



A SUBSIDIARY OF UNIFIRST CORPORATION

RECEIVED
REGION 1

03020934

2002 AUG 14 PM 1:02

August 12, 2002

Mr. John D. Kinneman
Chief, Nuclear Material Safety Branch 2
Division of Nuclear Material Safety
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

RE: License No. 37-23341-01 Quarterly Report- 2nd Quarter 2002

Dear Mr. Kinneman:

In accordance with condition No. 16 of the referenced license, enclosed is the quarterly report for the second quarter 2002.

If you have any questions or comments, please contact Michael Fuller, Manager, Health Physics & Engineering or me at (413) 543-6911, extensions 25 and 27, respectively.

Sincerely,

William Stevenson, Radiation Protection Engineer
UniTech Services Group

cc: M. Fuller, Manager Health Physics and Engineering
Dan Neely, Plant Manager/RSO, UniTech Royersford



131948

NMSS/RGNI MATERIALS-002

45

2002 - ROYERSFORD WASTEWATER DISCHARGE SUMMARY												
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
GALLONS	612000	552500	1285000	855000	670000	455000						
H-3	7.69E-06	7.69E-06	7.69E-06	7.45E-06	7.45E-06	7.45E-06						
mCi H-3	17.8132698	16.0814241	37.402045	24.109504	18.8928275	12.8302038						
C-14	3.66E-06	3.66E-06	3.66E-06	3.46E-06	3.46E-06	3.46E-06						
mCi C-14	8.4780972	7.65383775	17.801234	11.197166	8.774387	5.9587255						
K-40		2.42E-07			2.30E-07							
Cr-51		8.32E-07	2.75E-07									
Mn-54	1.15E-06	6.91E-07	7.13E-07	3.92E-07	1.30E-07	1.51E-07						
Fe-55	9.48E-06	9.48E-06	9.48E-06	4.33E-06	4.33E-06	4.33E-06						
Fe-59					3.50E-08							
Co-57												
Co-58	1.34E-06	7.16E-07	3.45E-07	4.87E-07	2.25E-07	1.28E-07						
Co-60	2.38E-06	1.09E-06	8.85E-07	5.82E-07	3.83E-07	4.36E-07						
Ni-63	5.92E-07	5.92E-07	5.92E-07	7.00E-07	7.00E-07	7.00E-07						
Zn-65												
Sr-89												
Sr-90	7.14E-09	7.14E-09	7.14E-09	2.79E-09	2.79E-09	2.79E-09						
Zr-95			3.57E-08									
Nb-95	8.45E-08	3.22E-08	3.89E-08	7.73E-08	7.89E-08	3.70E-08						
Tc-99	1.05E-07	1.05E-07	1.05E-07	4.17E-08	4.17E-08	4.17E-08						
Ag-110m	8.49E-08											
Sn-113						2.14E-08						
Sb-125												
I-125												
I-129	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA						
Cs-134	8.11E-08	6.96E-08	6.31E-08	1.62E-07	5.13E-08	2.75E-08						
Cs-137	9.23E-07	6.62E-07	1.33E-06	1.10E-06	7.01E-07	6.86E-07						
Eu-152												
Eu-154												
Pb-212												
Ra-226												
Th-228												
Th-230												
Th-232												
Th-234		3.79E-07			3.18E-07	3.80E-07						
U-234												
U-235												
U-238												
Pu-238												
Pu-239												
Np-237												
Am-241												
Cm-244												
CONC.	1.62E-05	1.49E-05	1.39E-05	7.87E-06	7.23E-06	6.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ACTIVITY	37.5844009	31.1577906	67.461763	25.480639	18.3249522	11.9555455	0	0	0	0	0	0

ANNUAL TOTALS
4429500 GALLONS

127.12927 mCi H-3

59.863446 mCi C-14

191.96509 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

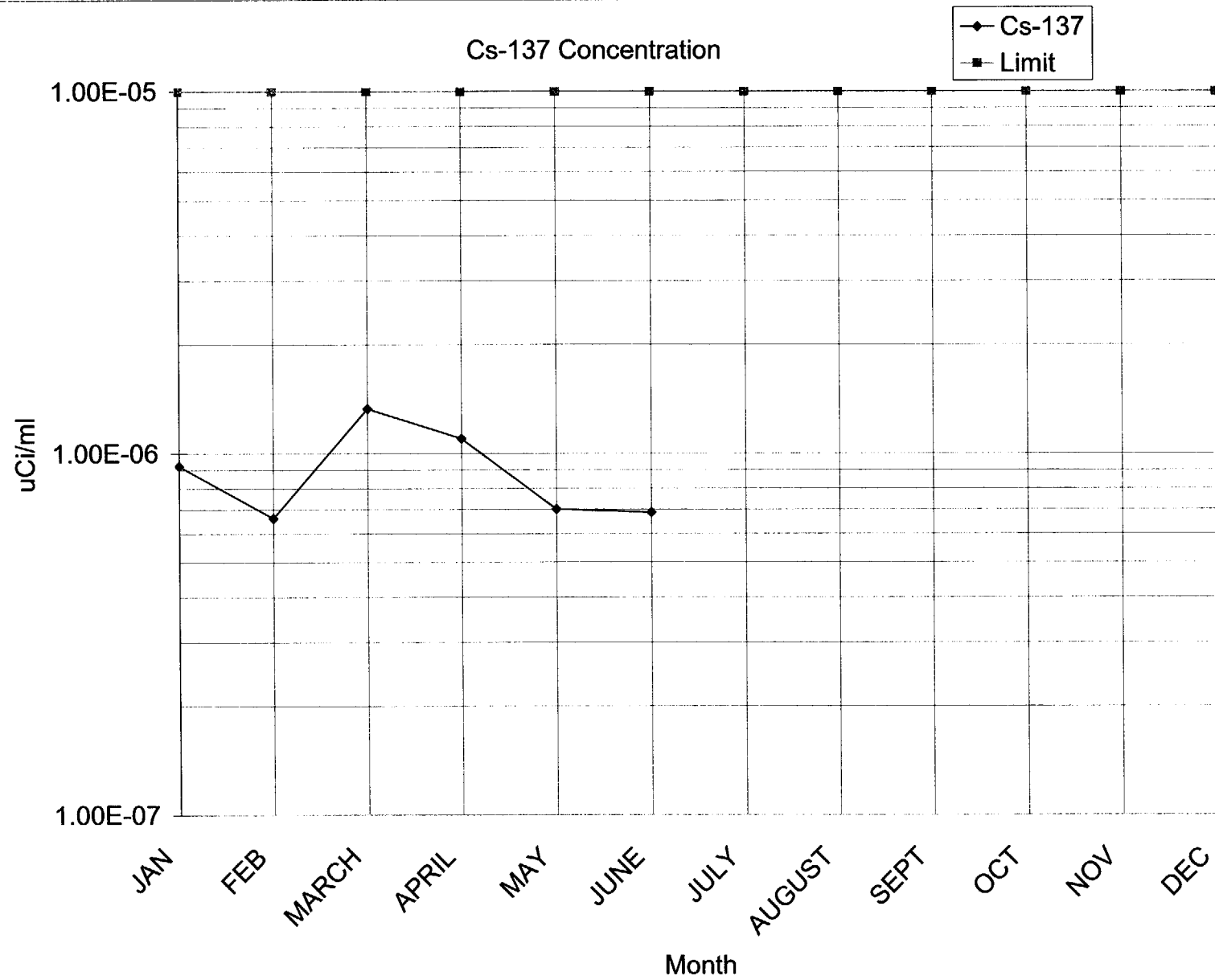
<MDA - Less than minimum detection limit for analytical method.

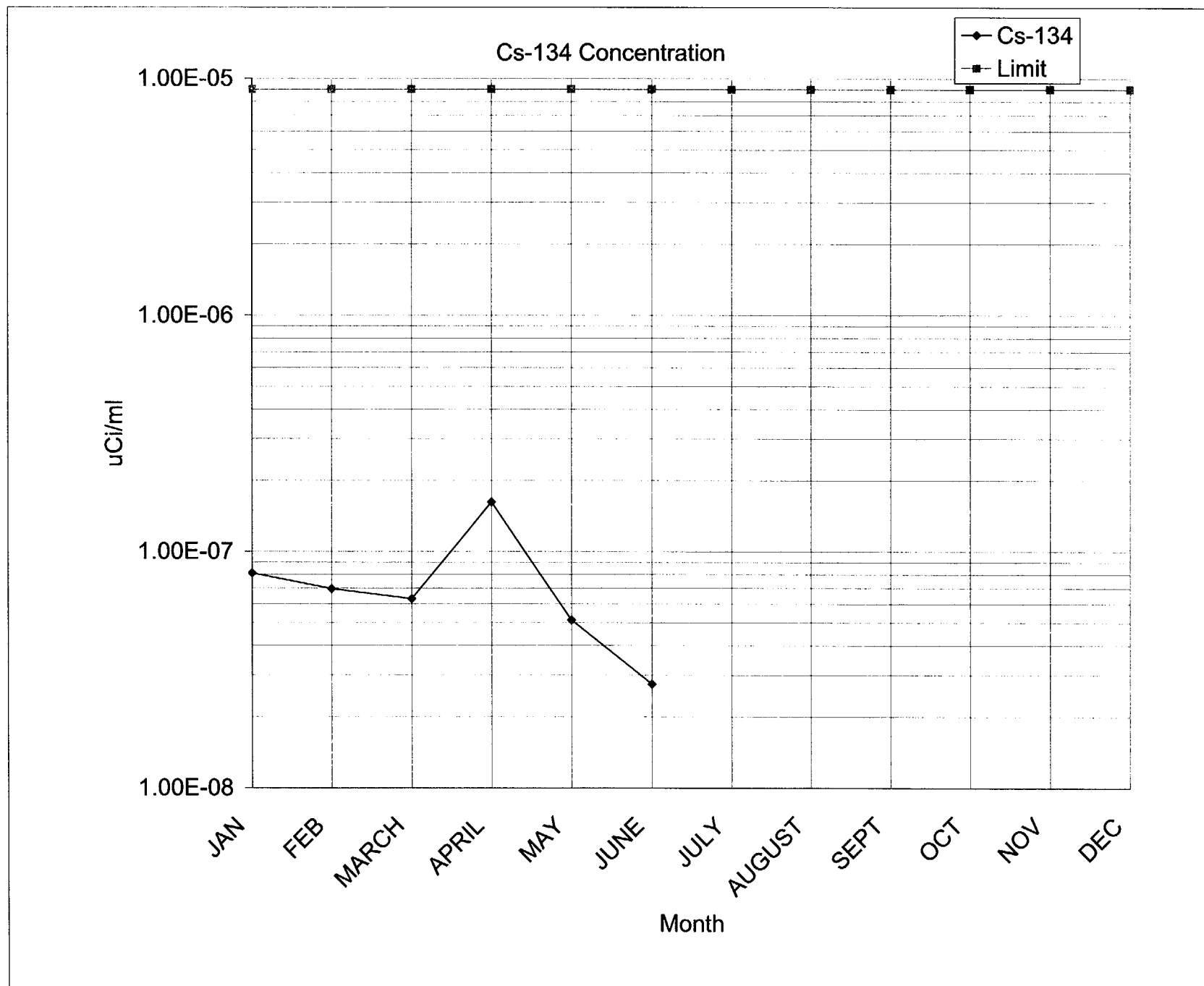
*Sr-89/90 analyzed and reported as total Sr unless >50 pCi/L. Conservatively assigned to Sr-90

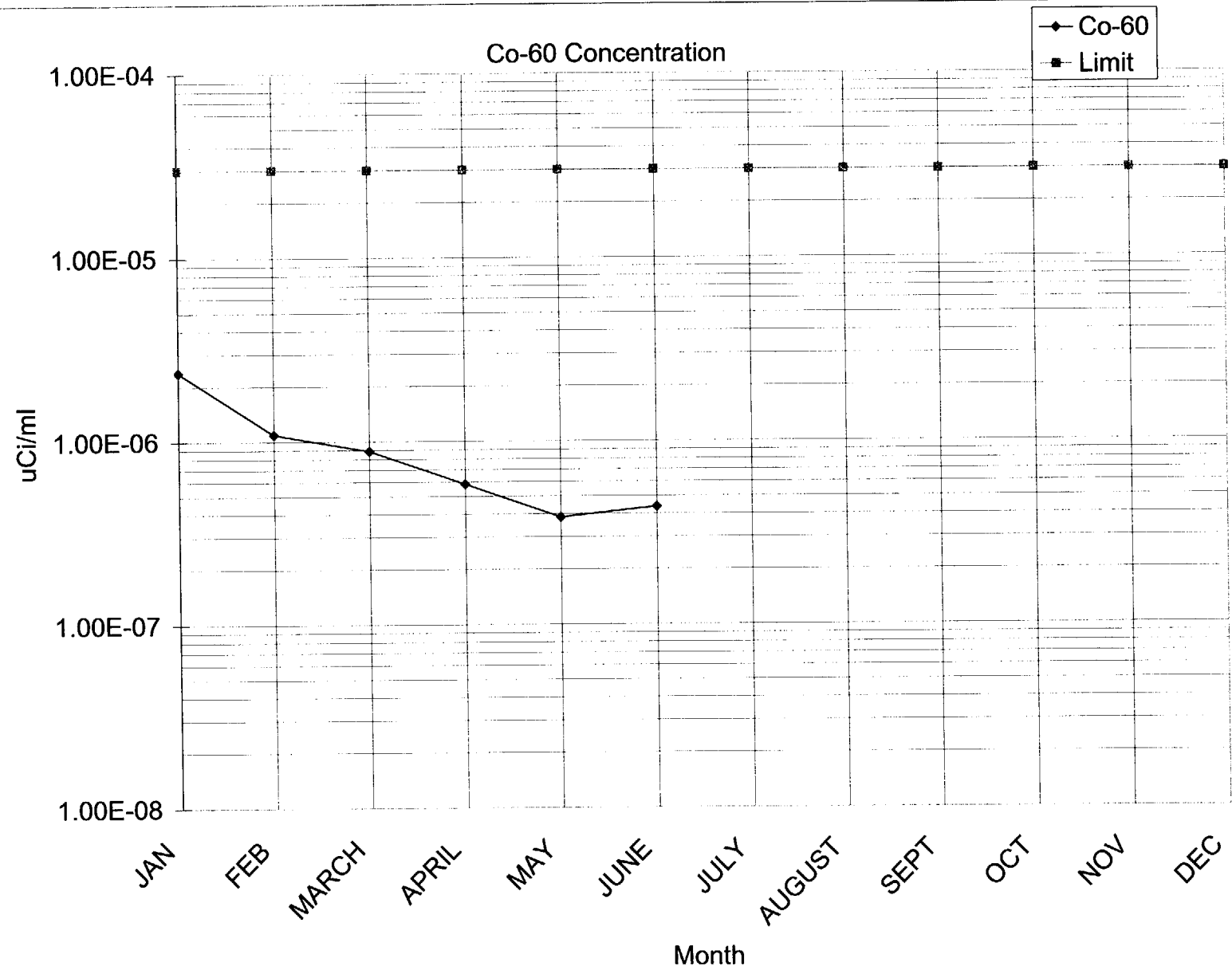
AORN - All other radionuclides (except for H-3 and C-14)

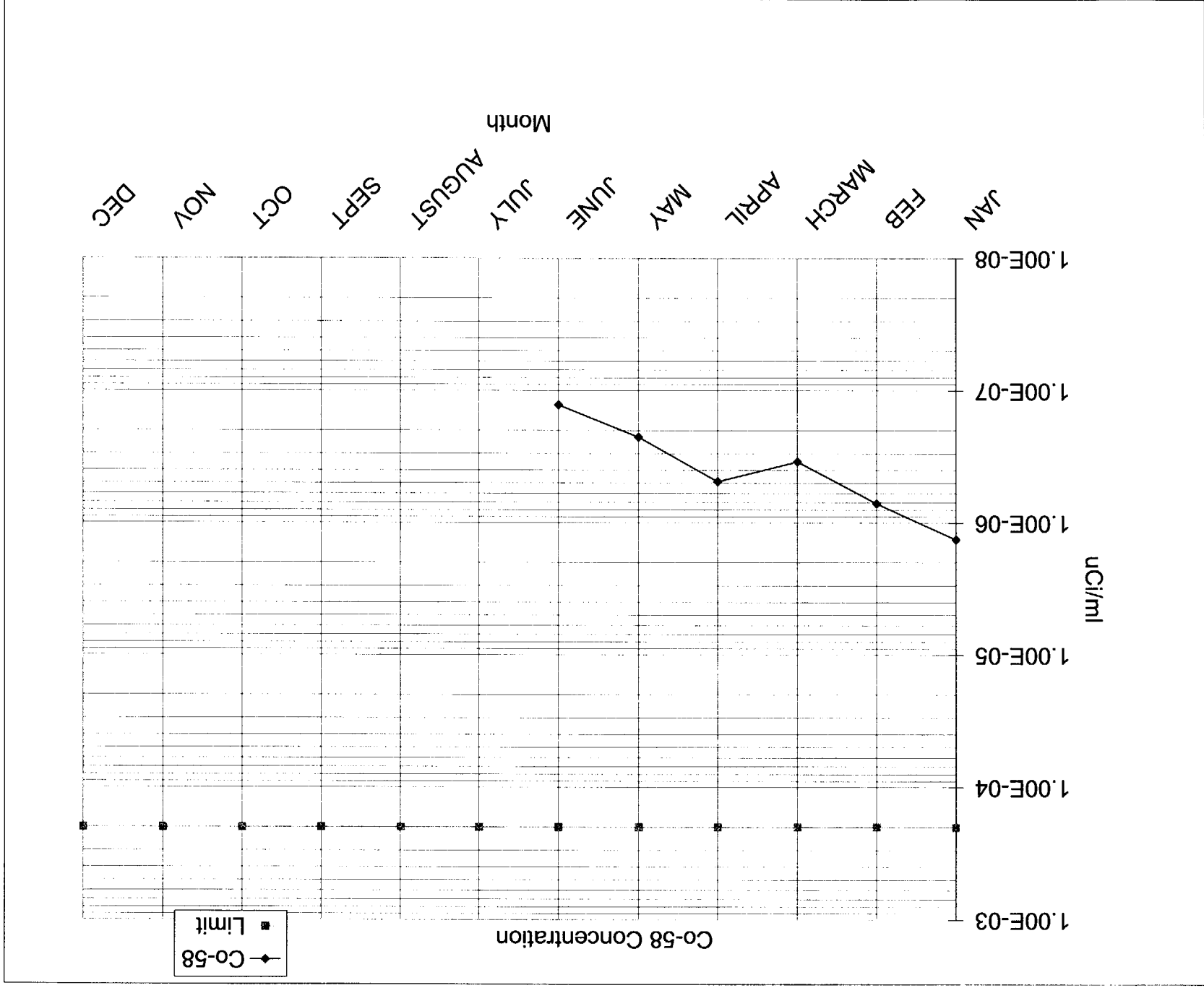
ND - No Data

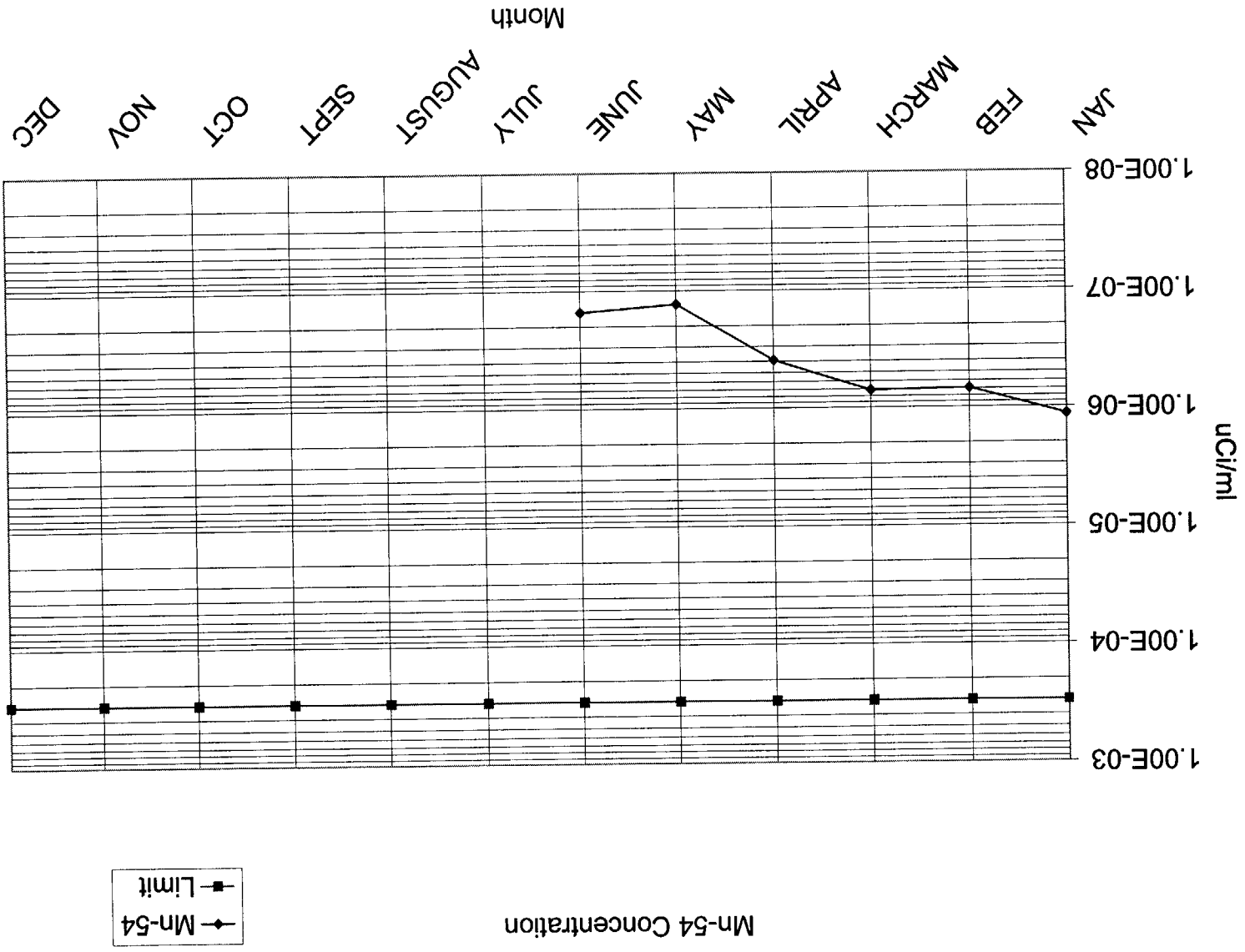
079 - ROYERSFORD RATIOS OF DISCHARGES TO LIMITS													
	LIMIT	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
H-3	1.0E-02	0.00077	0.00077	0.00077	0.00075	0.00075	0.00075						
C-14	3.0E-04	0.01220	0.01220	0.01220	0.01153	0.01153	0.01153						
K-40	4.0E-05		0.00605			0.00574							
Cr-51	5.0E-03		0.00017	0.00006									
Mn-54	3.0E-04	0.00383	0.00230	0.00238	0.00131	0.00043	0.00050						
Fe-55	1.0E-03	0.00948	0.00948	0.00948	0.00433	0.00433	0.00433						
Fe-59	1.0E-04					0.00035							
Co-57	6.0E-04												
Co-58	2.0E-04	0.00670	0.00358	0.00172	0.00244	0.00113	0.00064						
Co-60	3.0E-05	0.07937	0.03640	0.02950	0.01941	0.01276	0.01454						
Ni-63	1.0E-03	0.00059	0.00059	0.00059	0.00070	0.00070	0.00070						
Zn-65	5.0E-05												
Sr-89	8.0E-05												
Sr-90	5.0E-06	0.00143	0.00143	0.00143	0.00056	0.00056	0.00056						
Zr-95	2.0E-04			0.00018									
Nb-95	3.0E-04	0.00028	0.00011	0.00013	0.00026	0.00026	0.00012						
Tc-99	6.0E-04	0.00018	0.00018	0.00018	0.00007	0.00007	0.00007						
Ag-110m	6.0E-05	0.00141											
Sn-113	3.0E-05						0.00071						
Sb-125	3.0E-04												
I-125	2.0E-05												
I-129	2.0E-06												
Cs-134	9.0E-06	0.00901	0.00773	0.00701	0.01800	0.00570	0.00305						
Cs-137	1.0E-05	0.09226	0.06620	0.13300	0.10980	0.07006	0.06862						
Eu-152	1.0E-04												
Eu-154	7.0E-05												
Pb-212	2.0E-06												
Ra-226	6.0E-07												
Th-228	2.0E-06												
Th-230	1.0E-06												
Th-232	5.0E-05												
Th-234	5.0E-05		0.00758			0.00636	0.00760						
U-234	3.0E-06												
U-235	3.0E-06												
U-238	3.0E-06												
Pu-238	2.0E-07												
Pu-239	2.0E-07												
Np-237	2.0E-07												
Am-241	2.0E-07												
Cm-244	3.0E-07												
TOTAL	1.00	0.21749	0.15476	0.19862	0.16915	0.12072	0.11372	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

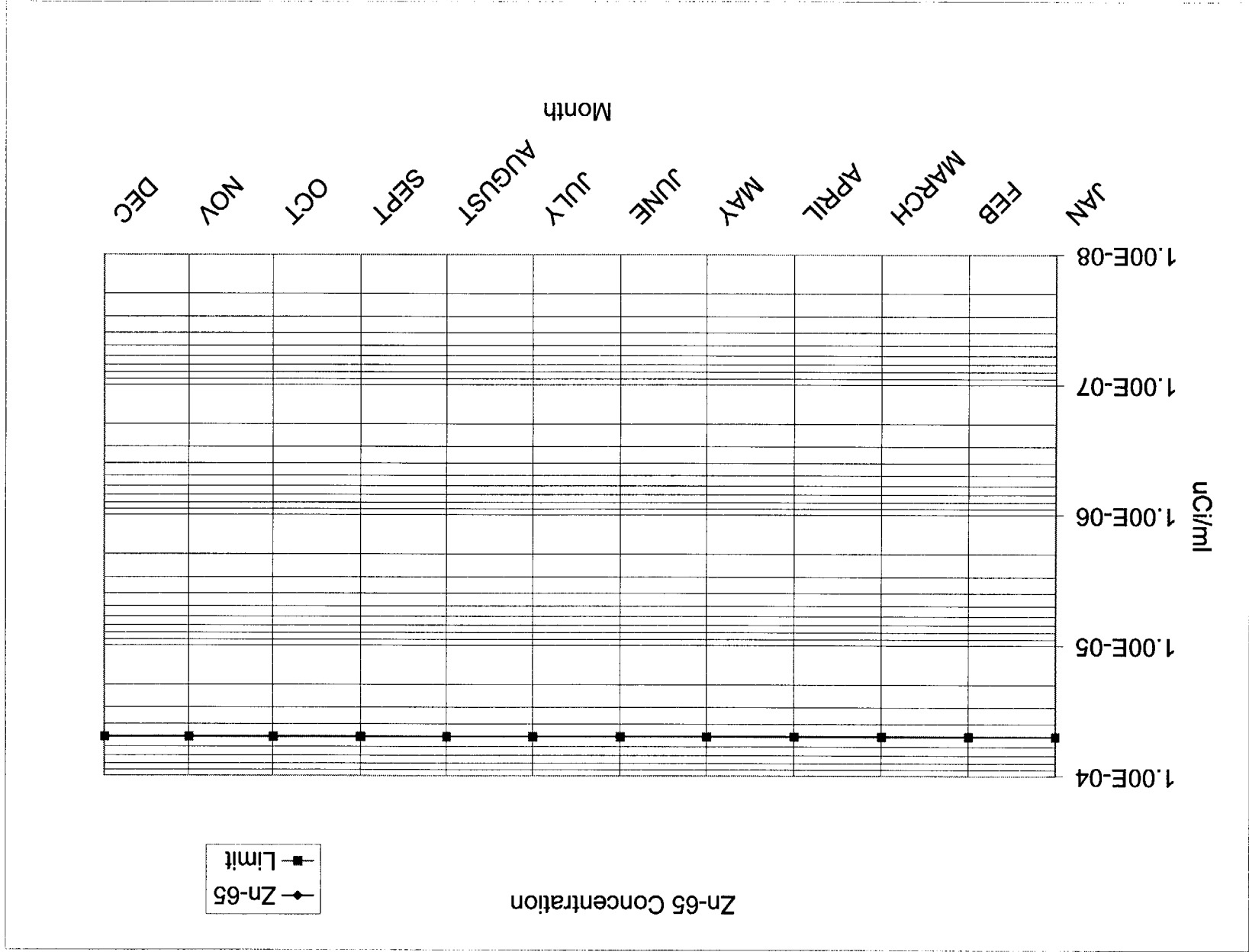












License Fee Management Branch, ARM
and
Regional Licensing Sections

```

:          (FOR LFMS USE)
:          INFORMATION FROM LTS
:          -----
:
:  Program Code: 03218
:  Status Code: 0
:  Fee Category: 6A
:  Exp. Date: 20050831
:  Fee Comments: CALIBRATION IS FOR THEM
:  Decom Fin Assur Req: Y
:  ::::::::::::::::::::::::::::::::::::::::::::::::::::::

```

Signed _____
Date _____

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

August 12, 2002, and to inform you that the initial processing which includes an administrative review has been performed.

☒ 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. *Notif.*

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

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 131948.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.