UniTech Services Group
A SUBSIDIARY OF UNIFIRST CORPORATION

Q-5

March 1, 2004

Mr. John D. Kinneman
Division of Nuclear Material Safety
U.S. Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

'04 MAR -3 P1:51
RECEIVED
REGION 1

RE: License No. 37-23341-01 Quarterly Report- 4th Quarter 2003

Dear Mr. Kinneman: 03020934

In accordance with condition #16 of the reference license, enclosed is the quarterly report for the third quarter, 2003.

If you have any questions or comments, please contact Glenn Roberts at our Royersford facility at (610) 948-9700, or me at (413) 543-6911 extension 27.

Sincerely,

John J. Wudyka
Radiation Protection Engineer/MIS

cc: Michael Fuller, Manager, HP&E
Glenn Roberts, Certified Health Physicist
Dan Neeley, Plant Manager/RSO UniTech Royersford

134612

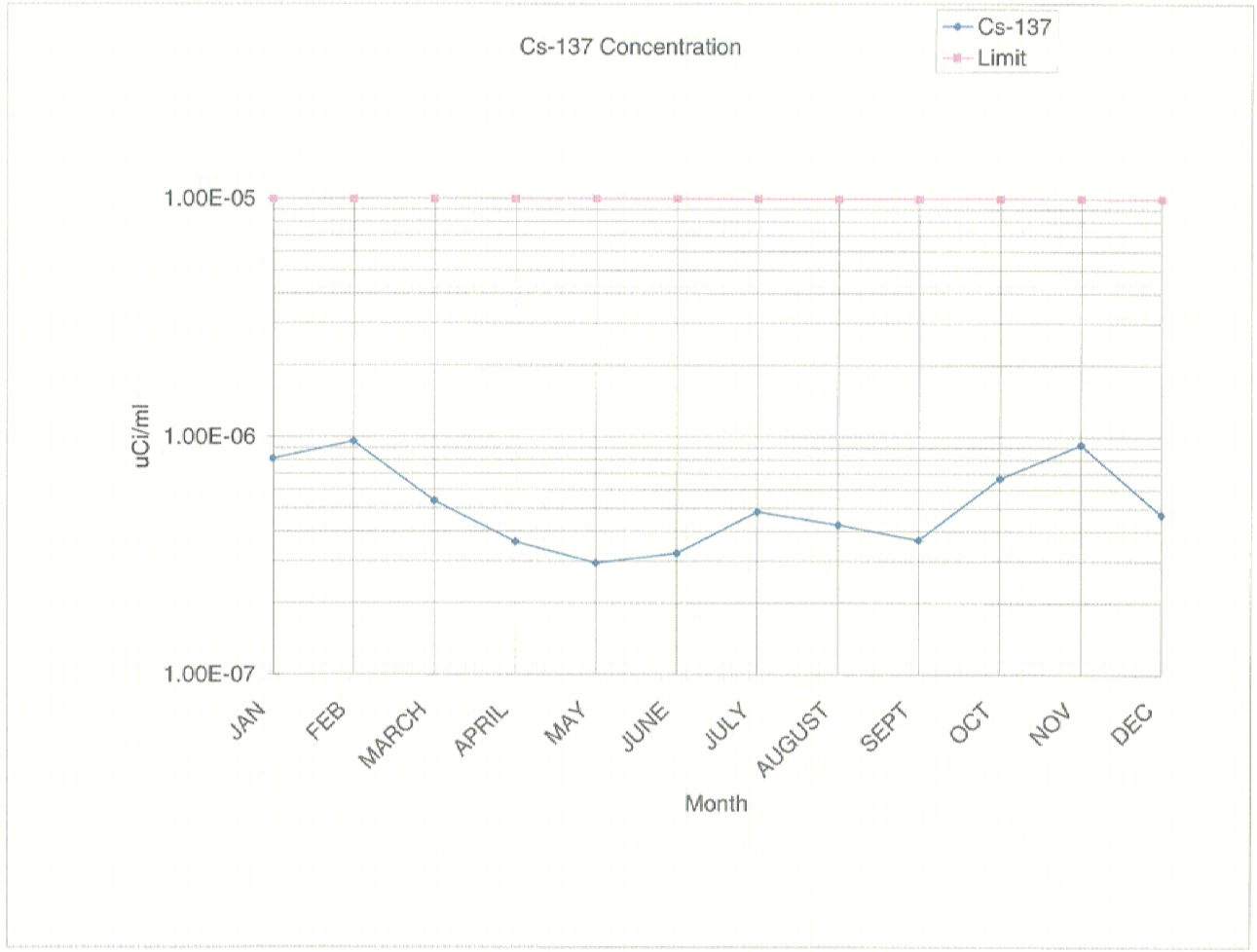
NMSS/RGNI MATERIALS-002

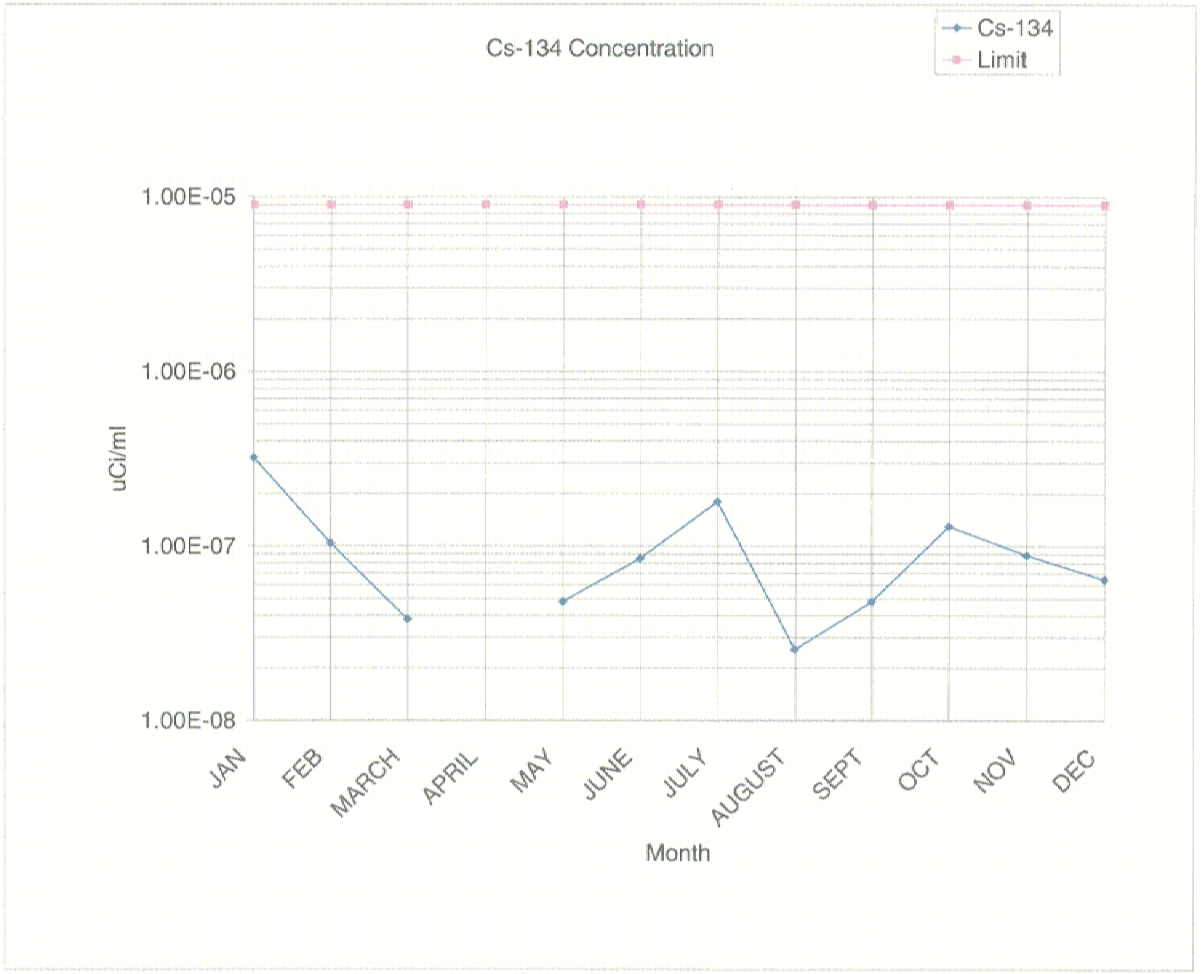
295 Parker Street • P.O. Box 51957 • Springfield, MA 01151 • tel: (413) 543-6911 • fax: (413) 543-6989 • e-mail: usg@u1st.com • http://www.u1st.com

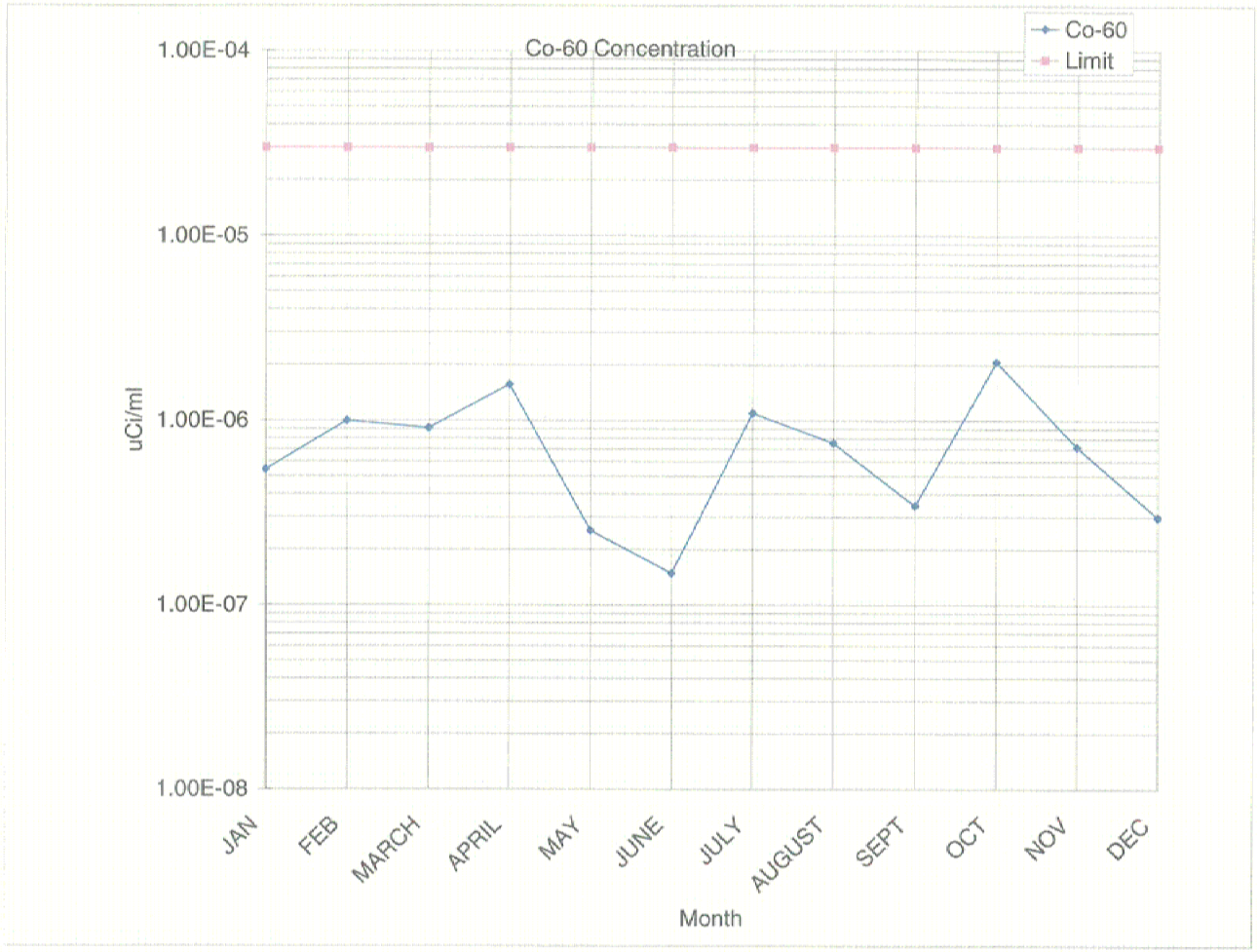
2003 - ROYERSFORD WASTEWATER DISCHARGE SUMMARY													
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC	**ANNUAL TOTALS**
GALLONS	330000	550000	1620000	1110000	460000	315000	380000	350000	795000	830000	565000	315000	7620000 **GALLONS**
H-3	7.53E-06	7.53E-06	7.53E-06	1.25E-05	1.25E-05	1.25E-05	<MDA	<MDA	<MDA	1.27E-05	1.27E-05	1.27E-05	
mCi H-3	9.4053465	15.6755775	46.171701	52.516875	21.76375	14.903438				39.897685	27.159268	15.141893	242.63553 **mCi H-3**
C-14	2.02E-06	2.02E-06	2.02E-06	2.29E-06	2.29E-06	2.29E-06	2.47E-06	2.47E-06	2.47E-06	2.56E-08	2.56E-08	2.56E-08	
mCi C-14	2.523081	4.205135	12.386034	9.6210915	3.987119	2.7303098	3.552601	3.2721325	7.4324153	0.0804237	0.0547462	0.0305222	49.875611 **mCi C-14**
K-40	3.05E-07				2.82E-07								
Cr-51			4.64E-07	2.91E-07						6.64E-07			7620000
Mn-54	3.68E-07	4.70E-07	6.02E-07	9.53E-07	1.41E-07	3.88E-08	5.69E-07	3.53E-07	9.66E-08	8.40E-07	3.10E-07	8.88E-08	
Mn-56													
Fe-55	8.66E-06	8.66E-06	8.66E-06	1.34E-05	1.34E-05	1.34E-05	6.82E-06	6.82E-06	6.82E-06	9.66E-06	9.66E-06	9.66E-06	
Fe-59							3.49E-08						
Co-57													
Co-58	2.57E-07	3.23E-07	4.12E-07	8.28E-07	2.63E-07	8.10E-08	4.60E-07	1.34E-07	1.15E-07	1.08E-06	9.21E-07	1.24E-07	
Co-60	5.42E-07	9.95E-07	9.10E-07	1.56E-06	2.53E-07	1.49E-07	1.10E-06	7.55E-07	3.46E-07	2.08E-06	7.19E-07	2.99E-07	
Ni-59													
Ni-63	7.27E-07	7.27E-07	7.27E-07	1.07E-06	1.07E-06	1.07E-06	2.89E-07	2.89E-07	2.89E-07	5.99E-07	5.99E-07	5.99E-07	
Zn-65	1.28E-07		6.89E-08				6.60E-08		5.66E-08	2.22E-07			
Sr-89													
Sr-90	2.31E-09	2.31E-09	2.31E-09	3.41E-09	3.41E-09	3.41E-09	9.40E-09	9.40E-09	9.40E-09	5.79E-09	5.79E-09	5.79E-09	
Zr-95				7.37E-08									
Nb-95			3.06E-08	1.59E-07			3.09E-08			1.24E-07			
Tc-99	3.46E-08	3.46E-08	3.46E-08	2.39E-07	2.39E-07	2.39E-07	2.23E-08	2.23E-08	2.23E-08	4.23E-08	4.23E-08	4.23E-08	
Ag-110m	2.66E-08						3.50E-08		4.85E-08		3.57E-08		
Sn-113													
Sb-125													
I-125													
I-129	1.14E-08	1.14E-08	1.14E-08	<MDA	<MDA	<MDA	2.07E-09	2.07E-09	2.07E-09	1.91E-08	1.91E-08	1.91E-08	
Cs-134	3.22E-07	1.04E-07	3.80E-08		4.80E-08	8.49E-08	1.80E-07	2.56E-08	4.81E-08	1.30E-07	8.88E-08	6.46E-08	
Cs-137	8.10E-07	9.57E-07	5.37E-07	3.62E-07	2.94E-07	3.23E-07	4.84E-07	4.26E-07	3.68E-07	6.68E-07	9.25E-07	4.71E-07	
Eu-152													
Eu-154													
Eu-155													
Pb-212													
Pb-214													
Ra-226					3.11E-09								
Ac-228													
Th-228	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	
Th-230	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	1.18E-09	
Th-231													
Th-232	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	
Th-234	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	4.06E-07	
U-234	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	1.19E-09	
U-235	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	3.44E-10	
U-235gs													
U-236													
U-238	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	4.36E-10	
Pu-238	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	1.98E-10	
Pu-239	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	
Pu-241	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	
Np-237	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	
Am-241	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	2.83E-10	
Cm-244	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	2.88E-10	
CONC.	1.26E-05	1.27E-05	1.29E-05	1.94E-05	1.64E-05	1.58E-05	1.05E-05	9.25E-06	8.63E-06	1.65E-05	1.37E-05	1.18E-05	
ACTIVITY	15.741963	26.4245458	79.136143	81.300194	28.564534	18.836418	15.112461	12.248968	25.968856	51.967234	29.374157	14.048313	398.72379 **mCi AORN**

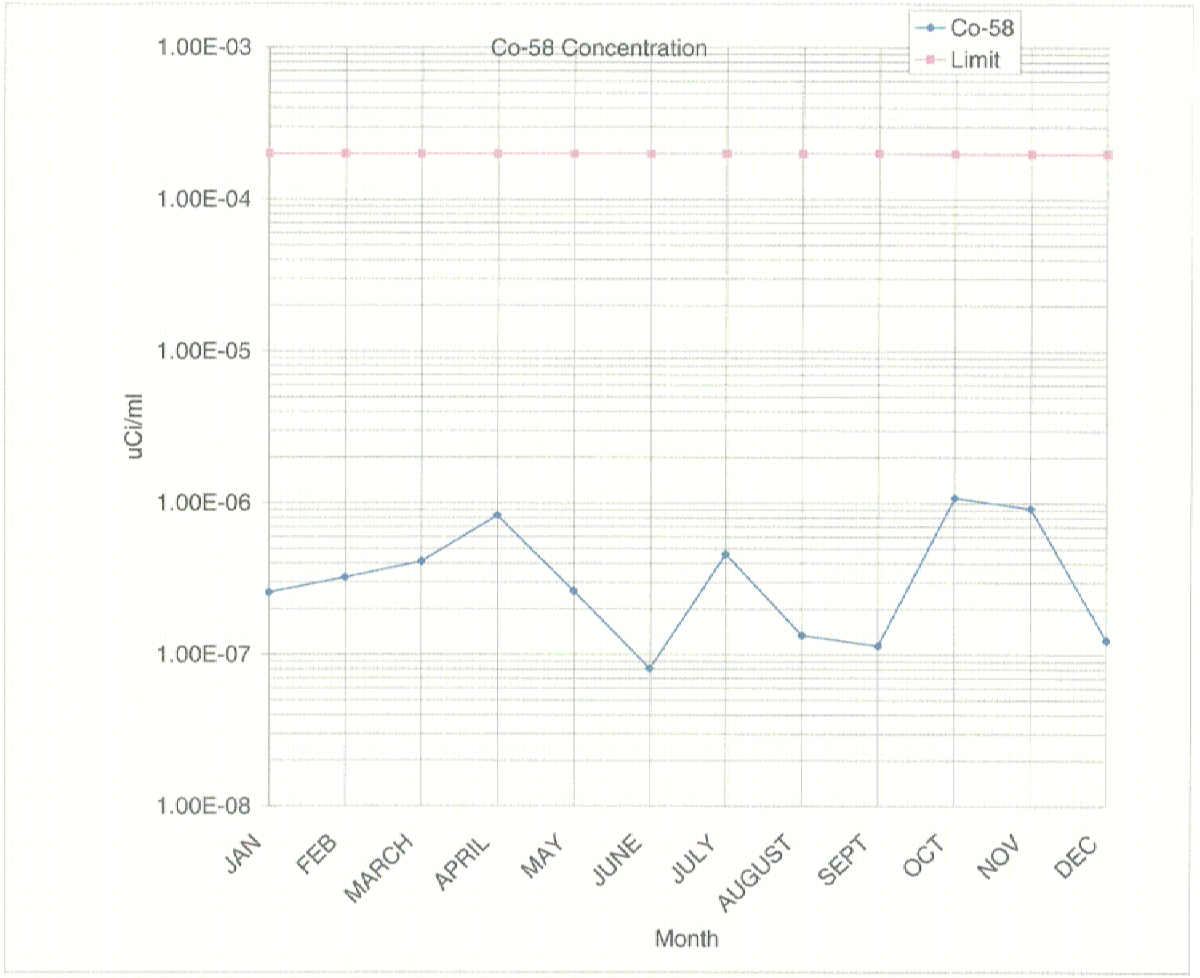
Notes: CONC. is total concentration for all nuclides except H-3 and C-14.
All concentrations are in uCi/ml. All activities are in mCi.
NF - Not found in gamma spectra search
<MDA - Less than minimum dection limit for analytical method.
AORN - All other radionuclides (except for H-3 and C-14)
ND - No Data
*Sr-89/90 analyzed and reported as total Sr unless > 50 pCi/L. Conservatively assigned to Sr-90

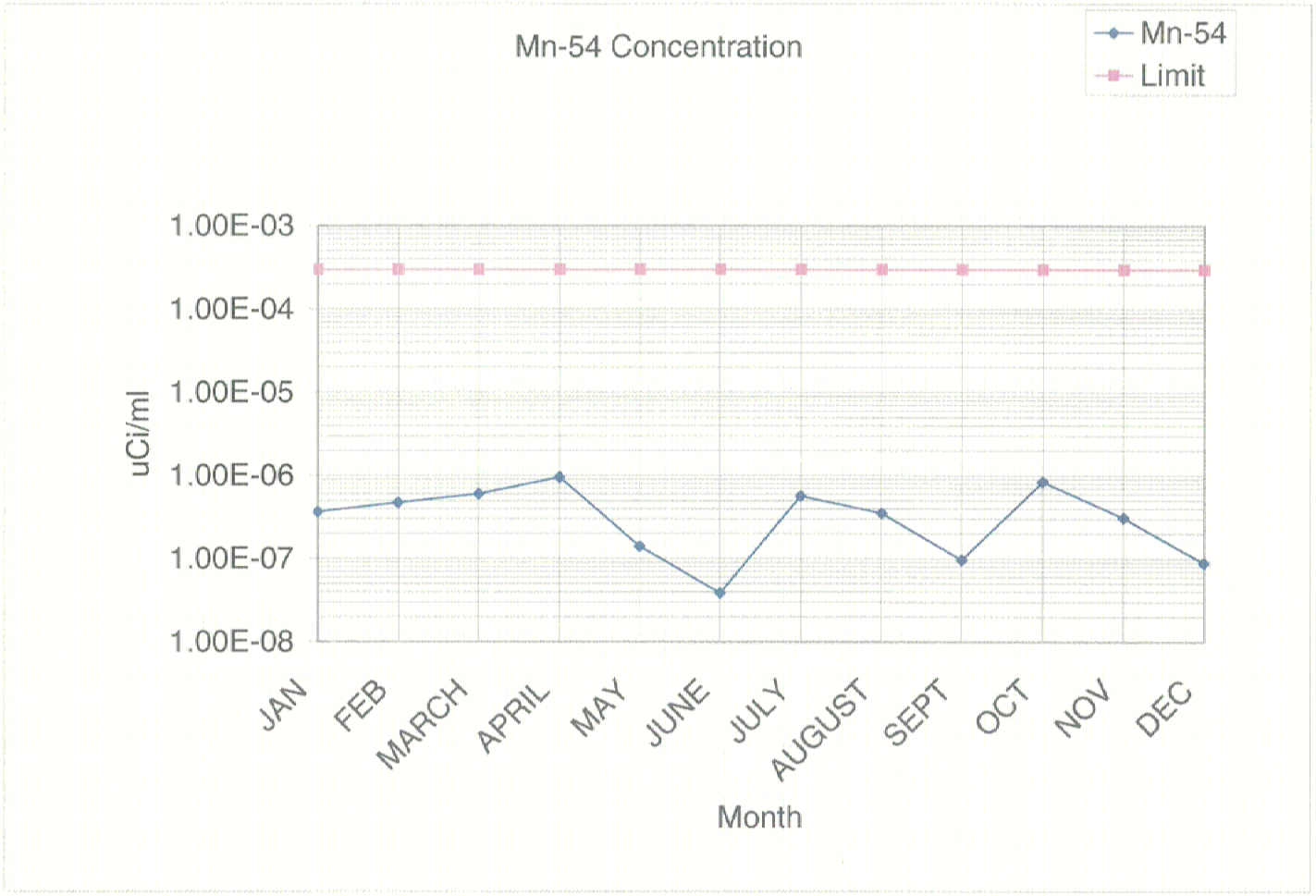
079 - ROYERSFORD RATIOS OF DISCHARGES TO LIMITS													
	LIMIT	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
H-3	1.0E-02	0.00075	0.00075	0.00075	0.00125	0.00125	0.00125				0.00127	0.00127	0.00127
C-14	3.0E-04	0.00673	0.00673	0.00673	0.00763	0.00763	0.00763	0.00823	0.00823	0.00823	0.00009	0.00009	0.00009
K-40	4.0E-05	0.00764				0.00705							
Cr-51	5.0E-03			0.00009	0.00006						0.00013		
Mn-54	3.0E-04	0.00123	0.00157	0.00201	0.00318	0.00047	0.00013	0.00190	0.00118	0.00032	0.00280	0.00103	0.00030
Mn-56	7.0E-04												
Fe-55	1.0E-03	0.00866	0.00866	0.00866	0.01340	0.01340	0.01340	0.00682	0.00682	0.00682	0.00966	0.00966	0.00966
Fe-59	1.0E-04							0.00035					
Co-57	6.0E-04												
Co-58	2.0E-04	0.00129	0.00161	0.00206	0.00414	0.00131	0.00040	0.00230	0.00067	0.00057	0.00541	0.00460	0.00062
Co-60	3.0E-05	0.01805	0.03317	0.03032	0.05210	0.00844	0.00496	0.03653	0.02517	0.01153	0.06927	0.02397	0.00996
Ni-59	3.0E-03												
Ni-63	1.0E-03	0.00073	0.00073	0.00073	0.00107	0.00107	0.00107	0.00029	0.00029	0.00029	0.00060	0.00060	0.00060
Zn-65	5.0E-05	0.00257		0.00138				0.00132		0.00113	0.00443		
Sr-89	8.0E-05												
Sr-90	5.0E-06	0.00046	0.00046	0.00046	0.00068	0.00068	0.00068	0.00188	0.00188	0.00188	0.00116	0.00116	0.00116
Zr-95	2.0E-04				0.00037								
Nb-95	3.0E-04			0.00010	0.00053			0.00010			0.00041		
Tc-99	6.0E-04	0.00006	0.00006	0.00006	0.00040	0.00040	0.00040	0.00004	0.00004	0.00004	0.00007	0.00007	0.00007
Ag-110m	6.0E-05	0.00044						0.00058		0.00081		0.00059	
Sn-113	3.0E-05												
Sb-125	3.0E-04												
I-125	2.0E-05												
I-129	2.0E-06	0.00570	0.00570	0.00570				0.00104	0.00104	0.00104	0.00955	0.00955	0.00955
Cs-134	9.0E-06	0.03578	0.01156	0.00422		0.00533	0.00944	0.01997	0.00284	0.00535	0.01443	0.00987	0.00717
Cs-137	1.0E-05	0.08096	0.09566	0.05368	0.03616	0.02944	0.03234	0.04837	0.04263	0.03680	0.06683	0.09253	0.04705
Eu-152	1.0E-04												
Eu-154	7.0E-05												
Eu-155	5.0E-04												
Pb-212	2.0E-06												
Bi-214	3.0E-03												
Ra-226	6.0E-07					0.00518							
Ac-228	2.0E-05												
Th-228	2.0E-06												
Th-230	1.0E-06	0.00118	0.00118	0.00118	0.00118	0.00118	0.00118	0.00118	0.00118	0.00118	0.00118	0.00118	0.00118
Th-231	5.0E-04												
Th-232	5.0E-05												
Th-234	5.0E-05	0.00811	0.00811	0.00811	0.00811	0.00811	0.00811	0.00811	0.00811	0.00811	0.00811	0.00811	0.00811
U-234	3.0E-06	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040	0.00040
U-235	3.0E-06	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
U-235	3.0E-06												
U-236	3.0E-06												
U-238	3.0E-06	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
Pu-238	2.0E-07	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099
Pu-239	2.0E-07												
Pu-241	1.0E-05												
Np-237	2.0E-07												
Am-241	2.0E-07	0.00142	0.00142	0.00142	0.00142	0.00142	0.00142	0.00142	0.00142	0.00142	0.00142	0.00142	0.00142
Cm-244	3.0E-07	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096
	1.00	0.18435	0.17997	0.13026	0.13428	0.09497	0.08502	0.14303	0.10409	0.08811	0.19942	0.16831	0.10081

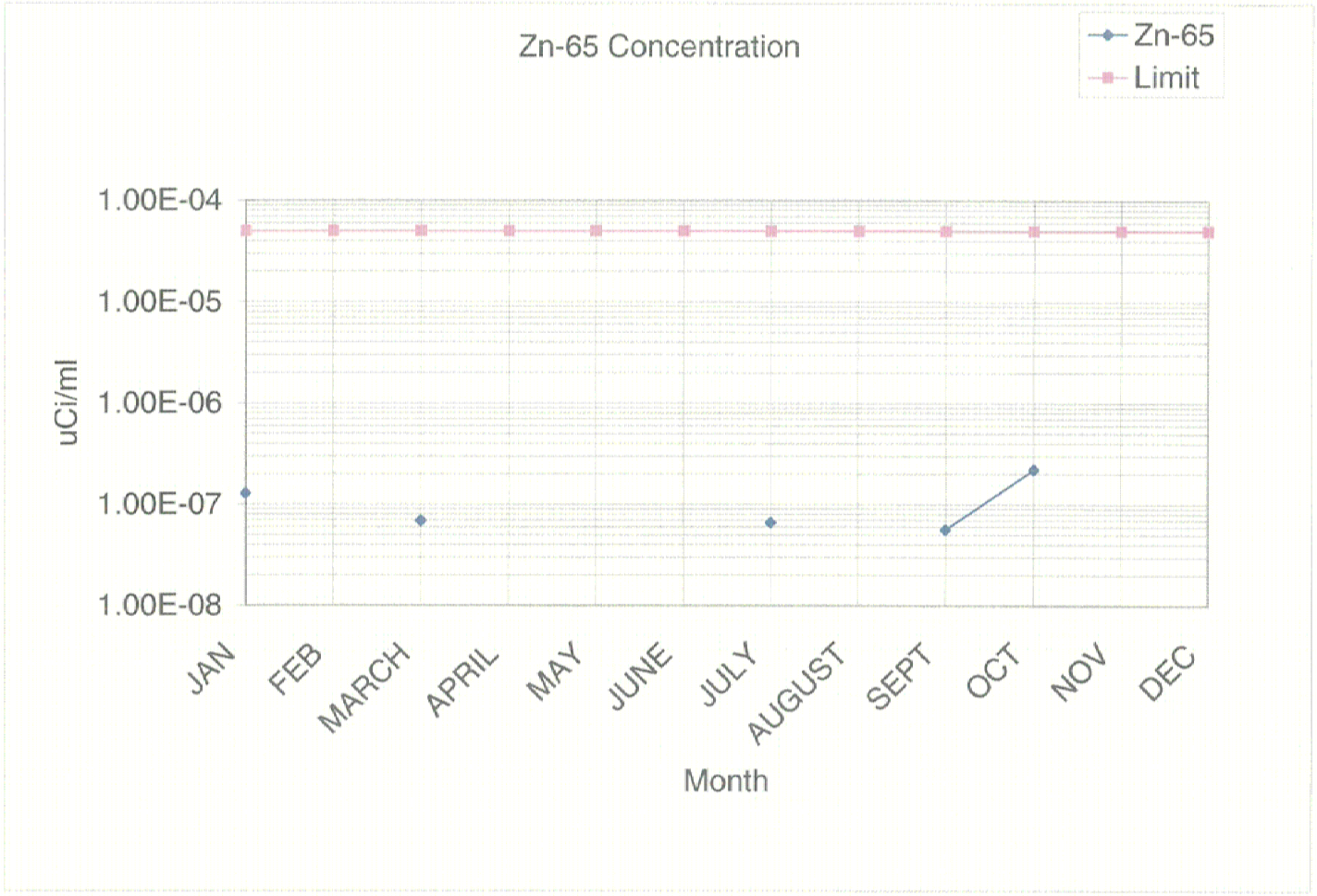

Cs-137 Concentration
Cs-137
Limit
1.00E-05
1.00E-06
1.00E-07
uCi/ml
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
Month


Cs-134 Concentration
Cs-134
Limit
1.00E-05
1.00E-06
1.00E-07
1.00E-08
uCi/ml
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
Month


Co-60 Concentration
Co-60
Limit
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
uCi/ml
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
Month


Co-58 Concentration
Co-58
Limit
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
uCi/ml
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
Month


Mn-54 Concentration
Mn-54
Limit
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
uCi/ml
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
Month


Zn-65 Concentration
Zn-65
Limit
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
uCi/ml
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
Month

This is to acknowledge the receipt of your letter/application dated

3/1/2004, and to inform you that the initial processing which includes an administrative review has been performed.

☑ NOTIFICATION 4th QTR 2003 REGRT- 37-23341-01
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 134612.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader

	:	(FOR LFMS USE)
	:	INFORMATION FROM LTS
BETWEEN:	:	----------
	:	
License Fee Management Branch, ARM	:	Program Code: 03218
and	:	Status Code: 0
Regional Licensing Sections	:	Fee Category: 6A
	:	Exp. Date: 20050831
	:	Fee Comments: CALIBRATION IS FOR THEM
	:	Decom Fin Assur Reqd: Y
	::	

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
   Applicant/Licensee: UNITECH SERVICES GROUP, INC.
   Received Date: 20040303
   Docket No: 3020934
   Control No.: 134612
   License No.: 37-23341-01
   Action Type: Notifications

2. FEE ATTACHED
   Amount: ____/____
   Check No.: ____/____

3. COMMENTS

Signed M. A. Perkins
Date 3/3/2004

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
   Amendment _____
   Renewal _____
   License _____

3. OTHER _____
   _____

Signed _____
Date _____