	uCi/ml
11-07058-01	LCS	KNOWN	07/11/11 00:00	7/8/2011	7/13/2011		11-07058	Gross Beta	LANL MLR-100 Modified	2.32E-04	6.95E-06			uCi/ml
11-07058-01	LCS	SPIKE	07/11/11 00:00	7/8/2011	7/13/2011		11-07058	Gross Beta	LANL MLR-100 Modified	2.40E-04	2.84E-06	3.33E-05	5.97E-07	uCi/ml
11-07058-02	MBL	BLANK	07/11/11 00:00	7/8/2011	7/13/2011		11-07058	Gross Beta	LANL MLR-100 Modified	-7.94E-16	9.75E-16	9.82E-16	2.17E-15	uCi/ml
11-07058-03	DUP	1001-562-1MA1 110406	04/06/11 09:08	7/8/2011	7/13/2011	2.88E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-2.46E-16	8.69E-16	8.70E-16	1.90E-15	uCi/ml
11-07058-04	DO	1001-562-1MA1 110406	04/06/11 09:08	7/8/2011	7/13/2011	2.88E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-2.67E-16	9.03E-16	9.03E-16	1.97E-15	uCi/ml
11-07058-05	TRG	1001-562-1MA1 110413	04/13/11 14:45	7/8/2011	7/13/2011	3.14E+08	11-07058	Gross Beta	LANL MLR-100 Modified	4.72E-16	7.89E-16	7.92E-16	1.64E-15	uCi/ml
11-07058-06	TRG	1001-562-1MA1 110420	04/20/11 13:19	7/8/2011	7/13/2011	3.00E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-3.57E-16	8.63E-16	8.65E-16	1.89E-15	uCi/ml
11-07058-07	TRG	1001-562-1MA1 110427	04/27/11 08:56	7/8/2011	7/13/2011	2.96E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-1.62E-16	9.06E-16	9.06E-16	1.96E-15	uCi/ml
11-07058-08	TRG	1001-562-1MA1 110504	05/04/11 09:03	7/8/2011	7/13/2011	3.12E+08	11-07058	Gross Beta	LANL MLR-100 Modified	2.71E-15	9.66E-16	1.04E-15	1.76E-15	uCi/ml
11-07058-09	TRG	1001-562-1MA1 110511	05/11/11 09:37	7/8/2011	7/13/2011	2.87E+08	11-07058	Gross Beta	LANL MLR-100 Modified	1.37E-16	9.44E-16	9.44E-16	2.01E-15	uCi/ml
11-07058-10	TRG	1001-562-1MA1 110518	05/18/11 08:33	7/8/2011	7/13/2011	2.93E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-1.01E-15	8.75E-16	8.86E-16	2.01E-15	uCi/ml
11-07058-11	TRG	1001-562-1MA1 110525	05/25/11 10:16	7/8/2011	7/13/2011	2.83E+08	11-07058	Gross Beta	LANL MLR-100 Modified	7.99E-16	9.49E-16	9.55E-16	1.94E-15	uCi/ml
11-07058-12	TRG	1001-562-1MA1 110601	06/01/11 10:17	7/8/2011	7/13/2011	2.94E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-5.78E-16	8.95E-16	8.98E-16	1.98E-15	uCi/ml
11-07058-13	TRG	1001-562-1MA1 110608	06/08/11 09:10	7/8/2011	7/13/2011	2.93E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-1.03E-16	8.34E-16	8.34E-16	1.80E-15	uCi/ml
11-07058-14	TRG	1001-562-1MA1 110615	06/15/11 08:52	7/8/2011	7/13/2011	2.78E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-2.78E-16	1.00E-15	1.00E-15	2.17E-15	uCi/ml
11-07058-15	TRG	1001-562-1MA1 110622	06/22/11 09:58	7/8/2011	7/13/2011	2.92E+08	11-07058	Gross Beta	LANL MLR-100 Modified	3.35E-16	7.83E-16	7.85E-16	1.64E-15	uCi/ml
11-07058-16	TRG	1001-562-1MA1 110629	06/29/11 08:37	7/8/2011	7/13/2011	2.86E+08	11-07058	Gross Beta	LANL MLR-100 Modified	-4.02E-16	9.11E-16	9.13E-16	2.00E-15	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:					
			Wes Terry						SDG:	11-07060				
			URENCO USA						Purchase Order:	LES-GSA-3080				
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL				
			Eunice, NM 88231						Sample Matrix:	AF				
Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Volume (ml)	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-07060-01	LCS	KNOWN	07/11/11 00:00	7/8/2011	7/13/2011		11-07060	Gross Alpha	LANL MLR-100 Modified	3.13E-04	1.35E-05			uCi/ml
11-07060-01	LCS	SPIKE	07/11/11 00:00	7/8/2011	7/13/2011		11-07060	Gross Alpha	LANL MLR-100 Modified	2.55E-04	3.52E-06	2.81E-05	2.42E-07	uCi/ml
11-07060-02	MBL	BLANK	07/11/11 00:00	7/8/2011	7/13/2011		11-07060	Gross Alpha	LANL MLR-100 Modified	-3.12E-16	4.00E-16	4.02E-16	1.08E-15	uCi/ml
11-07060-03	DUP	1300-562-1MA1 110406	04/06/11 10:08	7/8/2011	7/13/2011	2.80E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-1.90E-16	4.16E-16	4.16E-16	1.08E-15	uCi/ml
11-07060-04	DO	1300-562-1MA1 110406	04/06/11 10:08	7/8/2011	7/13/2011	2.80E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-2.71E-16	2.80E-16	2.82E-16	8.64E-16	uCi/ml
11-07060-05	TRG	1300-562-1MA1 110413	04/13/11 10:02	7/8/2011	7/13/2011	2.80E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-4.01E-16	3.81E-16	3.83E-16	1.08E-15	uCi/ml
11-07060-06	TRG	1300-562-1MA1 110420	04/20/11 09:36	7/8/2011	7/13/2011	2.82E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-3.77E-16	3.69E-16	3.72E-16	1.07E-15	uCi/ml
11-07060-07	TRG	1300-562-1MA1 110427	04/27/11 10:00	7/8/2011	7/13/2011	2.58E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	1.04E-16	2.49E-16	2.49E-16	5.73E-16	uCi/ml
11-07060-08	TRG	1300-562-1MA1 110504	05/04/11 14:29	7/8/2011	7/13/2011	2.87E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-3.63E-16	3.08E-16	3.10E-16	9.53E-16	uCi/ml
11-07060-09	TRG	1300-562-1MA1 110511	05/11/11 09:43	7/8/2011	7/13/2011	2.51E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	0.00E+00	2.14E-16	2.14E-16	6.04E-16	uCi/ml
11-07060-10	TRG	1300-562-1MA1 110518	05/18/11 09:56	7/8/2011	7/13/2011	2.75E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-4.59E-17	2.38E-16	2.38E-16	6.60E-16	uCi/ml
11-07060-11	TRG	1300-562-1MA1 110525	05/25/11 10:07	7/8/2011	7/13/2011	2.81E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-1.84E-16	3.61E-16	3.61E-16	9.67E-16	uCi/ml
11-07060-12	TRG	1300-562-1MA1 110601	06/01/11 10:07	7/8/2011	7/13/2011	2.75E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-4.75E-17	2.46E-16	2.47E-16	6.84E-16	uCi/ml
11-07060-13	TRG	1300-562-1MA1 110608	06/08/11 08:44	7/8/2011	7/13/2011	2.34E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-5.12E-16	3.70E-16	3.74E-16	1.20E-15	uCi/ml
11-07060-14	TRG	1300-562-1MA1 110615	06/15/11 10:14	7/8/2011	7/13/2011	2.76E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	-4.80E-17	2.49E-16	2.49E-16	6.91E-16	uCi/ml
11-07060-15	TRG	1300-562-1MA1 110622	06/22/11 10:05	7/8/2011	7/13/2011	2.71E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	9.88E-17	3.06E-16	3.06E-16	7.11E-16	uCi/ml
11-07060-16	TRG	1300-562-1MA1 110629	06/29/11 10:14	7/8/2011	7/13/2011	8.17E+07	11-07060	Gross Alpha	LANL MLR-100 Modified	-2.59E-15	1.42E-15	1.44E-15	4.39E-15	uCi/ml
11-07060-17	TRG	11-226 110623	06/23/11 13:11	7/8/2011	7/13/2011	5.66E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	6.76E-16	3.06E-16	3.15E-16	4.46E-16	uCi/ml
11-07060-18	TRG	11-232 110630	06/30/11 16:00	7/8/2011	7/13/2011	5.81E+08	11-07060	Gross Alpha	LANL MLR-100 Modified	2.94E-16	2.03E-16	2.06E-16	3.26E-16	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:					
			Wes Terry						SDG:	11-07060				
			URENCO USA						Purchase Order:	LES-GSA-3080				
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL				
			Eunice, NM 88231						Sample Matrix:	AF				
Lab ID	Sample Type	Client ID	Sample Date	Receipt Date	Analysis Date	Volume (ml)	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-07060-01	LCS	KNOWN	07/11/11 00:00	7/8/2011	7/13/2011		11-07060	Gross Beta	LANL MLR-100 Modified	2.30E-04	6.90E-06			uCi/ml
11-07060-01	LCS	SPIKE	07/11/11 00:00	7/8/2011	7/13/2011		11-07060	Gross Beta	LANL MLR-100 Modified	2.55E-04	2.97E-06	3.53E-05	5.65E-07	uCi/ml
11-07060-02	MBL	BLANK	07/11/11 00:00	7/8/2011	7/13/2011		11-07060	Gross Beta	LANL MLR-100 Modified	1.05E-15	1.02E-15	1.03E-15	2.07E-15	uCi/ml
11-07060-03	DUP	1300-562-1MA1 110406	04/06/11 10:08	7/8/2011	7/13/2011	2.80E+08	11-07060	Gross Beta	LANL MLR-100 Modified	2.86E-15	1.18E-15	1.24E-15	2.23E-15	uCi/ml
11-07060-04	DO	1300-562-1MA1 110406	04/06/11 10:08	7/8/2011	7/13/2011	2.80E+08	11-07060	Gross Beta	LANL MLR-100 Modified	1.29E-15	1.01E-15	1.03E-15	2.02E-15	uCi/ml
11-07060-05	TRG	1300-562-1MA1 110413	04/13/11 10:02	7/8/2011	7/13/2011	2.80E+08	11-07060	Gross Beta	LANL MLR-100 Modified	5.63E-16	9.99E-16	1.00E-15	2.07E-15	uCi/ml
11-07060-06	TRG	1300-562-1MA1 110420	04/20/11 09:36	7/8/2011	7/13/2011	2.82E+08	11-07060	Gross Beta	LANL MLR-100 Modified	3.09E-15	1.18E-15	1.26E-15	2.21E-15	uCi/ml
11-07060-07	TRG	1300-562-1MA1 110427	04/27/11 10:00	7/8/2011	7/13/2011	2.58E+08	11-07060	Gross Beta	LANL MLR-100 Modified	1.52E-16	1.01E-15	1.01E-15	2.15E-15	uCi/ml
11-07060-08	TRG	1300-562-1MA1 110504	05/04/11 14:29	7/8/2011	7/13/2011	2.87E+08	11-07060	Gross Beta	LANL MLR-100 Modified	6.05E-16	1.09E-15	1.09E-15	2.26E-15	uCi/ml
11-07060-09	TRG	1300-562-1MA1 110511	05/11/11 09:43	7/8/2011	7/13/2011	2.51E+08	11-07060	Gross Beta	LANL MLR-100 Modified	-2.54E-16	1.07E-15	1.07E-15	2.33E-15	uCi/ml
11-07060-10	TRG	1300-562-1MA1 110518	05/18/11 09:56	7/8/2011	7/13/2011	2.75E+08	11-07060	Gross Beta	LANL MLR-100 Modified	-8.97E-16	9.70E-16	9.78E-16	2.17E-15	uCi/ml
11-07060-11	TRG	1300-562-1MA1 110525	05/25/11 10:07	7/8/2011	7/13/2011	2.81E+08	11-07060	Gross Beta	LANL MLR-100 Modified	-1.24E-15	9.97E-16	1.01E-15	2.26E-15	uCi/ml
11-07060-12	TRG	1300-562-1MA1 110601	06/01/11 10:07	7/8/2011	7/13/2011	2.75E+08	11-07060	Gross Beta	LANL MLR-100 Modified	2.29E-16	9.40E-16	9.40E-16	1.99E-15	uCi/ml
11-07060-13	TRG	1300-562-1MA1 110608	06/08/11 08:44	7/8/2011	7/13/2011	2.34E+08	11-07060	Gross Beta	LANL MLR-100 Modified	9.66E-16	1.08E-15	1.09E-15	2.20E-15	uCi/ml
11-07060-14	TRG	1300-562-1MA1 110615	06/15/11 10:14	7/8/2011	7/13/2011	2.76E+08	11-07060	Gross Beta	LANL MLR-100 Modified	3.88E-16	9.82E-16	9.83E-16	2.06E-15	uCi/ml
11-07060-15	TRG	1300-562-1MA1 110622	06/22/11 10:05	7/8/2011	7/13/2011	2.71E+08	11-07060	Gross Beta	LANL MLR-100 Modified	-1.47E-16	9.91E-16	9.92E-16	2.14E-15	uCi/ml
11-07060-16	TRG	1300-562-1MA1 110629	06/29/11 10:14	7/8/2011	7/13/2011	8.17E+07	11-07060	Gross Beta	LANL MLR-100 Modified	1.12E-14	3.73E-15	4.04E-15	6.73E-15	uCi/ml
11-07060-17	TRG	11-226 110623	06/23/11 13:11	7/8/2011	7/13/2011	5.66E+08	11-07060	Gross Beta	LANL MLR-100 Modified	7.26E-15	7.87E-16	1.28E-15	1.02E-15	uCi/ml
11-07060-18	TRG	11-232 110630	06/30/11 16:00	7/8/2011	7/13/2011	5.81E+08	11-07060	Gross Beta	LANL MLR-100 Modified	6.44E-15	7.57E-16	1.17E-15	1.01E-15	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

Eberline Analytical Final Report of Analysis			Report To:						Work Order Details:					
			Wes Terry						SDG:	11-07111				
			URENCO USA						Purchase Order:	LES-GSA-3080				
			275 Hwy 176						Analysis Category:	ENVIRONMENTAL				
			Eunice, NM 88231						Sample Matrix:	AF				
Lab ID	Sample Type	Client ID	Sample Date	Recalpt Date	Analysis Date	Allquot	Batch ID	Analyte	Method	Result	CU	CSU	MDA	Report Units
11-07111-01	LCS	KNOWN	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-234	EML U-02 Modified	8.19E-06	2.95E-07			uCi/ml
11-07111-01	LCS	SPIKE	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-234	EML U-02 Modified	8.09E-06	1.40E-06	1.51E-06	9.99E-08	uCi/ml
11-07111-02	MBL	BLANK	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-234	EML U-02 Modified	1.21E-17	1.33E-17	1.34E-17	2.02E-17	uCi/ml
11-07111-03	DUP	1001-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	1.91E+09	11-07111	Uranium-234	EML U-02 Modified	9.62E-17	6.62E-17	6.65E-17	6.05E-17	uCi/ml
11-07111-04	DO	1001-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	1.91E+09	11-07111	Uranium-234	EML U-02 Modified	1.45E-16	7.49E-17	7.56E-17	5.44E-17	uCi/ml
11-07111-05	TRG	1001-562-1MA2 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	3.76E+09	11-07111	Uranium-234	EML U-02 Modified	1.53E-16	4.98E-17	5.10E-17	1.93E-17	uCi/ml
11-07111-06	TRG	1300-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	5.21E+09	11-07111	Uranium-234	EML U-02 Modified	1.63E-16	4.62E-17	4.76E-17	1.10E-17	uCi/ml
11-07111-01	LCS	SPIKE	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-235	EML U-02 Modified	5.98E-07	2.26E-07	2.30E-07	9.53E-08	uCi/ml
11-07111-02	MBL	BLANK	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-235	EML U-02 Modified	-1.83E-18	2.13E-18	2.14E-18	2.15E-17	uCi/ml
11-07111-03	DUP	1001-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	1.91E+09	11-07111	Uranium-235	EML U-02 Modified	3.33E-17	4.40E-17	4.41E-17	6.70E-17	uCi/ml
11-07111-04	DO	1001-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	1.91E+09	11-07111	Uranium-235	EML U-02 Modified	2.75E-17	3.65E-17	3.65E-17	5.55E-17	uCi/ml
11-07111-05	TRG	1001-562-1MA2 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	3.76E+09	11-07111	Uranium-235	EML U-02 Modified	1.59E-17	1.61E-17	1.61E-17	1.05E-17	uCi/ml
11-07111-06	TRG	1300-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	5.21E+09	11-07111	Uranium-235	EML U-02 Modified	1.33E-17	1.35E-17	1.36E-17	1.77E-17	uCi/ml
11-07111-01	LCS	KNOWN	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-238	EML U-02 Modified	7.98E-06	2.87E-07			uCi/ml
11-07111-01	LCS	SPIKE	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-238	EML U-02 Modified	8.23E-06	1.42E-06	1.53E-06	9.95E-08	uCi/ml
11-07111-02	MBL	BLANK	07/19/11 00:00	7/19/2011	7/25/2011		11-07111	Uranium-238	EML U-02 Modified	1.11E-17	1.18E-17	1.18E-17	1.33E-17	uCi/ml
11-07111-03	DUP	1001-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	1.91E+09	11-07111	Uranium-238	EML U-02 Modified	1.80E-16	9.04E-17	9.13E-17	4.61E-17	uCi/ml
11-07111-04	DO	1001-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	1.91E+09	11-07111	Uranium-238	EML U-02 Modified	1.11E-16	6.51E-17	6.56E-17	5.42E-17	uCi/ml
11-07111-05	TRG	1001-562-1MA2 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	3.76E+09	11-07111	Uranium-238	EML U-02 Modified	1.28E-16	4.51E-17	4.61E-17	2.36E-17	uCi/ml
11-07111-06	TRG	1300-562-1MA1 QTR2 2011	06/29/11 00:00	7/19/2011	7/25/2011	5.21E+09	11-07111	Uranium-238	EML U-02 Modified	1.62E-16	4.60E-17	4.74E-17	1.28E-17	uCi/ml

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original



EBERLINE
SERVICES

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URENCO
URENCO
SDG: 275972

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Urenco USA
Address : Andrews 275 Hwy 176

Eunice, New Mexico 88231

Report Date: April 26, 2011

Contact: Mr. Matthew Graves

Project: URENCO

Client Sample ID: LS1-Wastewater-041211-01

Project: UREN00111

Sample ID: 275972009

Client ID: UREN001

Matrix: Waste Water

Collect Date: 12-APR-11

Receive Date: 13-APR-11

Collector: Client

Parameter	Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis													
<i>Alphaspec U, Liquid "As Received"</i>													
Uranium-233/234		1.10E-09	+/-1.97E-10	9.76E-11	+/-2.48E-10	5.00E-11	uCi/mL		KXM4	04/23/11	1416	1094750	1
Uranium-235/236		4.36E-11	+/-4.27E-11	3.27E-11	+/-4.32E-11	5.00E-11	uCi/mL						
Uranium-238		6.53E-10	+/-1.53E-10	8.45E-11	+/-1.77E-10	5.00E-11	uCi/mL						

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, U-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"	1094750	96.0	(15%-125%)

Notes: