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TO: John Kinneman USNRC - 610 337 5269

FROM: Mike Fuller

REMARKS: Quarterly Report for Royersford (Unitech - formerly INS)

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1999 - ROYERSFORD WASTEWATER DISCHARGE SUMMARY												
MONTH	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
GALLONS	350000	445000	1050000	1295000	1270000	465000	470000	405000	830000	1035000		
H-3	2.13E-05	2.13E-05	2.13E-05	5.16E-06	5.16E-06	5.16E-06	1.17E-05	1.17E-05	1.17E-05			
mCi H-3	28.21718	35.87612	84.65153	25.29213	24.80386	9.081729	20.813715	17.93522	36.75614			
C-14	3.23E-06	3.23E-06	3.23E-06	1.42E-06	1.42E-06	1.42E-06	1.86E-06	1.86E-06	1.86E-05			
mCi C-14	4.278943	5.44037	12.83683	6.960237	6.825869	2.499236	3.308847	2.851241	5.843283			
K-40	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF		
Cr-51	NF	NF	1.37E-05	NF	2.89E-07	NF	NF	NF	NF	2.87E-07		
Mn-54	2.08E-07	4.82E-07	1.39E-06	2.15E-07	4.95E-07	1.27E-07	8.63E-07	7.13E-07	2.78E-07	3.41E-07		
Fe-55	1.59E-05	1.59E-05	1.59E-05	6.42E-06	6.42E-06	6.42E-06	9.19E-06	9.19E-06	9.19E-06			
Fe-59	NF	NF	NF	NF	1.19E-07	NF	NF	NF	NF	NF		
Co-57	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF		
Co-58	NF	5.63E-08	7.79E-07	3.55E-07	5.34E-07	2.68E-07	5.46E-07	4.82E-08	1.07E-06	1.64E-06		
Co-60	7.64E-07	1.59E-06	2.17E-06	8.85E-07	9.02E-07	4.31E-07	1.65E-06	9.05E-07	1.06E-06	1.16E-06		
Ni-63	9.72E-07	9.72E-07	9.72E-07	9.56E-07	9.56E-07	9.56E-07	2.02E-09	2.02E-09	2.02E-09			
Zn-65	1.50E-07	NF	2.82E-07	2.20E-07	3.13E-07	9.15E-08	3.77E-07	7.37E-08	NF	2.28E-07		
Sr-89	6.60E-09	6.60E-09	6.60E-09	3.29E-09	3.29E-09	3.29E-09	1.56E-08	1.56E-08	1.56E-08			
Sr-90	*	*	*	*	*	*	*	*	*			
Zr-95	NF	NF	NF	NF	3.88E-08	NF	NF	NF	NF	NF		
Nb-95	NF	NF	NF	NF	2.66E-08	NF	3.02E-08	NF	NF	NF		
Tc-99	1.68E-07	1.68E-07	1.68E-07	5.64E-08	5.64E-08	5.64E-08	1.79E-07	1.79E-07	1.79E-07			
Ag-110m	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF		
Sb-125	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF		
I-129	<MDA	<MDA	<MDA	1.55E-08	1.55E-08	1.55E-08	4.84E-09	4.84E-09	4.84E-09			
Cs-134	9.36E-08	NF	1.24E-07	NF	2.66E-08	5.63E-08	1.07E-07	NF	5.16E-07	2.93E-07		
Cs-137	1.11E-06	1.24E-06	8.38E-07	2.18E-07	2.44E-07	3.76E-07	6.42E-07	2.63E-07	1.29E-06	9.57E-07		
Eu-152	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF		
Eu-154	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF		
Th-228	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF		
Th-234	3.88E-06	NF	NF	NF	NF	NF	NF	NF	NF	NF		
U-234												
U-235												
U-238												
Pu-238												
Pu-239												
Np-237												
Am-241												
Cu-244												
CONC.	2.33E-05	2.04E-05	3.64E-05	9.32E-06	1.04E-05	8.80E-06	1.36E-05	1.14E-05	1.36E-05	4.90E-06	0.00E+00	0.00E+00
ACTIVITY	30.80416	34.38624	144.551	45.70028	50.08486	15.48864	24.206689	17.46694	42.7215	19.21247	0	0

ANNUAL TOTALS
7615000 GALLONS

283.4276 mCi H-3

50.84485 mCi C-14

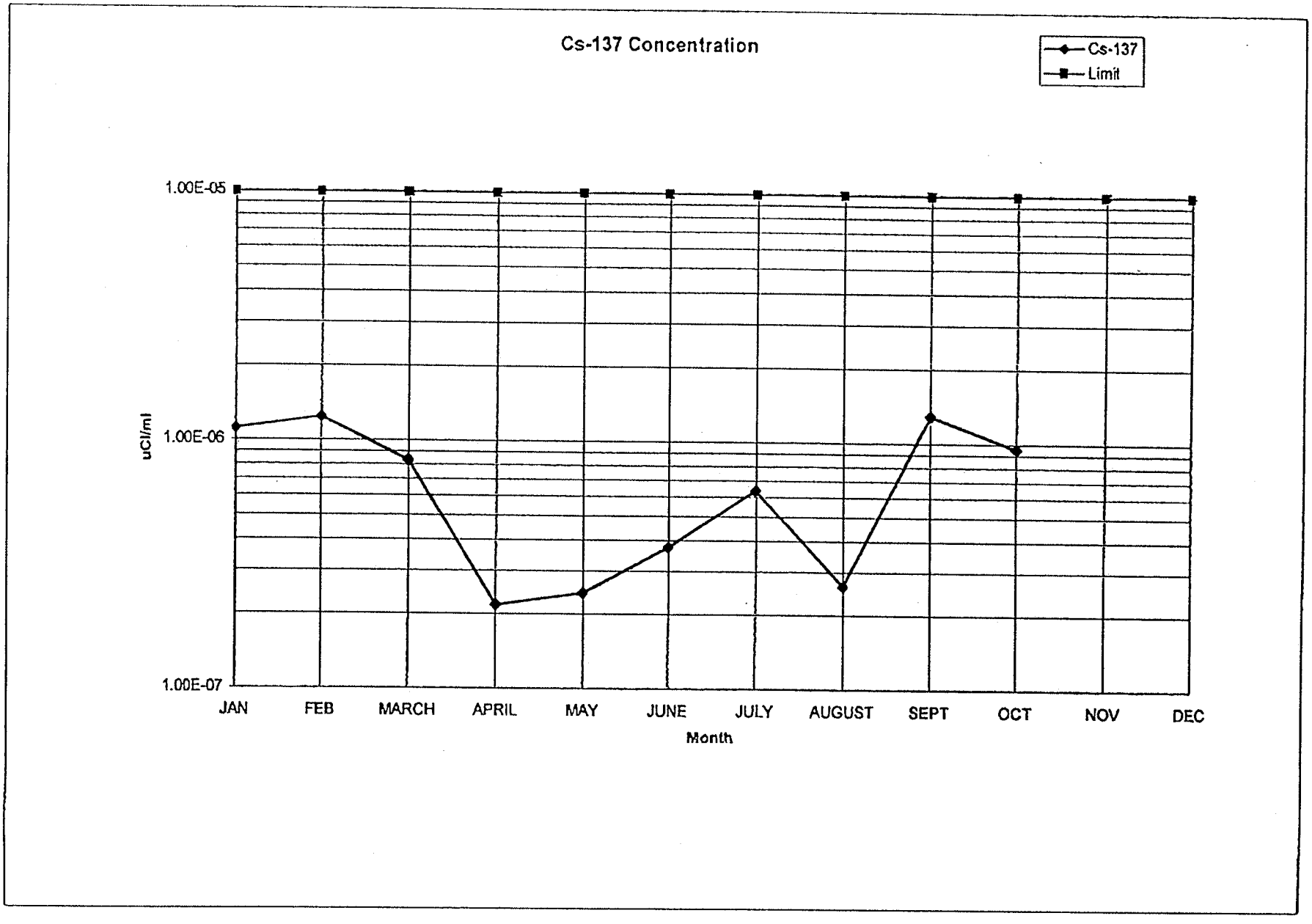
424.6228 mCi AORN

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

JAN-14-00 06:06PM FROM-INS CORPORATE +14135436989 T-156 P.02/09 F-581

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	0.00213	0.00213	0.00213	0.00052	0.00052	0.00052	0.00117	0.00117	0.00117			
C-14	3.0E-04	0.01077	0.01077	0.01077	0.00473	0.00473	0.00473	0.00620	0.00620	0.00620			
K-40	4.0E-05												
Cr-51	5.0E-03			0.00275		0.00005					0.00006		
Mn-54	3.0E-04	0.00059	0.00161	0.00464	0.00072	0.00165	0.00042	0.00288	0.00238	0.00093	0.00114		
Fe-55	1.0E-03	0.01590	0.01590	0.01590	0.00642	0.00642	0.00642	0.00919	0.00919	0.00919			
Fe-59	1.0E-04					0.00119							
Co-57	6.0E-04												
Co-58	2.0E-04		0.00028	0.00390	0.00177	0.00267	0.00134	0.00273	0.00024	0.00535	0.00820		
Co-60	3.0E-05	0.02546	0.05297	0.07233	0.02882	0.03007	0.01437	0.05500	0.03017	0.03533	0.03867		
Ni-63	1.0E-03	0.00097	0.00097	0.00097	0.00096	0.00096	0.00096	0.00000	0.00000	0.00000			
Zn-65	5.0E-05	0.00301		0.00565	0.00440	0.00627	0.00183	0.00753	0.00147		0.00456		
Sr-89	8.0E-05	0.00008	0.00008	0.00008	0.00004	0.00004	0.00004	0.00020	0.00020	0.00020			
Sr-90	5.0E-06												
Zr-95	2.0E-04					0.00019							
Nb-95	3.0E-04					0.00009		0.00010					
Tc-99	6.0E-04	0.00028	0.00028	0.00028	0.00009	0.00009	0.00009	0.00030	0.00030	0.00030			
Ag-110m	6.0E-05												
Sb-125	3.0E-04												
I-129	2.0E-06				0.00775	0.00775	0.00775	0.00242	0.00242	0.00242			
Cs-134	9.0E-06	0.01040		0.01373		0.00296	0.00626	0.01190		0.05733	0.03256		
Cs-137	1.0E-05	0.11140	0.12420	0.08379	0.02180	0.02437	0.03755	0.06422	0.02630	0.12900	0.09570		
Eu-152	1.0E-04												
Eu-154	7.0E-05												
Th-228	2.0E-06												
Th-234	5.0E-05	0.07754											
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												
Cu-244	3.0E-07												
TOTAL	1.00	0.25863	0.20918	0.21692	0.07802	0.09002	0.08228	0.16384	0.08003	0.24742	0.18088	0.00000	0.00000

JAN-14-00 06:06PM FROM-INS CORPORATE +14135436989 T-156 P.03/09 F-581



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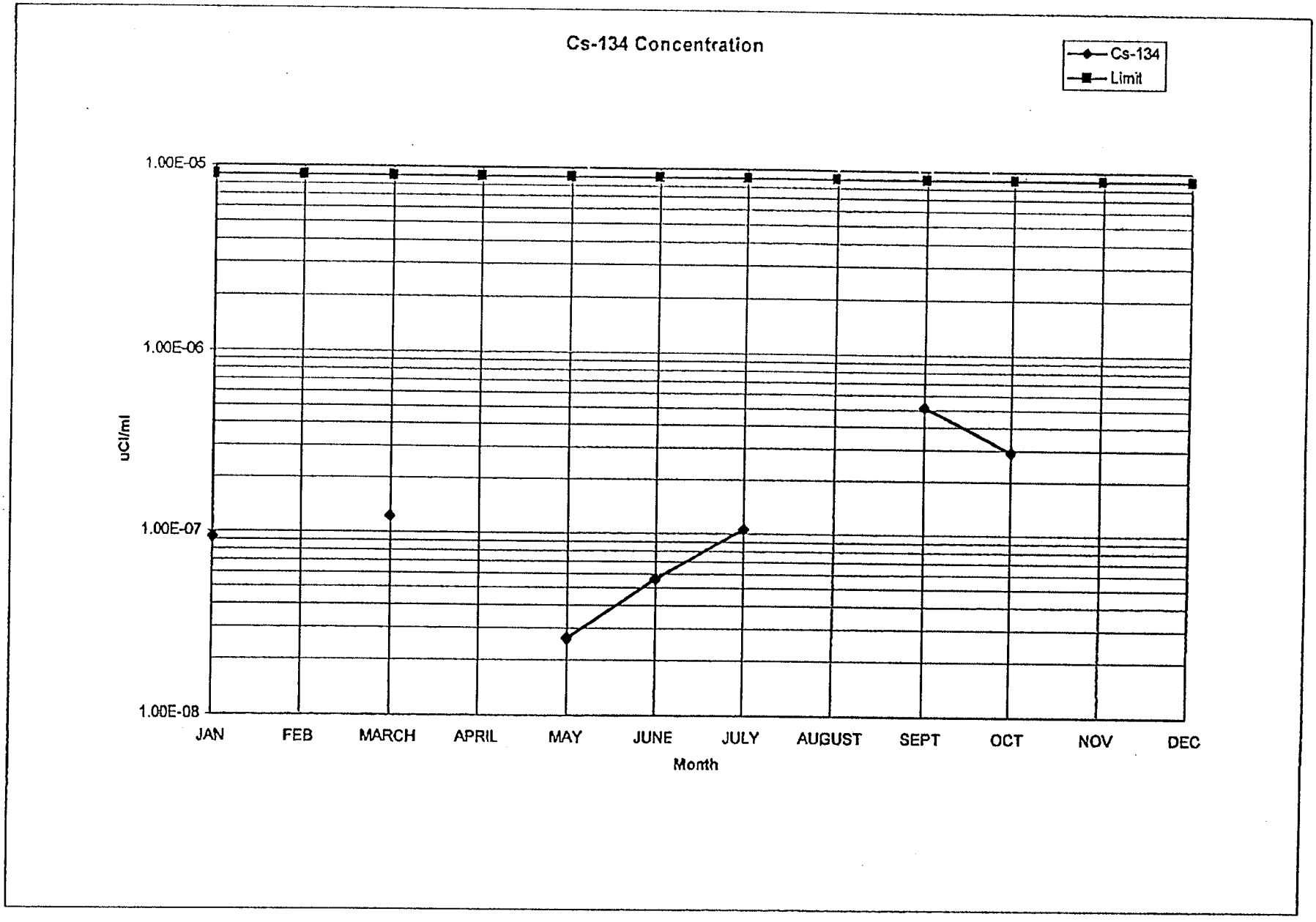

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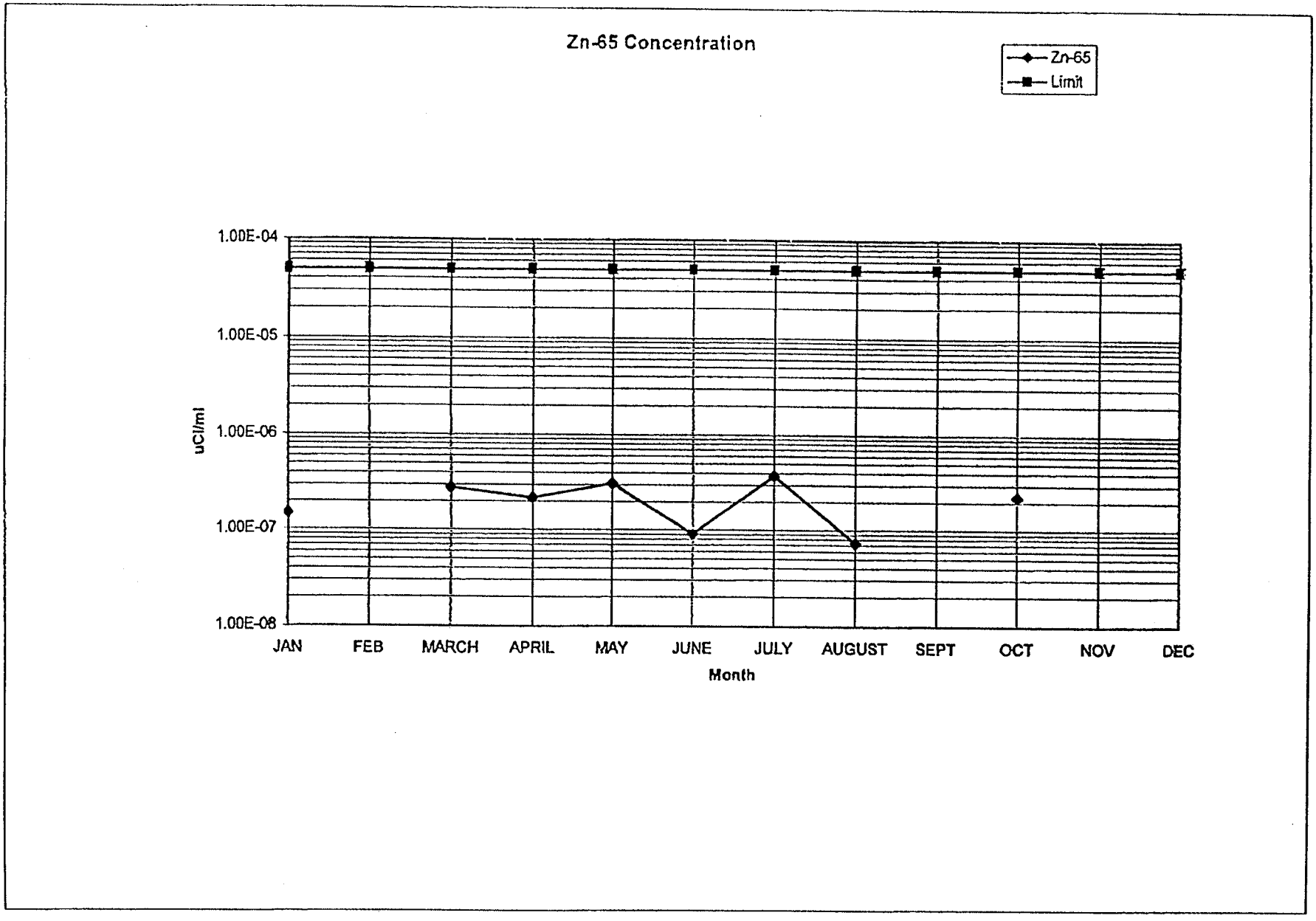

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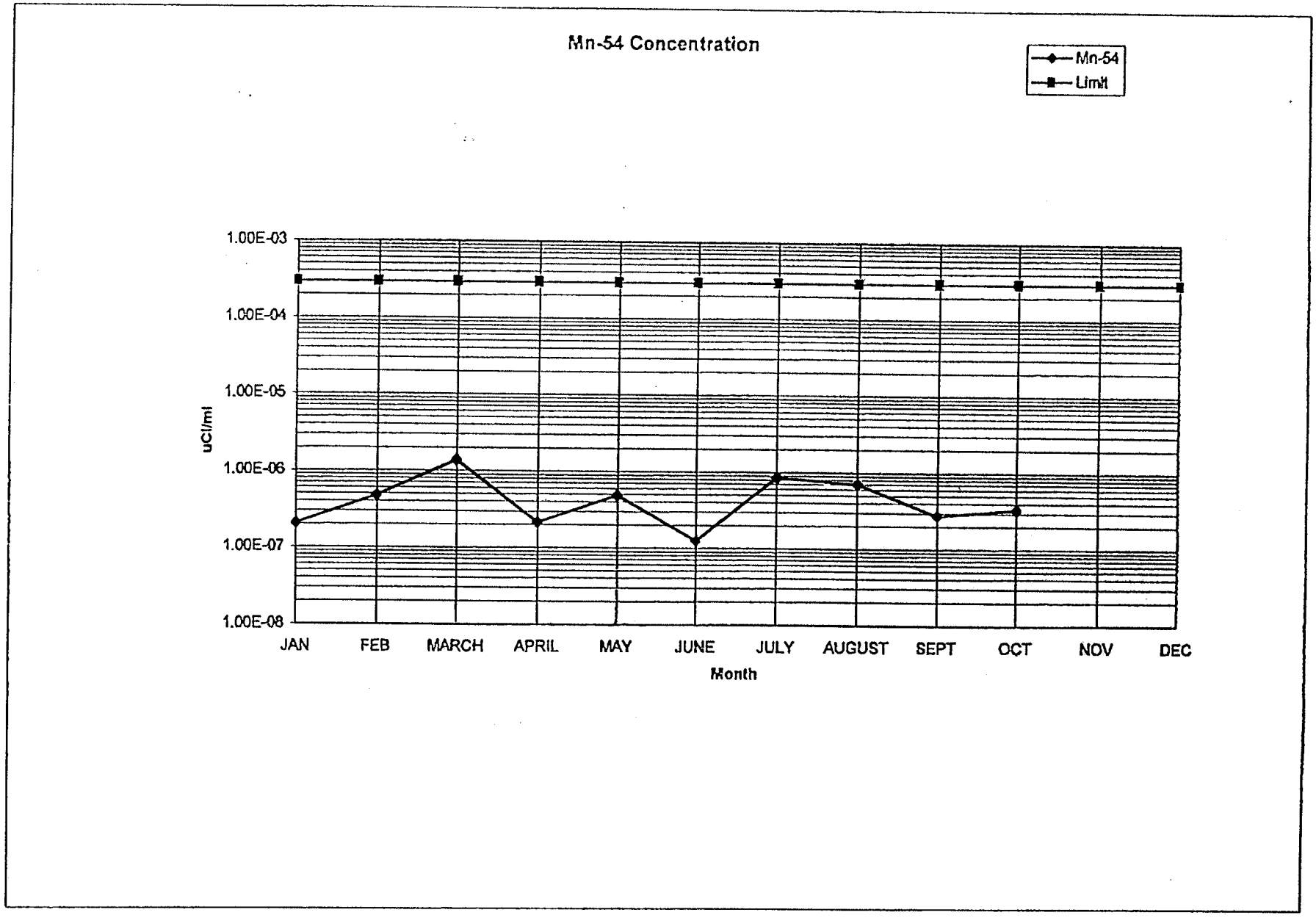

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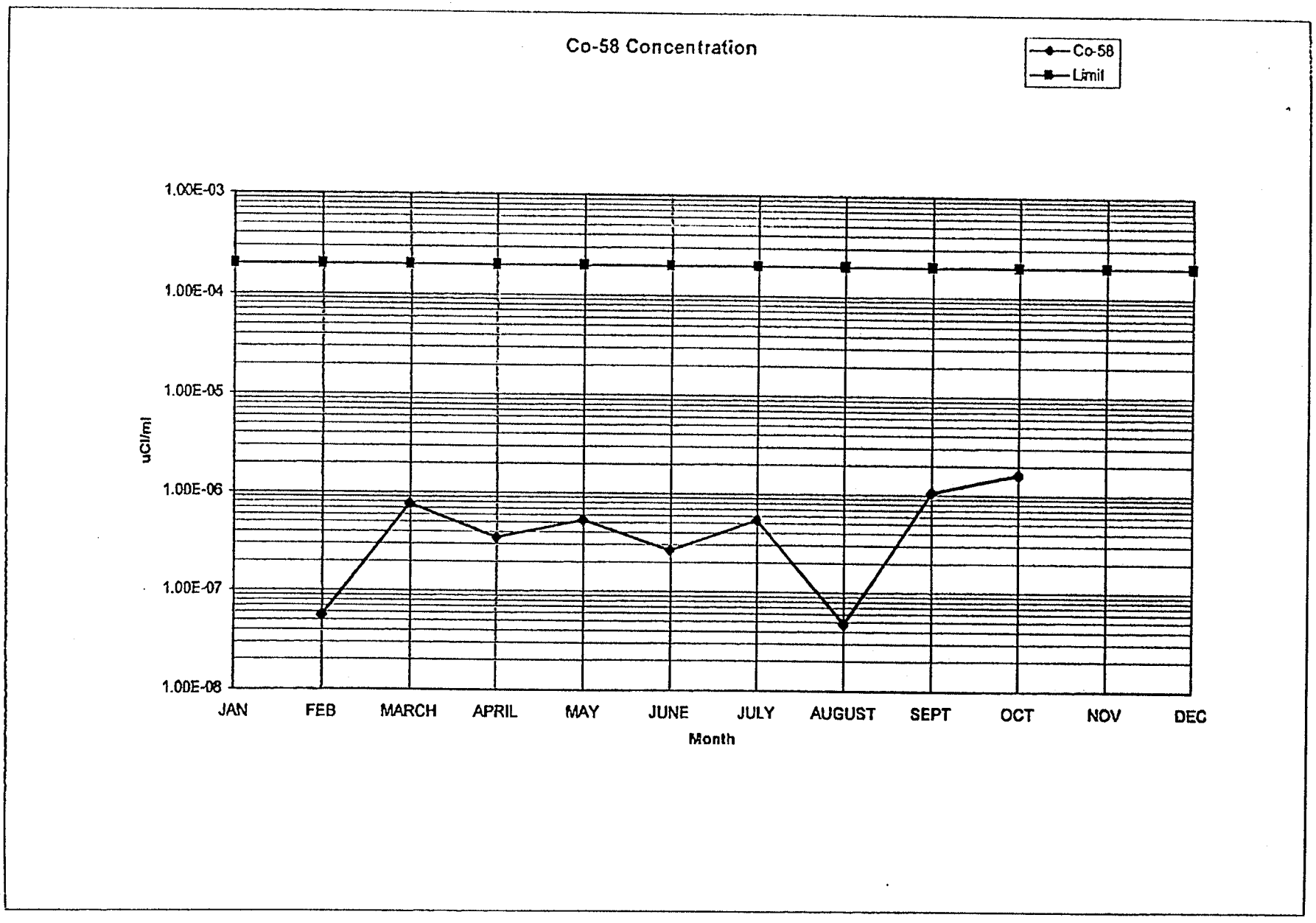

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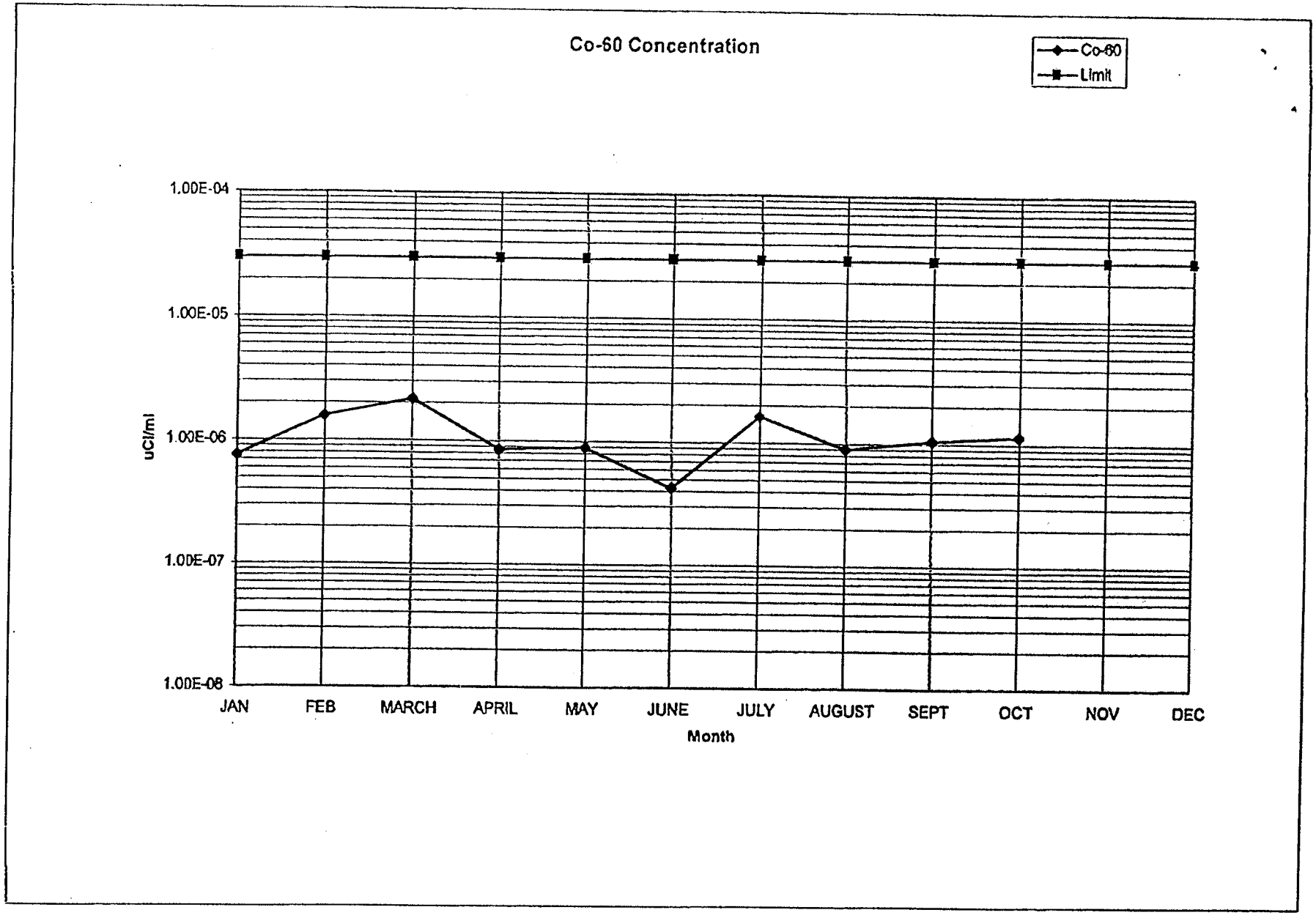

JAN-14-00 06:08PM FROM-INS CORPORATE +14135436989 T-156 P.09/09 F-581

ORISE
OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

November 2, 1999

Ms. Elizabeth Ullrich
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

SUBJECT: REVISED REPORT FOR ANALYSIS OF REED BED SAMPLES COLLECTED, AUGUST 12, 1999 THROUGH SEPTEMBER 2, 1999, FROM ROYERSFORD WASTEWATER TREATMENT FACILITY, ROYERSFORD, PENNSYLVANIA (DOCKET NO. 030-20934, RFTA NO. 99-017)

Dear Ms. Ullrich:

The Environmental Survey and Site Assessment Program (ESSAP) of the Oak Ridge Institute for Science and Education (ORISE) performed strontium-90, tritium, gamma spectroscopy, and percent moisture analyses on 6 sludge and 13 liquid samples from the Royersford Wastewater Treatment Facility, Royersford, Pennsylvania. Results are presented in Tables 1 through 8, respectively.

ESSAP's Quality Control (QC) procedures were followed for these analyses. Analytical and instrumentation QC for these analyses were within acceptable limits. The QC files are available for your review upon request.

Please contact me at (423) 241-3242 or Wade Ivey at (423) 576-9184, with any questions or comments.

Sincerely,

Dale Condra

Dale Condra
Technical Resources Manager
Environmental Survey and
Site Assessment Program

RDC:klp

Enclosure

cc: R. Uleck, NRC/NMSS/TWFN/7F27
J. Halvorsen, NRC/NMSS/TWFN/8A23
J. Kottan, NRC/Region I
W. Beck, ORISE/ESSAP
E. Abelquist, ORISE/ESSAP
T. Vitkus, ORISE/ESSAP
W. Ivey, ORISE/ESSAP
File/737

TABLE 1

STRONTIUM-90 CONCENTRATIONS IN SLUDGE SAMPLES ROYERSFORD WASTEWATER TREATMENT FACILITY ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC SAMPLE ID	Sr-90 Concentration (pCi/g wet)	MDC (pCi/g wet)
0737M015	Sample #1 sludge dewatering filter cake	1.21 ± 0.27[a]	0.34
0737M016	Sample #2 sludge filter pressed cake	1.42 ± 0.28	0.33
0737M017	Sample #3 sludge filter cake	2.29 ± 0.33	0.34
0737M018	Sample #4 sludge dewatering filter cake	1.48 ± 0.28	0.34
0737M019	Sample #5 pressed filter cake	1.80 ± 0.31[a]	0.36
0737M020	Sample #5 sludge filter cake	0.86 ± 0.29	0.41

[a] Uncertainties are total propagated uncertainties at the 95% confidence level.

TABLE 2

STRONTIUM-90 CONCENTRATIONS
IN LIQUID SAMPLES
ROYERSFORD WASTEWATER TREATMENT FACILITY
ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC SAMPLE ID	Sr-90 Concentration (pCi/L)	MDC (pCi/L)
0737M021	Sample #1 sludge dewatering, polymer added	48 ± 17[a]	25
0737M022	Sample #1 primary digestor sludge sample, polymer added	14.4 ± 6.7	10
0737M023	Sample #1 sludge dewatering, sludge sample only	33.4 ± 9.8	14
0737M024	Sample #2 dewatering sludge sample, polymer added	39 ± 14	21
0737M025	Sample #3 sludge sample, polymer added, cell A-B	65 ± 18	25
0737M026	Sample #5 sludge sample, polymer added	30.9 ± 9.4	13
0737M027	Sample #1 filtrate from sludge dewatering	-7.9 ± 8.5	16
0737M028	Sample #1 river sample effluent	-4.8 ± 9.3	17
0737M029	Sample #1 filtrate from primary digestor	-4.2 ± 8.8	16

TABLE 2 (continued)

STRONTIUM-90 CONCENTRATIONS
IN LIQUID SAMPLES
ROYERSFORD WASTEWATER TREATMENT FACILITY
ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC SAMPLE ID	Sr-90 Concentration (pCi/L)	MDC (pCi/L)
0737M030	Sample #2 filtrate from sludge dewatering	-6.4 ± 8.4	16
0737M031	Sample #3 filtrate from sludge dewatering	0.6 ± 9.1	16
0737M032	Sample #4 filtrate	-1.5 ± 9.2	17
0737M033	Sample #5 filtrate	-3.1 ± 8.8	16

[a] Uncertainties are total propagated uncertainties at the 95% confidence level.

TABLE 3

TRITIUM CONCENTRATIONS IN LIQUID SAMPLES ROYERSFORD WASTEWATER TREATMENT FACILITY ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC SAMPLE ID	H-3 Concentration (pCi/L)	MDC (pCi/L)
0737M021	Sample #1 sludge dewatering, polymer added	536 ± 461[a]	760
0737M022	Sample #1 primary digestor sludge sample, polymer added	546 ± 459	757
0737M023	Sample #1 sludge dewatering, sludge sample only	332 ± 455	764
0737M024	Sample #2 dewatering sludge sample, polymer added	312 ± 463	779
0737M025	Sample #3 sludge sample, polymer added, cell A-B	639 ± 473	774
0737M026	Sample #5 sludge sample, polymer added	296 ± 458	772
0737M027	Sample #1 filtrate from sludge dewatering	889 ± 478	765
0737M028	Sample #1 river sample effluent	223 ± 460	780

TABLE 3 (continued)

TRITIUM CONCENTRATIONS
IN LIQUID SAMPLES
ROYERSFORD WASTEWATER TREATMENT FACILITY
ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC SAMPLE ID	H-3 Concentration (pCi/L)	MDC (pCi/L)
0737M029	Sample #1 filtrate from primary digestor	407 ± 468	781
0737M030	Sample #2 filtrate from sludge dewatering	561 ± 471	777
0737M031	Sample #3 filtrate from sludge dewatering	346 ± 462	776
0737M032	Sample #4 filtrate	486 ± 465	771
0737M033	Sample #5 filtrate	462 ± 454	753

TABLE 4

CONCENTRATION OF SELECTED GAMMA EMITTING ISOTOPES IN SLUDGE SAMPLES ROYERSFORD WASTEWATER TREATMENT FACILITY ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC REGION I SAMPLE ID	Radionuclide Concentration (pCi/g wet)				
		I-125	Cr-51	Sb-125	Ag-110M	Cs-137
0737M015	Sample #1 sludge dewatering filter cake	4.2 ± 2.8[a]	8.2 ± 7.0	2.86 ± 0.73	1.35 ± 0.32	13.69 ± 0.79
0737M016	Sample #2 sludge filter pressed cake	12.7 ± 4.7	1.7 ± 9.1	2.86 ± 0.52	0.98 ± 0.24	13.74 ± 0.72
0737M17	Sample #3 sludge filter cake	-6.5 ± 8.5	17.4 ± 4.8	2.69 ± 0.59	1.98 ± 0.39	13.66 ± 0.77
0737M018	Sample #4 sludge dewatering filter cake	4.4 ± 2.3	12.7 ± 5.7	2.75 ± 0.65	2.26 ± 0.41	12.65 ± 0.74
0737M019	Sample #5 pressed filter cake	10.5 ± 4.3	9.9 ± 3.3	2.18 ± 0.49	1.81 ± 0.29	13.13 ± 0.69
0737M020	Sample #5 sludge filter cake	7.7 ± 2.7	18.1 ± 2.9	1.54 ± 0.40	1.49 ± 0.26	10.40 ± 0.56

TABLE 4 (continued)

CONCENTRATION OF SELECTED GAMMA EMITTING ISOTOPES IN SLUDGE SAMPLES ROYERSFORD WASTEWATER TREATMENT FACILITY ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC REGION 1 SAMPLE ID	Radionuclide Concentration (pCi/g wet)				
		Cs-134	Co-58	Mn-54	Zn-65	Co-60
0737M015	Sample #1 sludge dewatering filter cake	1.18 ± 0.44[a]	34.1 ± 2.2	1677 ± 10	71.6 ± 2.8	304.4 ± 4.2
0737M016	Sample #2 sludge filter pressed cake	0.88 ± 0.33	32.2 ± 1.8	1757 ± 10	71.7 ± 2.4	301.8 ± 4.2
0737M017	Sample #3 sludge filter cake	1.07 ± .48	46.1 ± 2.7	156.5 ± 8.7	85.4 ± 2.9	302.0 ± 4.5
0737M018	Sample #4 sludge dewatering filter cake	0.88 ± 0.49	44.7 ± 2.7	141.5 ± 8.1	70.4 ± 2.6	271.7 ±3.8
0737M019	Sample #5 pressed filter cake	0.90 ± 0.32	38.9 ± 2.2	138.4 ± 7.60	60.0 ± 2.0	288.4 ± 4.1
0737M020	Sample #5 sludge filter cake	0.61 ± 0.26	17.0 ± 1.0	173.0 ± 9.5	26.9 ± 1.3	182.2 ± 2.6

[a] Uncertainties are total propagated uncertainties at the 95% confidence level.

TABLE 5

CONCENTRATION OF SELECTED GAMMA EMITTING ISOTOPES IN LIQUID SAMPLES ROYERSFORD WASTEWATER TREATMENT FACILITY ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC REGION I SAMPLE ID	Radionuclide Concentration (pCi/L)				
		I-125	Cr-51	Sb-125	Ag-110M	Cs-137
0737M021	Sample #1 sludge dewatering polymer added	409 ± 210[a]	1140 ± 580	231 ± 58	83 ± 17	1270 ± 70
0737M022	Sample #1 primary digestor sludge sample, polymer added	177 ± 247	1810 ± 270	207 ± 52	139 ± 23	950 ± 50
0737M023	Sample #1 sludge dewatering, sludge sample only	605 ± 451	2410 ± 870	461± 149	313 ± 65	1820 ± 110
0737M024	Sample #2 sludge dewatering sludge sample, polymer added	121 ± 555	833 ± 501	170 ± 68	86 ± 34	1120 ± 80
0737M025	Sample #3 sludge sample, polymer added, cell A-B	746 ± 451	1790 ± 860	395 ± 96	237 ± 46	1650 ± 100
0737M026	Sample #5 sludge sample, polymer added	369 ± 544	24 ± 107	267 ± 80	145 ± 36	94.15
0737M027	Sample #1 filtrate from sludge dewatering	-60 ± 139	-20 ± 138	21 ± 17	1.7 ± 7.1	94 ± 15

TABLE 5 (continued)

CONCENTRATION OF SELECTED GAMMA EMITTING ISOTOPES IN LIQUID SAMPLES ROYERSFORD WASTEWATER TREATMENT FACILITY ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC REGION I SAMPLE ID	Radionuclide Concentration (pCi/L)				
		I-125	Cr-51	Sb-125	Ag-110M	Cs-137
0737M028	Sample #1 river sample effluent	18 ± 84	37 ± 71	-3.0 ± 9.1	-1.4 ± 3.6	24.5 ± 8.2
0737M029	Sample #1 filtrate from primary digestor	-16 ± 92	75 ± 67	-1.5 ± 12.1	-6.1 ± 4.6	44.5 ± 7.7
0737M030	Sample #2 filtrate from sludge dewatering	20 ± 78	27 ± 72	8.9 ± 9.8	-13.2 ± 4.6	112.5 ± 8.9
0737M031	Sample #3 filtrate from sludge dewatering	-188 ± 215	98 ± 168	11 ± 23	-9.8 ± 9.9	93 ± 19
0737M032	Sample #4 filtrate	-81 ± 227	42 ± 173	18 ± 27	3 ± 12	135 ± 23
0737M033	Sample #5 filtrate	-145 ± 150	89 ± 126	12 ± 21	0.2 ± 9.4	84 ± 17

[a] Uncertainties are total propagated uncertainties at the 95% confidence level.

TABLE 6

CONCENTRATION OF SELECTED GAMMA EMITTING ISOTOPES IN LIQUID SAMPLES ROYERSFORD WASTEWATER TREATMENT FACILITY ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC REGION 1 SAMPLE ID	Radionuclide Concentration (pCi/L)				
		Cs-134	Co-58	Mn-54	Zn-65	Co-60
0737M021	Sample #1 sludge dewatering, polymer added	68 ± 43[a]	2840 ± 180	13,890 ± 770	4700 ± 210	27,330 ± 410
0737M022	Sample #1 primary digestor dewatering, sludge sample, polymer added	49 ± 22	1670 ± 100	16,330 ± 880	3300 ± 130	17,520 ± 250
0737M023	Sample #1 sludge dewatering, sludge sample only	140 ± 81	5910 ± 350	19,950 ± 1110	9600 ± 390	42,530 ± 650
0737M024	Sample #2 sludge dewatering sludge sample, polymer added	100 ± 50	2310 ± 160	12,300 ± 690	4225 ± 225	21, 230 ± 340
0737M025	Sample #3 sludge sample, polymer added, cell A-B	124 ± 76	5700 ± 340	17,630 ± 980	10,070 ± 410	35,050 ± 540
0737M026	Sample #5 sludge sample, polymer added	83 ± 49	3250 ± 200	11,830 ± 660	5770 ± 260	24,120 ± 380
0737M027	Sample #1 filtrate from sludge dewatering	1.8 ± 8.5	45 ± 21	278 ± 28	66 ± 23	545 ± 31

TABLE 6 (continued)

CONCENTRATION OF SELECTED GAMMA EMITTING ISOTOPES
IN LIQUID SAMPLES
ROYERSFORD WASTEWATER TREATMENT FACILITY
ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC REGION 1 SAMPLE ID	Radionuclide Concentration (pCi/L)				
		Cs-134	Co-58	Mn-54	Zn-65	Co-60
0737M028	Sample #1 river sample effluent	3.0 ± 3.8	8.2 ± 4.7	1.9 ± 3.5	8.1 ± 7.7	38.8 ± 6.9
0737M029	Sample #1 filtrate from primary digestor	5.6 ± 5.4	5.2 ± 9.2	126 ± 13	11 ± 11	132 ± 14
0737M030	Sample #2 filtrate from sludge dewatering	8.8 ± 4.7	86 ± 11	294 ± 19	73 ± 12	709 ± 18
0737M031	Sample #3 filtrate from sludge dewatering	4 ± 12	93 ± 25	290 ± 30	83 ± 40	900 ± 40
0737M032	Sample #4 filtrate	8 ± 13	377 ± 38	740 ± 50	310 ± 50	1500 ± 50
0737M033	Sample #5 filtrate	7 ± 11	60 ± 20	220 ± 30	176 ± 56	920 ± 40

[a] Uncertainties are total propagated uncertainties at the 95% confidence level.

TABLE 7

PERCENT MOISTURE
IN REED BED SAMPLES
ROYERSFORD WASTEWATER TREATMENT FACILITY
ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC SAMPLE ID	Percent Moisture[a]
0737M015	Sample #1 sludge dewatering filter cake	83.77
0737M016	Sample #2 sludge filter pressed cake	82.84
0737M017	Sample #3 sludge filter cake	83.26
0737M018	Sample #4 sludge dewatering filter cake	84.17
0737M019	Sample #5 pressed filter cake	82.17
0737M020	Sample #5 sludge filter cake	78.37
0737M021	Sample #1 sludge dewatering, polymer added	96.41
0737M022	Sample #1 primary digestor sludge sample, polymer added	98.72
0737M023	Sample #1 sludge dewatering, sludge sample only	97.96
0737M024	Sample #2 sludge dewatering sludge sample, polymer added	96.96
0737M025	Sample #3 sludge sample, polymer added, cell A-B	96.32
0737M026	Sample #5 sludge sample, polymer added	98.14

TABLE 7 (continued)

PERCENT MOISTURE
IN REED BED SAMPLES
ROYERSFORD WASTEWATER TREATMENT FACILITY
ROYERSFORD, PENNSYLVANIA

ESSAP SAMPLE ID	NRC SAMPLE ID	Percent Moisture[a]
0737M027	Sample #1 filtrate from sludge dewatering	99.89
0737M028	Sample #1 river sample effluent	99.93
0737M029	Sample #1 filtrate from primary digestor	99.92
0737M030	Sample #2 filtrate from sludge dewatering	99.87
0737M031	Sample #3 filtrate from sludge dewatering	99.87
0737M032	Sample #4 filtrate	99.77
0737M033	Sample #5 filtrate	99.91

[a] Percent moisture was calculated by:

$$Percent\ Moisture = \left(\frac{wet\ weight - dry\ weight}{wet\ weight}\right) x\ 100$$