UniTech Services Group

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REGION 1

7/14/2004
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

03020934

RE: License No. 37-23341-01 Quarterly Report- 1st Quarter 2004

Dear Mr. Kinneman:

In accordance with condition #16 of the reference license, enclosed is the quarterly effluent discharge report for the first quarter, 2004. This is part two of a two part report necessitated by UniTech commencing effluent discharges to the Schuykill River during the quarter. On January 30, 2004 UniTech stopped discharging to the Royersford POTW system, and initiated river discharges on February 4, 2004. This report covers discharges to the Royersford POTW system in January 04.

This will be the last report concerning discharges to the Royersford POTW unless POTW discharges are recommenced.

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 Neely, Plant Manager/RSO UniTech Royersford

135166

NMSS/RGN1 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

2004 ROYERSFORD WASTEWATER DISCHARGE SUMMARY												
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
GALLONS	220000											
H-3	5.82E-06											
mCi H-3	4.846314											
C-14	2.22E-06											
mCi C-14	1.848594											
K-40	1.962E-07											
Cr-51	NF											
Mn-54	NF											
Mn-56	NF											
Fe-55	1.33E-06											
Fe-59	NF											
Co-57	NF											
Co-58	7.289E-08											
Co-60	1.004E-07											
Ni-59	NF											
Ni-63	6.32E-07											
Zn-65	NF											
Sr-89	NF											
Sr-90	7.99E-09											
Zr-95	NF											
Nb-95	NF											
Tc-99	8.28E-08											
Ag-110m	NF											
Sn-113	NF											
Sb-125	NF											
I-125	NF											
I-129	9.94E-08											
Cs-134	4.12E-08											
Cs-137	3.94E-07											
Eu-152	NF											
Eu-154	NF											
Eu-155	NF											
Pb-212	NF											
Pb-214	NF											
Ra-226	NF											
Ac-228	NF											
Th-228	2.86E-09											
Th-230	3.67E-08											
Th-231	NF											
Th-232	1.59E-09											
Th-234	6.204E-07											
U-234	9.90E-09											
U-235	<MDA											
U-235gs	NF											
U-236	NF											
U-238	<MDA											
Pu-238	<MDA											
Pu-239	<MDA											
Pu-241	<MDA											
Np-237	<MDA											
Am-241	1.28E-10											
Cm-244	<MDA											
CONC.	3.63E-06											
ACTIVITY	3.021417											

ANNUAL TOTALS

220000 **GALLONS**

4.846314 **mCi H-3**

1.848594 **mCi C-14**

QTR Totals (gal)

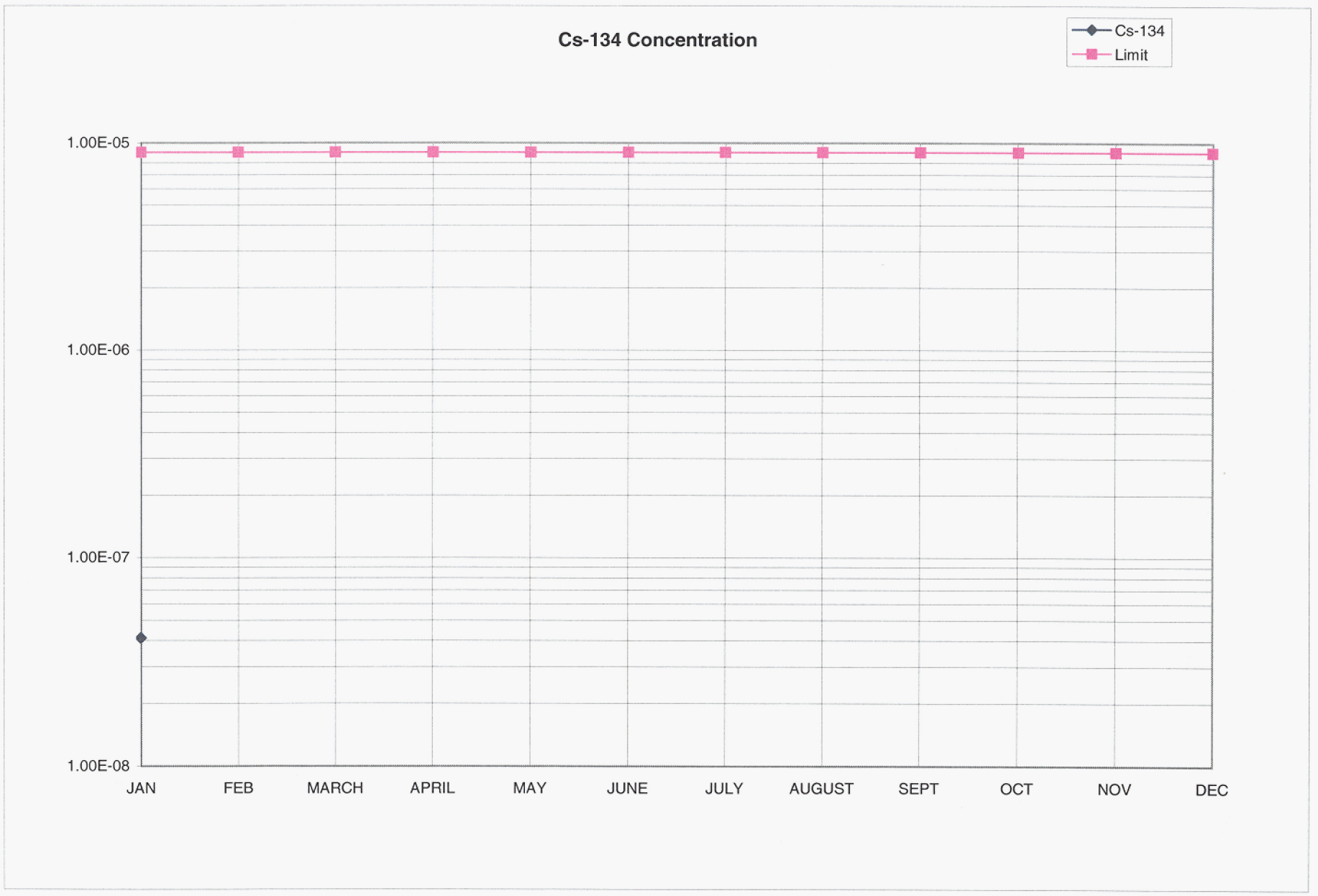
1st Qtr Vol= 220000
2nd Qtr Vol= 0
3rd Qtr Vol= 0
4th Qtr Vol= 0

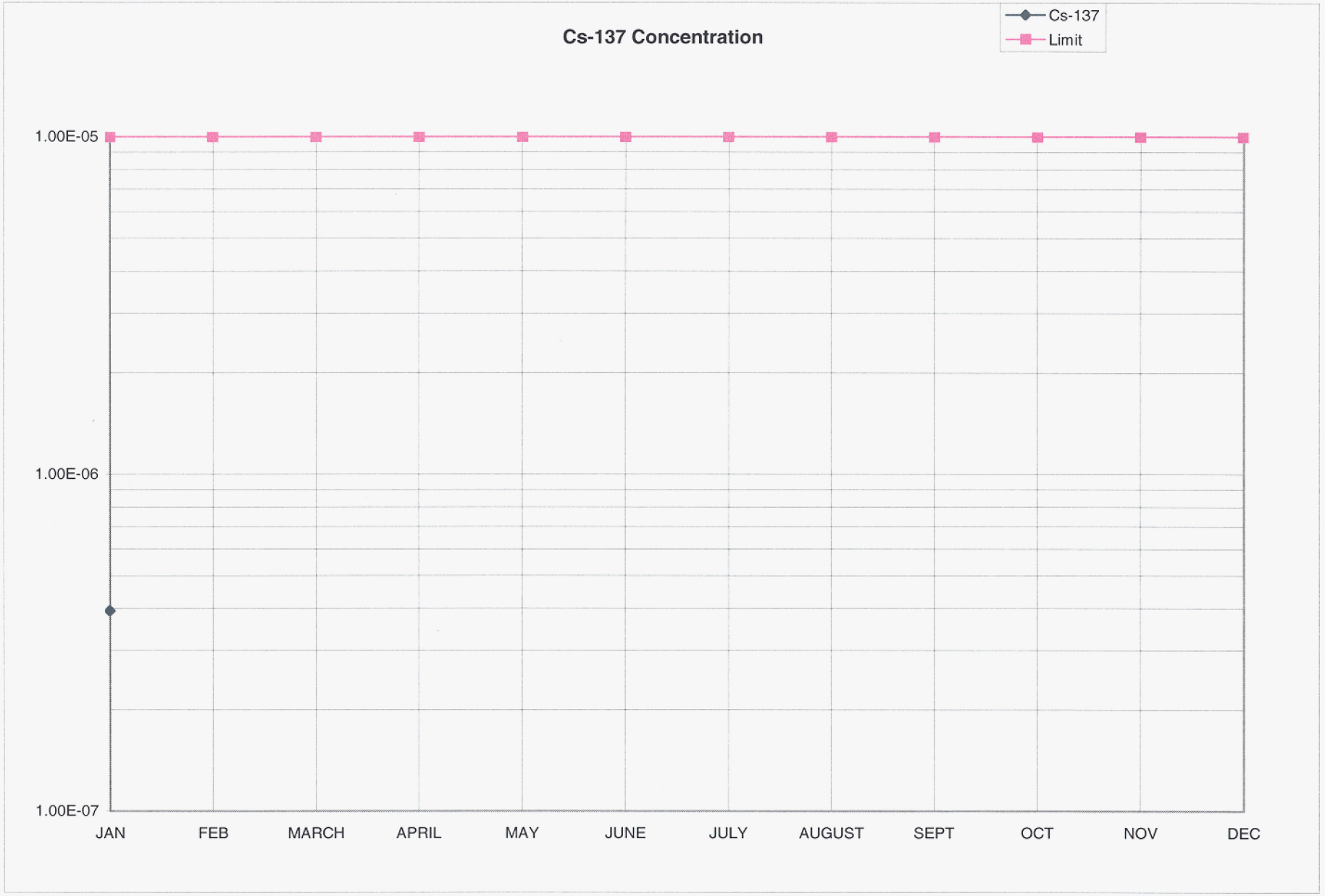
3.021417 **mCi AORN**

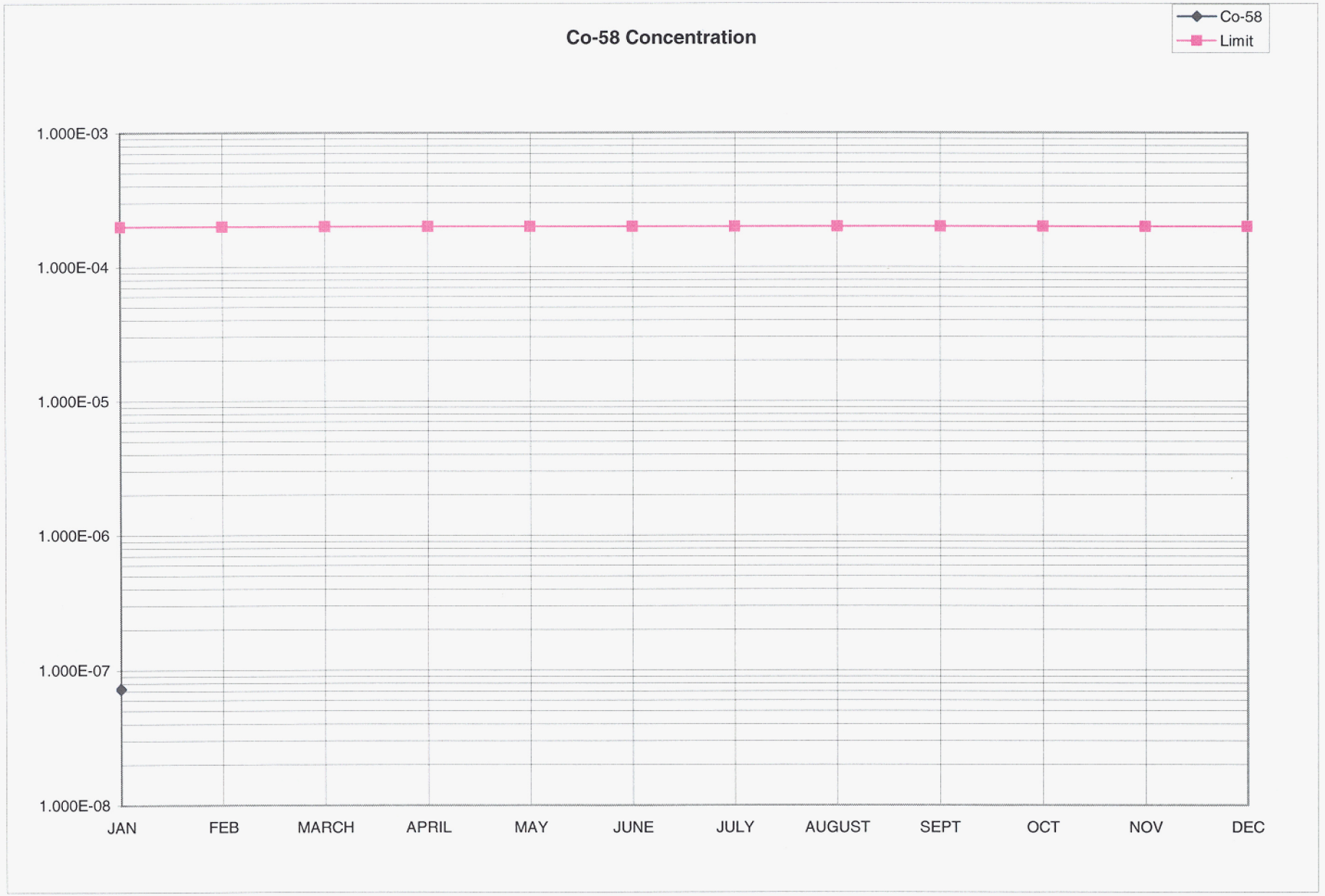
Notes:
CONC. is total concentration for all nuclides except H-3 and C-14.
All concentrations are in uCi/ml. All activities are in mCi.
NF - Not found in gamma spectra search
<MDA - Less than minimum dection limit for analytical method.
*Sr-89/90 analyzed and reported as total Sr unless >50 pCi/L. Conservatively assigned to Sr-90

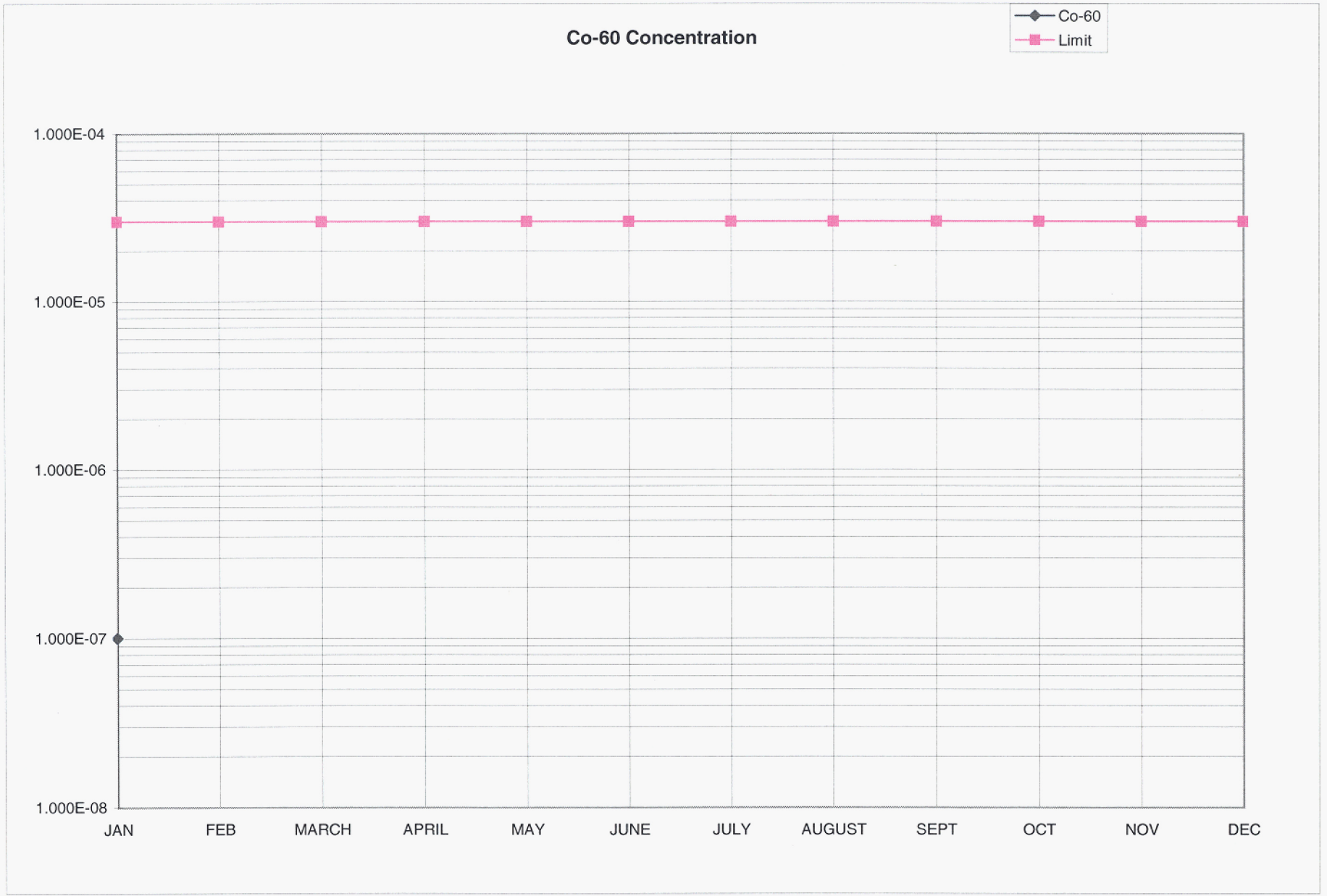
AORN - All other radionuclides (except for H-3 and C-14)
ND - No Data
Secured discharge to POTW 1/30/04, commenced discharge to Skykill River 2/4/04.

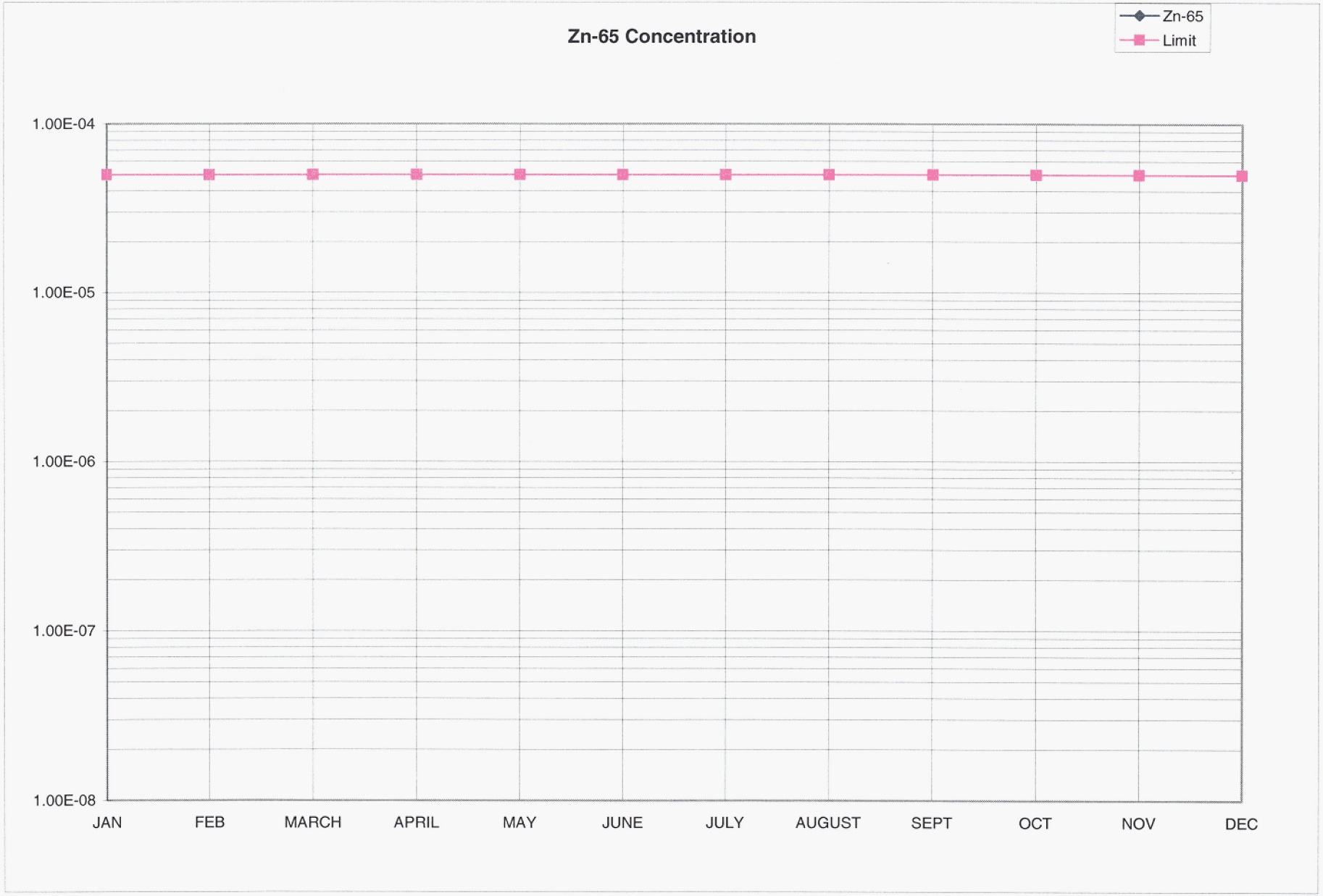
079 - ROYERSFORD RATIOS OF DISCHARGES TO LIMITS													
	LIMIT	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
H-3	1.0E-02	0.00058											
C-14	3.0E-04	0.00740											
K-40	4.0E-05	0.00491											
Cr-51	5.0E-03												
Mn-54	3.0E-04												
Mn-56	7.0E-04												
Fe-55	1.0E-03	0.00133											
Fe-59	1.0E-04												
Co-57	6.0E-04												
Co-58	2.0E-04	0.00036											
Co-60	3.0E-05	0.00335											
Ni-59	3.0E-03												
Ni-63	1.0E-03	0.00063											
Zn-65	5.0E-05												
Sr-89	8.0E-05												
Sr-90	5.0E-06	0.00160											
Zr-95	2.0E-04												
Nb-95	3.0E-04												
Tc-99	6.0E-04	0.00014											
Ag-110m	6.0E-05												
Sn-113	3.0E-04												
Sb-125	3.0E-04												
I-125	2.0E-05												
I-129	2.0E-06	0.04970											
Cs-134	9.0E-06	0.00458											
Cs-137	1.0E-05	0.03940											
Eu-152	1.0E-04												
Eu-154	7.0E-05												
Eu-155	5.0E-04												
Pb-212	2.0E-06												
Pb-214	1.0E-03												
Ra-226	6.0E-07												
Ac-228	3.0E-04												
Th-228	2.0E-06	0.00143											
Th-230	1.0E-06	0.03670											
Th-231	5.0E-04												
Th-232	3.0E-07	0.00530											
Th-234	5.0E-05	0.01241											
U-234	3.0E-06	0.00330											
U-235	3.0E-06												
U-235	3.0E-06												
U-236	3.0E-06												
U-238	3.0E-06												
Pu-238	2.0E-07												
Pu-239	2.0E-07												
Pu-241	1.0E-05												
Np-237	2.0E-07												
Am-241	2.0E-07	0.00064											
Cm-244	3.0E-07												
	1.00	0.17375	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

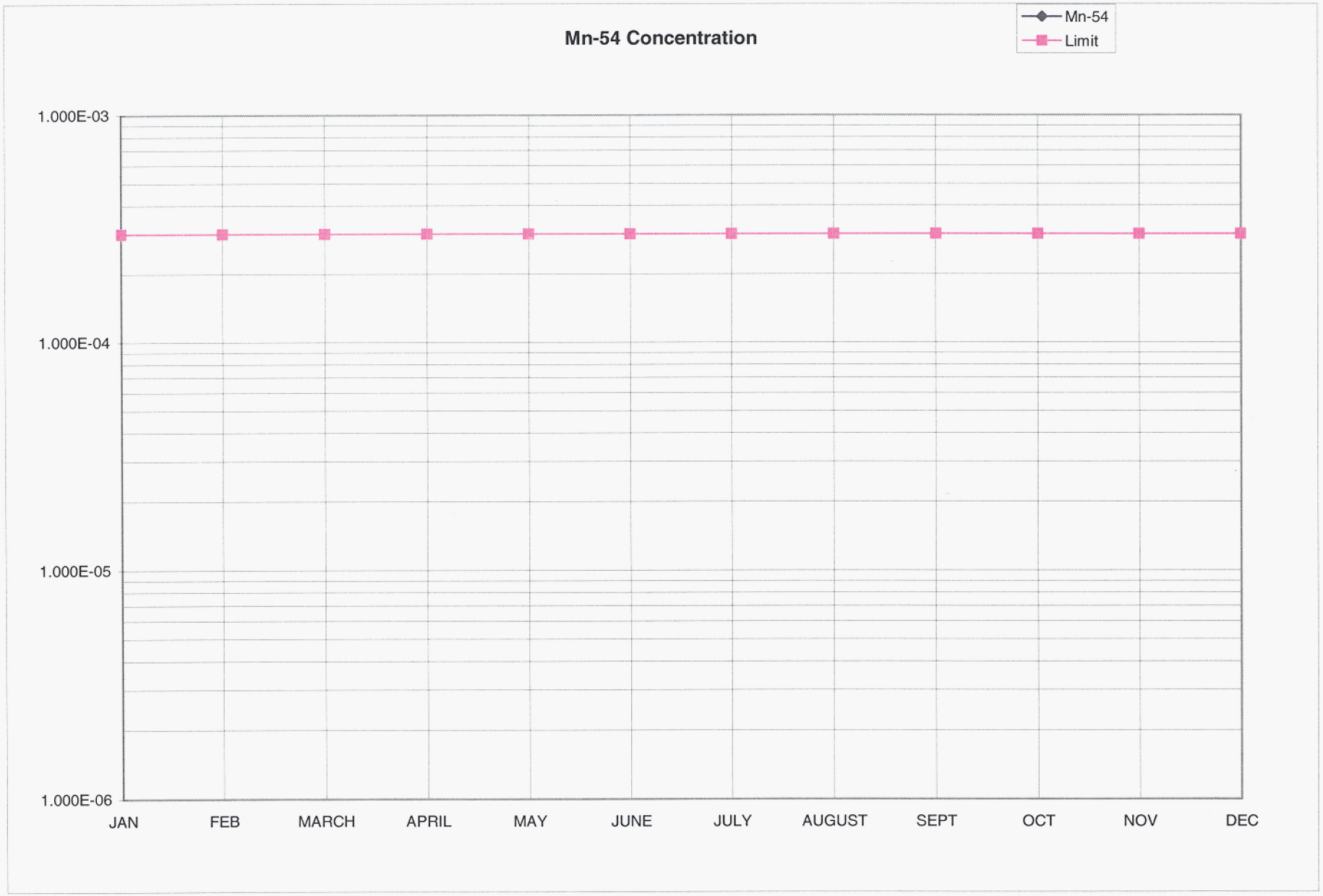

Cs-134 Concentration
Cs-134
Limit
1.00E-05
1.00E-06
1.00E-07
1.00E-08
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC


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


Co-58 Concentration
Co-58
Limit
1.000E-03
1.000E-04
1.000E-05
1.000E-06
1.000E-07
1.000E-08
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC


Co-60 Concentration
Co-60
Limit
1.000E-04
1.000E-05
1.000E-06
1.000E-07
1.000E-08
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC


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


Mn-54 Concentration
Mn-54
Limit
1.000E-03
1.000E-04
1.000E-05
1.000E-06
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC