

Appendix C  
2000 Individual Sample Results

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 02

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0121	2.0 +-0.3 E-02
0113	0119	2.50E 08	0209	4.3 +-0.4 E-02
0119	0126	3.10E 08	0211	2.8 +-0.3 E-02
0126	0202	3.10E 08	0215	2.7 +-0.3 E-02
0202	0209	3.00E 08	0301	3.8 +-0.3 E-02
0209	0216	3.10E 08	0308	4.0 +-0.4 E-02
0216	0223	2.80E 08	0310	2.6 +-0.3 E-02
0223	0301	3.10E 08	0330	2.0 +-0.3 E-02
0223*	0301	3.10E 08	0331	1.8 +-0.3 E-02
0301	0308	3.10E 08	0405	1.6 +-0.2 E-02
0308	0315	3.00E 08	0413	2.2 +-0.3 E-02
0315	0322	3.10E 08	0413	1.8 +-0.3 E-02
0322	0330	3.40E 08	0411	2.1 +-0.3 E-02
0330	0405	2.60E 08	0421	2.4 +-0.3 E-02
0405	0412	3.00E 08	0503	2.3 +-0.3 E-02
0412	0419	3.00E 08	0505	2.0 +-0.3 E-02
0419	0426	3.00E 08	0515	2.1 +-0.3 E-02
0426	0503	3.00E 08	0531	2.4 +-0.3 E-02
0503	0510	3.10E 08	0601	1.9 +-0.3 E-02
0510	0517	3.00E 08	0609	1.9 +-0.3 E-02
0517	0524	3.00E 08	0602	2.1 +-0.3 E-02
0524	0531	3.00E 08	0610	2.4 +-0.3 E-02
0531	0608	3.40E 08	0615	1.7 +-0.2 E-02
0608	0615	3.00E 08	0629	1.7 +-0.3 E-02
0615	0621	2.60E 08	0720	1.2 +-0.3 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 02

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0621	0628	3.00E 08	0721	1.8 +-0.3 E-02
0628	0705	3.00E 08	0725	1.8 +-0.3 E-02
0705	0712	2.90E 08	0728	2.7 +-0.3 E-02
0712*	0719	3.00E 08	0803	3.4 +-0.3 E-02
0712	0719	3.00E 08	0803	3.0 +-0.3 E-02
0719	0726	2.90E 08	0808	2.5 +-0.3 E-02
0726	0802	2.80E 08	0815	3.4 +-0.3 E-02
0802	0809	3.00E 08	0816	2.7 +-0.3 E-02
0809	0816	3.00E 08	0824	3.0 +-0.3 E-02
0816	0823	2.90E 08	0906	3.3 +-0.3 E-02
0823	0830	2.90E 08	0914	2.9 +-0.3 E-02
0830	0906	2.90E 08	0914	3.0 +-0.3 E-02
0906	0913	2.80E 08	0919	2.1 +-0.3 E-02
0913	0920	2.80E 08	0929	2.7 +-0.3 E-02
0920	0927	3.00E 08	1012	1.6 +-0.3 E-02
0927	1004	3.00E 08	1011	3.0 +-0.3 E-02
1004	1011	3.00E 08		2.5 +-0.3 E-02
1011	1018	3.00E 08		3.3 +-0.4 E-02
1018	1025	3.00E 08		5.3 +-0.4 E-02
1025	1101	3.00E 08		2.3 +-0.3 E-02
1101	1109	3.40E 08		2.2 +-0.3 E-02
1109	1115	2.50E 08		3.1 +-0.4 E-02
1115	1121	2.60E 08		3.0 +-0.4 E-02
1121	1129	3.30E 08		5.2 +-0.4 E-02
1129	1206	2.90E 08		2.3 +-0.3 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 02

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
1206	1214	3.30E 08		3.6 +-0.4 E-02
1214	1220	2.60E 08		4.1 +-0.5 E-02
1220	1227	2.90E 08		3.8 +-0.4 E-02
1227	0103	2.90E 08		6.3 +-0.5 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 03

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0121	2.1 +-0.3 E-02
0113	0119	2.50E 08	0209	4.2 +-0.4 E-02
0119	0126	3.10E 08	0211	3.1 +-0.3 E-02
0126	0202	3.20E 08	0215	3.4 +-0.3 E-02
0202	0209	3.10E 08	0301	4.7 +-0.4 E-02
0209	0216	3.30E 08	0308	4.6 +-0.4 E-02
0216	0223	2.90E 08	0310	2.0 +-0.3 E-02
0223	0301	2.90E 08	0330	1.8 +-0.3 E-02
0301	0308	3.00E 08	0405	1.9 +-0.3 E-02
0308	0315	2.90E 08	0413	1.8 +-0.3 E-02
0315	0322	2.90E 08	0413	2.0 +-0.3 E-02
0322*	0330	3.30E 08	0411	2.0 +-0.3 E-02
0322	0330	3.30E 08	0411	1.8 +-0.2 E-02
0330	0405	2.60E 08	0421	2.0 +-0.3 E-02
0405	0412	2.90E 08	0503	2.2 +-0.3 E-02
0412	0419	2.90E 08	0505	1.9 +-0.3 E-02
0419	0426	3.00E 08	0515	1.9 +-0.3 E-02
0426	0503	3.00E 08	0531	2.0 +-0.3 E-02
0503	0510	3.00E 08	0601	1.8 +-0.3 E-02
0510	0517	2.90E 08	0609	1.9 +-0.3 E-02
0517	0524	2.90E 08	0602	1.9 +-0.3 E-02
0524	0531	2.90E 08	0610	2.0 +-0.3 E-02
0531	0608	3.30E 08	0615	1.5 +-0.2 E-02
0608	0615	2.80E 08	0629	1.4 +-0.2 E-02
0615	0621	2.50E 08	0720	1.3 +-0.3 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 03

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0621	0628	2.90E 08	0721	1.6 +-0.3 E-02
0628	0705	2.90E 08	0725	1.7 +-0.3 E-02
0705	0712	2.90E 08	0728	2.8 +-0.3 E-02

\* Duplicate

**Wolf Creek Nuclear Operating Corporation**

Air Particulate Filters  
STATION NUMBER 18

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0615	0621	2.60E 08	0720	1.4 +-0.3 E-02
0621	0628	3.20E 08	0721	1.8 +-0.3 E-02
0628	0705	3.00E 08	0725	1.9 +-0.3 E-02
0705	0712	3.00E 08	0728	2.7 +-0.3 E-02
0712	0719	3.10E 08	0803	3.0 +-0.3 E-02
0719	0726	2.90E 08	0808	1.8 +-0.3 E-02
0726	0802	3.10E 08	0815	2.5 +-0.3 E-02
0802	0809	3.00E 08	0816	2.7 +-0.3 E-02
0809	0816	3.00E 08	0824	2.3 +-0.3 E-02
0809*	0816	3.00E 08	0824	2.5 +-0.3 E-02
0816	0823	3.00E 08	0906	2.7 +-0.3 E-02
0823	0830	3.00E 08	0914	2.9 +-0.3 E-02
0830	0906	3.10E 08	0914	2.8 +-0.3 E-02
0906	0913	2.90E 08	0919	2.3 +-0.3 E-02
0913	0920	3.00E 08	0929	2.4 +-0.3 E-02
0920	0927	3.00E 08	1012	1.6 +-0.2 E-02
0927	1004	3.00E 08	1011	3.1 +-0.3 E-02
1004	1011	2.90E 08		2.2 +-0.3 E-02
1011	1018	2.90E 08		3.4 +-0.4 E-02
1018	1025	2.90E 08		4.7 +-0.4 E-02
1025	1101	3.00E 08		2.2 +-0.3 E-02
1101	1109	3.40E 08		2.1 +-0.3 E-02
1101*	1109	3.40E 08		1.8 +-0.3 E-02
1109*	1115	2.50E 08		3.5 +-0.5 E-02
1109	1115	2.50E 08		2.9 +-0.4 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 18

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
1115	1121	2.60E 08		2.7 +-0.4 E-02
1121	1129	3.40E 08		4.5 +-0.4 E-02
1129	1206	2.90E 08		1.9 +-0.3 E-02
1206	1214	3.30E 08		3.7 +-0.4 E-02
1214	1220	2.40E 08		4.6 +-0.5 E-02
1220	1227	2.70E 08		3.8 +-0.5 E-02
1227*	0103	2.80E 08		5.8 +-0.5 E-02
1227	0103	2.80E 08		5.4 +-0.5 E-02

\* Duplicate



Wolf Creek Nuclear Operating Corporation

Air Particulate Filters  
STATION NUMBER 32

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0121	2.0 +-0.3 E-02
0113	0119	2.50E 08	0209	4.3 +-0.4 E-02
0119	0126	3.10E 08	0211	3.4 +-0.3 E-02
0126	0202	3.00E 08	0215	3.3 +-0.3 E-02
0202	0209	3.00E 08	0301	3.9 +-0.4 E-02
0209	0216	3.00E 08	0308	4.0 +-0.4 E-02
0216	0223	2.90E 08	0310	2.4 +-0.3 E-02
0223	0301	3.00E 08	0330	2.0 +-0.3 E-02
0301	0308	3.00E 08	0405	2.3 +-0.3 E-02
0308	0315	3.00E 08	0413	2.0 +-0.3 E-02
0315	0322	3.00E 08	0413	2.2 +-0.3 E-02
0322	0330	3.40E 08	0411	1.8 +-0.2 E-02
0330	0405	2.70E 08	0421	2.4 +-0.3 E-02
0405	0412	3.00E 08	0503	2.2 +-0.3 E-02
0412	0419	3.00E 08	0505	1.7 +-0.3 E-02
0419	0426	3.00E 08	0515	2.0 +-0.3 E-02
0419*	0426	3.00E 08	0515	2.1 +-0.3 E-02
0426	0503	3.00E 08	0531	2.2 +-0.3 E-02
0503	0510	3.00E 08	0601	1.9 +-0.3 E-02
0510	0517	3.00E 08	0609	2.5 +-0.3 E-02
0517	0524	3.00E 08	0602	1.9 +-0.3 E-02
0524	0531	3.10E 08	0610	1.9 +-0.3 E-02
0531	0608	3.50E 08	0615	1.4 +-0.2 E-02
0608	0615	2.90E 08	0629	1.7 +-0.3 E-02
0615	0621	2.60E 08	0720	1.6 +-0.3 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 32

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0621	0628	2.90E 08	0721	1.7 +-0.3 E-02
0628	0705	3.00E 08	0725	1.9 +-0.3 E-02
0705	0712	2.90E 08	0728	2.7 +-0.3 E-02
0712	0719	3.10E 08	0803	2.8 +-0.3 E-02
0719	0726	2.90E 08	0808	2.3 +-0.3 E-02
0726	0802	3.10E 08	0815	2.9 +-0.3 E-02
0802	0809	3.00E 08	0816	2.9 +-0.3 E-02
0809	0816	3.00E 08	0824	2.9 +-0.3 E-02
0816	0823	3.00E 08	0906	3.1 +-0.3 E-02
0823	0830	3.00E 08	0914	3.2 +-0.3 E-02
0830	0906	3.10E 08	0914	2.8 +-0.3 E-02
0906	0913	2.90E 08	0919	2.5 +-0.3 E-02
0906*	0913	3.00E 08	0919	2.1 +-0.3 E-02
0913	0920	2.90E 08	0929	3.1 +-0.3 E-02
0920	0927	2.90E 08	1012	1.9 +-0.3 E-02
0927*	1004	2.90E 08	1011	4.1 +-0.4 E-02
0927	1004	2.90E 08	1011	3.5 +-0.3 E-02
1004	1011	2.90E 08		2.3 +-0.3 E-02
1011	1018	2.90E 08		3.4 +-0.4 E-02
1018	1025	2.90E 08		5.4 +-0.4 E-02
1025	1101	3.00E 08		2.5 +-0.3 E-02
1101	1109	3.30E 08		2.1 +-0.3 E-02
1109	1115	2.50E 08		3.7 +-0.5 E-02
1115	1121	2.60E 08		3.5 +-0.5 E-02
1121	1129	3.30E 08		5.2 +-0.4 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 32

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
1129	1206	2.90E 08		2.2 +-0.3 E-02
1206	1214	3.30E 08		3.7 +-0.4 E-02
1214	1220	2.50E 08		4.3 +-0.5 E-02
1220	1227	2.80E 08		4.2 +-0.5 E-02
1227	0103	2.90E 08		6.3 +-0.5 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 37

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0121	2.3 +-0.3 E-02
0113	0119	2.50E 08	0209	4.2 +-0.4 E-02
0119	0126	3.10E 08	0211	2.9 +-0.3 E-02
0126	0202	3.00E 08	0215	3.3 +-0.3 E-02
0202	0209	3.00E 08	0301	3.7 +-0.3 E-02
0209	0216	3.00E 08	0308	4.3 +-0.4 E-02
0216	0223	2.90E 08	0310	2.5 +-0.3 E-02
0223	0301	3.00E 08	0330	2.1 +-0.3 E-02
0301	0308	3.10E 08	0405	2.1 +-0.3 E-02
0308	0315	3.00E 08	0413	2.5 +-0.3 E-02
0315	0322	3.00E 08	0413	2.3 +-0.3 E-02
0322	0330	3.40E 08	0411	2.1 +-0.3 E-02
0330	0405	2.60E 08	0421	2.3 +-0.3 E-02
0405	0412	3.00E 08	0503	2.3 +-0.3 E-02
0412	0419	3.00E 08	0505	1.7 +-0.3 E-02
0419	0426	3.00E 08	0515	1.9 +-0.3 E-02
0426	0503	3.00E 08	0531	2.1 +-0.3 E-02
0503	0510	3.10E 08	0601	1.8 +-0.3 E-02
0510	0517	3.00E 08	0609	2.3 +-0.3 E-02
0517	0524	3.00E 08	0602	1.9 +-0.3 E-02
0517*	0524	3.00E 08	0602	2.2 +-0.3 E-02
0524	0531	3.10E 08	0610	2.4 +-0.3 E-02
0531	0608	3.40E 08	0615	1.4 +-0.2 E-02
0608	0615	3.00E 08	0629	1.6 +-0.2 E-02
0615	0621	2.60E 08	0720	1.3 +-0.3 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 37

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0621	0628	3.00E 08	0721	1.7 +-0.3 E-02
0628	0705	3.00E 08	0725	2.2 +-0.3 E-02
0705	0712	2.90E 08	0728	2.6 +-0.3 E-02
0712	0719	3.10E 08	0803	3.1 +-0.3 E-02
0719	0726	2.90E 08	0808	2.1 +-0.3 E-02
0726	0802	3.10E 08	0815	2.8 +-0.3 E-02
0802	0809	3.00E 08	0816	3.4 +-0.3 E-02
0809	0816	3.10E 08	0824	2.9 +-0.3 E-02
0816	0823	2.90E 08	0906	2.8 +-0.3 E-02
0823	0830	2.90E 08	0914	3.2 +-0.3 E-02
0830	0906	2.90E 08	0914	3.2 +-0.3 E-02
0906	0913	2.90E 08	0919	2.4 +-0.3 E-02
0913	0920	2.90E 08	0929	2.9 +-0.3 E-02
0920	0927	2.90E 08	1012	1.6 +-0.3 E-02
0927	1004	3.00E 08	1011	3.3 +-0.3 E-02
1004	1011	2.90E 08		2.4 +-0.3 E-02
1011	1018	2.90E 08		3.4 +-0.4 E-02
1018	1025	2.90E 08		5.0 +-0.4 E-02
1025	1101	3.00E 08		2.4 +-0.3 E-02
1101	1109	3.40E 08		2.2 +-0.3 E-02
1109	1115	2.40E 08		3.5 +-0.5 E-02
1115	1121	2.40E 08		3.3 +-0.4 E-02
1121	1129	3.30E 08		4.7 +-0.4 E-02
1129	1206	2.90E 08		1.9 +-0.3 E-02
1206	1214	3.30E 08		3.5 +-0.4 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 37

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
1214	1220	2.50E 08		4.0 +-0.5 E-02
1220	1227	2.80E 08		4.0 +-0.5 E-02
1227	0103	2.90E 08		5.9 +-0.5 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 40

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0121	2.2 +-0.3 E-02
0113	0119	2.50E 08	0209	4.7 +-0.4 E-02
0119	0126	3.10E 08	0211	3.0 +-0.3 E-02
0126*	0202	3.00E 08	0215	3.1 +-0.3 E-02
0126	0202	3.00E 08	0215	3.3 +-0.3 E-02
0202	0209	3.10E 08	0301	4.1 +-0.4 E-02
0209	0216	3.00E 08	0308	4.3 +-0.4 E-02
0216	0223	2.90E 08	0310	2.4 +-0.3 E-02
0223	0301	3.00E 08	0330	2.0 +-0.3 E-02
0301	0308	3.20E 08	0405	2.0 +-0.3 E-02
0308	0315	3.00E 08	0413	1.9 +-0.3 E-02
0315	0322	3.00E 08	0413	1.8 +-0.3 E-02
0322	0330	3.30E 08	0411	1.8 +-0.2 E-02
0330	0405	2.60E 08	0421	2.0 +-0.3 E-02
0405	0412	2.80E 08	0503	2.2 +-0.3 E-02
0412	0419	3.00E 08	0505	2.0 +-0.3 E-02
0419	0426	3.00E 08	0515	2.0 +-0.3 E-02
0426	0503	3.00E 08	0531	2.4 +-0.3 E-02
0503	0510	3.00E 08	0601	2.0 +-0.3 E-02
0510	0517	3.00E 08	0609	2.5 +-0.3 E-02
0517	0524	3.00E 08	0602	1.9 +-0.3 E-02
0524	0531	3.10E 08	0610	2.0 +-0.3 E-02
0531	0608	3.50E 08	0615	1.4 +-0.2 E-02
0608	0615	2.90E 08	0629	1.6 +-0.3 E-02
0615	0621	2.60E 08	0720	1.2 +-0.3 E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 40

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
0615*	0621	2.60E 08	0720	1.2 +-0.3 E-02
0621	0628	2.90E 08	0721	1.7 +-0.3 E-02
0628	0705	3.10E 08	0725	1.7 +-0.3 E-02
0705	0712	3.00E 08	0728	2.3 +-0.3 E-02
0712	0719	3.10E 08	0803	2.9 +-0.3 E-02
0719	0726	2.90E 08	0808	2.2 +-0.3 E-02
0726	0802	3.10E 08	0815	2.4 +-0.3 E-02
0802	0809	3.00E 08	0816	3.2 +-0.3 E-02
0809	0816	3.00E 08	0824	2.6 +-0.3 E-02
0816	0823	3.00E 08	0906	3.1 +-0.3 E-02
0823	0830	3.00E 08	0914	2.8 +-0.3 E-02
0830	0906	3.10E 08	0914	2.7 +-0.3 E-02
0906	0913	3.00E 08	0919	2.7 +-0.3 E-02
0913	0920	3.00E 08	0929	2.5 +-0.3 E-02
0920	0927	2.90E 08	1012	1.9 +-0.3 E-02
0927	1004	3.10E 08	1011	3.1 +-0.3 E-02
1004	1011	2.90E 08		2.5 +-0.3 E-02
1011	1018	3.00E 08		3.4 +-0.4 E-02
1018	1025	3.00E 08		4.6 +-0.4 E-02
1025	1101	3.00E 08		2.0 +-0.3 E-02
1101	1109	3.40E 08		2.0 +-0.3 E-02
1109	1115	2.50E 08		2.8 +-0.4 E-02
1115	1121	2.70E 08		3.1 +-0.4 E-02
1121	1129	3.40E 08		4.3 +-0.4 E-02
1129	1206	3.00E 08		2.0 +-0.3 E-02

\* Duplicate



Wolf Creek Nuclear Operating Corporation

Air Particulate Filters

STATION NUMBER 40

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	Gross Beta Activity (pCi/Cu.M.)
1129*	1206	3.00E 08		2.0 +-0.3 E-02
1206	1214	3.40E 08		3.7 +-0.4 E-02
1214	1220	2.40E 08		4.2 +-0.5 E-02
1214*	1220	2.40E 08		4.4 +-0.5 E-02
1220	1227	2.90E 08		3.5 +-0.4 E-02
1227	0103	3.00E 08		5.7 +-0.5 E-02

\* Duplieate

**Wolf Creek Nuclear Operating Corporation**

Air Particulate Filters  
Isotopic Analysis on Quarterly Composite

(pCi/ Cu.M.)

STATION NUMBER 02

Gamma Spectrum Analysis

Dates Listed are Collection Start Dates

<u>1229</u>	<u>AIR PARTICULATES</u>	<u>0330</u>	<u>AIR PARTICULATES</u>	<u>0628</u>	<u>AIR PARTICULATES</u>
BE-7	4.20+-0.73E-02	BE-7	6.22+-0.80E-02	BE-7	1.1+-0.5E-01
K-40	L.T. 9. E-03	K-40	L.T. 2. E-02	MN-54	L.T. 1. E-03
MN-54	L.T. 4. E-04	MN-54	L.T. 6. E-04	CO-58	L.T. 2. E-03
CO-58	L.T. 5. E-04	CO-58	L.T. 8. E-04	FE-59	L.T. 8. E-03
FE-59	L.T. 2. E-03	FE-59	L.T. 3. E-03	CO-60	L.T. 1. E-03
CO-60	L.T. 6. E-04	CO-60	L.T. 6. E-04	ZN-65	L.T. 2. E-03
ZN-65	L.T. 1. E-03	ZN-65	L.T. 1. E-03	ZR-95	L.T. 5. E-03
ZR-95	L.T. 5. E-04	ZR-95	L.T. 9. E-04	CS-134	L.T. 1. E-03
RU-103	L.T. 9. E-04	RU-103	L.T. 1. E-03	CS-137	L.T. 1. E-03
RU-106	L.T. 4. E-03	RU-106	L.T. 5. E-03	<u>1004</u>	<u>AIR PARTICULATES</u>
I-131	L.T. 9. E-03	I-131	L.T. 6. E-02	BE-7	6.+-1.E-02
CS-134	L.T. 4. E-04	CS-134	L.T. 6. E-04	MN-54	L.T. 1. E-03
CS-137	L.T. 5. E-04	CS-137	L.T. 5. E-04	CO-58	L.T. 1. E-03
BA-140	L.T. 3. E-03	BA-140	L.T. 1. E-02	FE-59	L.T. 1. E-03
CE-141	L.T. 1. E-03	CE-141	L.T. 2. E-03	CO-60	L.T. 1. E-03
CE-144	L.T. 3. E-03	CE-144	L.T. 2. E-03	ZN-65	L.T. 1. E-03
RA-226	L.T. 8. E-03	RA-226	L.T. 8. E-03	ZR-95	L.T. 1. E-03
TH-228	L.T. 7. E-04	TH-228	L.T. 7. E-04	CS-134	L.T. 1. E-03
				CS-137	L.T. 1. E-03

**Air Particulate Filters**  
**Isotopic Analysis on Quarterly Composite**  
 (pCi/ Cu.M.)  
**STATION NUMBER 02 Duplicate**  
**Gamma Spectrum Analysis**  
**Dates Listed are Collection Start Dates**

**AIR PARTICULATES**  
**DUP**

MN-54 L.T. 1. E-03

CO-58 L.T. 1. E-03

FE-59 L.T. 1. E-03

CO-60 I.T. 1. E-03

**ZN-65**                      **L.T. I. E-03**

ZR-95 I.T. 1. E-03

CS-134 L.T. 1. E-03

CS-137 L.T. 1. E-03

**Wolf Creek Nuclear Operating Corporation**

**Air Particulate Filters  
Isotopic Analysis on Quarterly Composite**

**(pCi/ Cu.M.)  
STATION NUMBER 03  
Gamma Spectrum Analysis**

**Dates Listed are Collection Start Dates**

**1229**

**AIR PARTICULATES**

**0330**

**AIR PARTICULATES**

BE-7

6.10+-0.74E-02

BE-7

6.97+-0.82E-02

K-40

L.T. 8. E-03

K-40

L.T. 9. E-03

MN-54

L.T. 4. E-04

MN-54

L.T. 5. E-04

CO-58

L.T. 5. E-04

CO-58

L.T. 6. E-04

FE-59

L.T. 1. E-03

FE-59

L.T. 3. E-03

CO-60

L.T. 3. E-04

CO-60

L.T. 4. E-04

ZN-65

L.T. 7. E-04

ZN-65

L.T. 1. E-03

ZR-95

L.T. 6. E-04

ZR-95

L.T. 8. E-04

RU-103

L.T. 7. E-04

RU-103

L.T. 1. E-03

RU-106

L.T. 4. E-03

RU-106

L.T. 4. E-03

I-131

L.T. 8. E-03

I-131

L.T. 5. E-02

CS-134

L.T. 4. E-04

CS-134

L.T. 5. E-04

CS-137

L.T. 5. E-04

CS-137

L.T. 6. E-04

BA-140

L.T. 4. E-03

BA-140

L.T. 1. E-02

CE-141

L.T. 1. E-03

CE-141

L.T. 2. E-03

CE-144

L.T. 3. E-03

CE-144

L.T. 3. E-03

RA-226

L.T. 1. E-02

RA-226

L.T. 8. E-03

TH-228

L.T. 8. E-04

TH-228

L.T. 7. E-04

**Wolf Creek Nuclear Operating Corporation**

**Air Particulate Filters  
Isotopic Analysis on Quarterly Composite**

**(pCi/ Cu.M.)**

**STATION NUMBER 18**

**Gamma Spectrum Analysis**

**Dates Listed are Collection Start Dates**

**0628**                    **AIR PARTICULATES**

BE-7                    6.+-2. E-02

MN-54                    L.T. 1. E-03

CO-58                    L.T. 1. E-03

FE-59                    L.T. 5. E-03

CO-60                    L.T. 1. E-03

ZN-65                    L.T. 1. E-03

ZR-95                    L.T. 3. E-03

CS-134                    L.T. 1. E-03

CS-137                    L.T. 1. E-03

**1004**                    **AIR PARTICULATES**

BE-7                    5.+-1. E-02

MN-54                    L.T. 1. E-03

CO-58                    L.T. 1. E-03

FE-59                    L.T. 2. E-03

CO-60                    L.T. 1. E-03

ZN-65                    L.T. 1. E-03

ZR-95                    L.T. 1. E-03

CS-134                    L.T. 1. E-03

CS-137                    L.T. 1. E-03

**Wolf Creek Nuclear Operating Corporation**

**Air Particulate Filters  
Isotopic Analysis on Quarterly Composite**

(pCi/ Cu.M.)

**STATION NUMBER 32**

**Gamma Spectrum Analysis**

**Dates Listed are Collection Start Dates**

<u>1229</u>	<u>AIR PARTICULATES</u>	<u>0330</u>	<u>AIR PARTICULATES</u>	<u>0628</u>	<u>AIR PARTICULATES</u>
BE-7	7.34+0.77E-02	BE-7	7.49+0.80E-02	BE-7	8.+5. E-02
K-40	L.T. 1. E-02	K-40	L.T. 9. E-03	MN-54	L.T. 1. E-03
MN-54	L.T. 5. E-04	MN-54	L.T. 4. E-04	CO-58	L.T. 2. E-03
CO-58	L.T. 5. E-04	CO-58	L.T. 6. E-04	FE-59	L.T. 5. E-03
FE-59	L.T. 2. E-03	FE-59	L.T. 2. E-03	CO-60	L.T. 1. E-03
CO-60	L.T. 5. E-04	CO-60	L.T. 5. E-04	ZN-65	L.T. 1. E-03
ZN-65	L.T. 1. E-03	ZN-65	L.T. 1. E-03	ZR-95	L.T. 3. E-03
ZR-95	L.T. 7. E-04	ZR-95	L.T. 7. E-04	CS-134	L.T. 1. E-03
RU-103	L.T. 8. E-04	RU-103	L.T. 1. E-03	CS-137	L.T. 1. E-03
RU-106	L.T. 4. E-03	RU-106	L.T. 4. E-03	<u>1004</u>	<u>AIR PARTICULATES</u>
I-131	L.T. 9. E-03	I-131	L.T. 4. E-02	BE-7	6.+1. E-02
CS-134	L.T. 5. E-04	CS-134	L.T. 4. E-04	MN-54	L.T. 1. E-03
CS-137	L.T. 6. E-04	CS-137	L.T. 4. E-04	CO-58	L.T. 1. E-03
BA-140	L.T. 3. E-03	BA-140	L.T. 1. E-02	FE-59	L.T. 2. E-03
CE-141	L.T. 1. E-03	CE-141	L.T. 1. E-03	CO-60	L.T. 1. E-03
CE-144	L.T. 3. E-03	CE-144	L.T. 2. E-03	ZN-65	L.T. 2. E-03
RA-226	L.T. 8. E-03	RA-226	L.T. 6. E-03	ZR-95	L.T. 1. E-03
TH-228	L.T. 8. E-04	TH-228	L.T. 6. E-04	CS-134	L.T. 1. E-03
				CS-137	L.T. 1. E-03

**Wolf Creek Nuclear Operating Corporation**

Air Particulate Filters  
Isotopic Analysis on Quarterly Composite

(pCi/ Cu.M.)

STATION NUMBER 37

Gamma Spectrum Analysis

Dates Listed are Collection Start Dates

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<u>1229</u>	<u>AIR PARTICULATES</u>	<u>0330</u>	<u>AIR PARTICULATES</u>	<u>0628</u>	<u>AIR PARTICULATES</u>
BE-7	6.74+-0.68E-02	BE-7	6.11+-0.98E-02	BE-7	1.3+-0.7E-01
K-40	L.T. 1. E-02	K-40	L.T. 2. E-02	MN-54	L.T. 1. E-03
MN-54	L.T. 5. E-04	MN-54	L.T. 7. E-04	CO-58	L.T. 2. E-03
CO-58	L.T. 6. E-04	CO-58	L.T. 8. E-04	FE-59	L.T. 1.2E-02
FE-59	L.T. 2. E-03	FE-59	L.T. 3. E-03	CO-60	L.T. 1. E-03
CO-60	L.T. 4. E-04	CO-60	L.T. 6. E-04	ZN-65	L.T. 3. E-03
ZN-65	L.T. 1. E-03	ZN-65	L.T. 1. E-03	ZR-95	L.T. 4. E-03
ZR-95	L.T. 6. E-04	ZR-95	L.T. 1. E-03	CS-134	L.T. 1. E-03
RU-103	L.T. 7. E-04	RU-103	L.T. 1. E-03	CS-137	L.T. 1. E-03
RU-106	L.T. 4. E-03	RU-106	L.T. 5. E-03	<u>1004</u>	<u>AIR PARTICULATES</u>
I-131	L.T. 8. E-03	I-131	L.T. 7. E-02	BE-7	5.+-1. E-02
CS-134	L.T. 4. E-04	CS-134	L.T. 7. E-04	MN-54	L.T. 1. E-03
CS-137	L.T. 5. E-04	CS-137	L.T. 6. E-04	CO-58	L.T. 1. E-03
BA-140	L.T. 3. E-03	BA-140	L.T. 1. E-02	FE-59	L.T. 2. E-03
CE-141	L.T. 9. E-04	CE-141	L.T. 3. E-03	CO-60	L.T. 1. E-03
CE-144	L.T. 2. E-03	CE-144	L.T. 4. E-03	ZN-65	L.T. 1. E-03
RA-226	L.T. 6. E-03	RA-226	L.T. 1. E-02	ZR-95	L.T. 1. E-03
TH-228	L.T. 6. E-04	TH-228	L.T. 1. E-03	CS-134	L.T. 1. E-03
				CS-137	L.T. 1. E-03

**Wolf Creek Nuclear Operating Corporation**

Air Particulate Filters  
Isotopic Analysis on Quarterly Composite

(pCi/ Cu.M.)

STATION NUMBER 40

Gamma Spectrum Analysis

Dates Listed are Collection Start Dates

Page C-24

<u>1229</u>	<u>AIR PARTICULATES</u>	<u>0330</u>	<u>AIR PARTICULATES</u>	<u>0628</u>	<u>AIR PARTICULATES</u>
BE-7	6.97+-0.89E-02	BE-7	6.04+-0.98E-02	BE-7	1.0+-0.4E-01
K-40	L.T. 2. E-02	K-40	L.T. 2. E-02	MN-54	L.T. 1. E-03
MN-54	L.T. 7. E-04	MN-54	L.T. 7. E-04	CO-58	L.T. 1. E-03
CO-58	L.T. 8. E-04	CO-58	L.T. 9. E-04	FE-59	L.T. 4. E-03
FE-59	L.T. 3. E-03	FE-59	L.T. 4. E-03	CO-60	L.T. 1. E-03
CO-60	L.T. 6. E-04	CO-60	L.T. 6. E-04	ZN-65	L.T. 1. E-03
ZN-65	L.T. 1. E-03	ZN-65	L.T. 1. E-03	ZR-95	L.T. 1. E-03
ZR-95	L.T. 9. E-04	ZR-95	L.T. 9. E-04	CS-134	L.T. 1. E-03
RU-103	L.T. 1. E-03	RU-103	L.T. 1. E-03	CS-137	L.T. 1. E-03
RU-106	L.T. 5. E-03	RU-106	L.T. 6. E-03	<u>1004</u>	<u>AIR PARTICULATES</u>
I-131	L.T. 1. E-02	I-131	L.T. 7. E-02	BE-7	4.+-1. E-02
CS-134	L.T. 6. E-04	CS-134	L.T. 7. E-04	MN-54	L.T. 1. E-03
CS-137	L.T. 6. E-04	CS-137	L.T. 6. E-04	CO-58	L.T. 1. E-03
BA-140	L.T. 5. E-03	BA-140	L.T. 1. E-02	FE-59	L.T. 1. E-03
CE-141	L.T. 1. E-03	CE-141	L.T. 2. E-03	CO-60	L.T. 1. E-03
CE-144	L.T. 3. E-03	CE-144	L.T. 3. E-03	ZN-65	L.T. 1. E-03
RA-226	L.T. 9. E-03	RA-226	L.T. 9. E-03	ZR-95	L.T. 1. E-03
TH-228	L.T. 9. E-04	TH-228	L.T. 8. E-04	CS-134	L.T. 1. E-03
				CS-137	L.T. 1. E-03



Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 02

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0117	L.T. 2. E-02
0113	0119	2.50E 08	0121	L.T. 1. E-02
0119	0126	3.10E 08	0131	L.T. 2. E-02
0126	0202	3.10E 08	0204	L.T. 1. E-02
0202	0209	3.00E 08	0211	L.T. 1. E-02
0209	0216	3.10E 08	0219	L.T. 2. E-02
0216	0223	2.80E 08	0224	L.T. 1. E-02
0223	0301	3.10E 08	0304	L.T. 1. E-02
0223*	0301	3.10E 08	0306	L.T. 1. E-02
0301	0308	3.10E 08	0311	L.T. 1. E-02
0308	0315	3.00E 08	0320	L.T. 2. E-02
0315	0322	3.10E 08	0323	L.T. 2. E-02
0322	0330	3.40E 08	0404	L.T. 2. E-02
0330	0405	2.60E 08	0410	L.T. 3. E-02
0405	0412	3.00E 08	0413	L.T. 2. E-02
0412	0419	3.00E 08	0424	L.T. 1. E-02
0419	0426	3.00E 08	0427	L.T. 1. E-02
0426	0503	3.00E 08	0508	L.T. 2. E-02
0503	0510	3.10E 08	0513	L.T. 9. E-03
0510	0517	3.00E 08	0520	L.T. 1. E-02
0517	0524	3.00E 08	0526	L.T. 2. E-02
0524	0531	3.00E 08	0607	L.T. 3. E-02
0531	0608	3.40E 08	0613	L.T. 2. E-02
0608	0615	3.00E 08	0620	L.T. 1. E-02
0615	0621	2.60E 08	0624	L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 02

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0621	0628	3.00E 08	0701	L.T. 1. E-02
0628	0705	3.00E 08	0708	L.T. 1. E-02
0705	0712	2.90E 08	0715	L.T. 1. E-02
0712*	0719	3.00E 08	0820	L.T. 8. E-03
0712	0719	3.00E 08	0724	L.T. 2. E-02
0719	0726	2.90E 08	0820	L.T. 6. E-03
0726	0802	2.80E 08	0809	L.T. 3. E-02
0802	0809	3.00E 08	0812	L.T. 1. E-02
0809	0816	3.00E 08	0823	L.T. 2. E-02
0816	0823	2.90E 08	0902	L.T. 2. E-03
0823	0830	2.90E 08	0911	L.T. 2.81E-02
0830	0906	2.90E 08	0928	L.T. 4. E-03
0906	0913	2.80E 08	0922	L.T. 2. E-02
0913	0920	2.80E 08	1002	L.T. 3. E-02
0920	0927	3.00E 08	1012	L.T. 3. E-02
0927	1004	3.00E 08	1013	L.T. 2. E-02
1004	1011	3.00E 08		L.T. 2. E-02
1011	1018	3.00E 08		L.T. 1. E-02
1018	1025	3.00E 08		L.T. 1. E-02
1025	1101	3.00E 08		L.T. 1. E-02
1101	1109	3.40E 08		L.T. 2. E-02
1109	1115	2.50E 08		L.T. 1. E-02
1115	1121	2.60E 08		L.T. 1. E-02
1121	1129	3.30E 08		L.T. 1. E-02
1129	1206	2.90E 08		L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 02

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
1206	1214	3.30E 08		L.T. 1. E-02
1214	1220	2.60E 08		L.T. 2. E-02
1220	1227	2.90E 08		L.T. 1. E-02
1227	0103	2.90E 08		L.T. 2. E-02

\* Duplicate

**Wolf Creek Nuclear Operating Corporation**

Charcoal Filters

STATION NUMBER 03

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0117	L.T. 2. E-02
0113	0119	2.50E 08	0121	L.T. 1. E-02
0119	0126	3.10E 08	0131	L.T. 2. E-02
0126	0202	3.20E 08	0204	L.T. 1. E-02
0202	0209	3.10E 08	0211	L.T. 1. E-02
0209	0216	3.30E 08	0219	L.T. 1. E-02
0216	0223	2.90E 08	0224	L.T. 1. E-02
0223	0301	2.90E 08	0304	L.T. 1. E-02
0301	0308	3.00E 08	0311	L.T. 1. E-02
0308	0315	2.90E 08	0320	L.T. 2. E-02
0315	0322	2.90E 08	0323	L.T. 2. E-02
0322*	0330	3.30E 08	0405	L.T. 1. E-02
0322	0330	3.30E 08	0404	L.T. 2. E-02
0330	0405	2.60E 08	0410	L.T. 3. E-02
0405	0412	2.90E 08	0413	L.T. 2. E-02
0412	0419	2.90E 08	0424	L.T. 1. E-02
0419	0426	3.00E 08	0427	L.T. 1. E-02
0426	0503	3.00E 08	0508	L.T. 2. E-02
0503	0510	3.00E 08	0513	L.T. 1. E-02
0510	0517	2.90E 08	0520	L.T. 1. E-02
0517	0524	2.90E 08	0526	L.T. 2. E-02
0524	0531	2.90E 08	0607	L.T. 3. E-02
0531	0608	3.30E 08	0613	L.T. 2. E-02
0608	0615	2.80E 08	0620	L.T. 1. E-02
0615	0621	2.50E 08	0624	L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 03

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0621	0628	2.90E 08	0701	L.T. 1. E-02
0628	0705	2.90E 08	0708	L.T. 1. E-02
0705	0712	2.90E 08	0715	L.T. 1. E-02

\* Duplicate

**Wolf Creek Nuclear Operating Corporation**

Charcoal Filters

STATION NUMBER 18

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0615	0621	2.60E 08	0623	L.T. 4. E-02
0621	0628	3.20E 08	0701	L.T. 8. E-03
0628	0705	3.00E 08	0707	L.T. 7. E-03
0705	0712	3.00E 08	0716	L.T. 1. E-02
0712	0719	3.10E 08	0724	L.T. 2. E-02
0719	0726	2.90E 08	0820	L.T. 6. E-03
0726	0802	3.10E 08	0809	L.T. 3. E-02
0802	0809	3.00E 08	0812	L.T. 1. E-02
0809	0816	3.00E 08	0823	L.T. 2. E-02
0809*	0816	3.00E 08	0824	L.T. 2. E-02
0816	0823	3.00E 08	0902	L.T. 2. E-03
0823	0830	3.00E 08	0911	L.T. 2.72E-02
0830	0906	3.10E 08	0928	L.T. 4. E-03
0906	0913	2.90E 08	0922	L.T. 2. E-02
0913	0920	3.00E 08	1002	L.T. 2. E-02
0920	0927	3.00E 08	1012	L.T. 3. E-02
0927	1004	3.00E 08	1013	L.T. 2. E-02
1004	1011	2.90E 08		L.T. 2. E-02
1011	1018	2.90E 08		L.T. 1. E-02
1018	1025	2.90E 08		L.T. 1. E-02
1025	1101	3.00E 08		L.T. 1. E-02
1101	1109	3.40E 08		L.T. 2. E-02
1109	1115	2.50E 08		L.T. 1. E-02
1115	1121	2.60E 08		L.T. 1. E-02
1121	1129	3.40E 08		L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 18

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
1129	1206	2.90E 08		L.T. 1. E-02
1206	1214	3.30E 08		L.T. 1. E-02
1214	1220	2.40E 08		L.T. 2. E-02
1220	1227	2.70E 08		L.T. 1. E-02
1227	0103	2.80E 08		L.T. 2. E-02

\* Duplicate

**Wolf Creek Nuclear Operating Corporation**

Charcoal Filters

STATION NUMBER 32

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0117	L.T. 2. E-02
0113	0119	2.50E 08	0121	L.T. 1. E-02
0119	0126	3.10E 08	0131	L.T. 2. E-02
0126	0202	3.00E 08	0204	L.T. 1. E-02
0202	0209	3.00E 08	0211	L.T. 1. E-02
0209	0216	3.00E 08	0219	L.T. 2. E-02
0216	0223	2.90E 08	0224	L.T. 1. E-02
0223	0301	3.00E 08	0304	L.T. 1. E-02
0301	0308	3.00E 08	0311	L.T. 1. E-02
0308	0315	3.00E 08	0320	L.T. 2. E-02
0315	0322	3.00E 08	0323	L.T. 2. E-02
0322	0330	3.40E 08	0404	L.T. 2. E-02
0330	0405	2.70E 08	0410	L.T. 2. E-02
0405	0412	3.00E 08	0413	L.T. 2. E-02
0412	0419	3.00E 08	0424	L.T. 1. E-02
0419	0426	3.00E 08	0427	L.T. 1. E-02
0419*	0426	3.00E 08	0428	L.T. 1. E-02
0426	0503	3.00E 08	0508	L.T. 2. E-02
0503	0510	3.00E 08	0513	L.T. 1. E-02
0510	0517	3.00E 08	0520	L.T. 1. E-02
0517	0524	3.00E 08	0526	L.T. 2. E-02
0524	0531	3.10E 08	0607	L.T. 3. E-02
0531	0608	3.50E 08	0613	L.T. 2. E-02
0608	0615	2.90E 08	0620	L.T. 1. E-02
0615	0621	2.60E 08	0624	L.T. 1. E-02

\* Duplicate



Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 32

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0621	0628	2.90E 08	0701	L.T. 1. E-02
0628	0705	3.00E 08	0708	L.T. 1. E-02
0705	0712	2.90E 08	0715	L.T. 1. E-02
0712	0719	3.10E 08	0724	L.T. 2. E-02
0719	0726	2.90E 08	0820	L.T. 6. E-03
0726	0802	3.10E 08	0809	L.T. 3. E-02
0802	0809	3.00E 08	0812	L.T. 1. E-02
0809	0816	3.00E 08	0823	L.T. 2. E-02
0816	0823	3.00E 08	0902	L.T. 2. E-03
0823	0830	3.00E 08	0911	L.T. 2.73E-02
0830	0906	3.10E 08	0928	L.T. 4. E-03
0906	0913	2.90E 08	0922	L.T. 2. E-02
0906*	0913	3.00E 08	0925	L.T. 2. E-02
0913	0920	2.90E 08	1002	L.T. 2. E-02
0920	0927	2.90E 08	1012	L.T. 3. E-02
0927	1004	2.90E 08	1013	L.T. 2. E-02
1004	1011	2.90E 08		L.T. 2. E-02
1011	1018	2.90E 08		L.T. 1. E-02
1018	1025	2.90E 08		L.T. 1. E-02
1025	1101	3.00E 08		L.T. 1. E-02
1101	1109	3.30E 08		L.T. 2. E-02
1109	1115	2.50E 08		L.T. 1. E-02
1115	1121	2.60E 08		L.T. 1. E-02
1121	1129	3.30E 08		L.T. 1. E-02
1129	1206	2.90E 08		L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 32

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
1206	1214	3.30E 08		L.T. 1. E-02
1214	1220	2.50E 08		L.T. 2. E-02
1220	1227	2.80E 08		L.T. 1. E-02
1227	0103	2.90E 08		L.T. 2. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 37

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0117	L.T. 2. E-02
0113	0119	2.50E 08	0121	L.T. 1. E-02
0119	0126	3.10E 08	0131	L.T. 2. E-02
0126	0202	3.00E 08	0204	L.T. 1. E-02
0202	0209	3.00E 08	0211	L.T. 1. E-02
0209	0216	3.00E 08	0219	L.T. 2. E-02
0216	0223	2.90E 08	0224	L.T. 1. E-02
0223	0301	3.00E 08	0304	L.T. 1. E-02
0301	0308	3.10E 08	0311	L.T. 1. E-02
0308	0315	3.00E 08	0320	L.T. 2. E-02
0315	0322	3.00E 08	0323	L.T. 2. E-02
0322	0330	3.40E 08	0404	L.T. 2. E-02
0330	0405	2.60E 08	0410	L.T. 3. E-02
0405	0412	3.00E 08	0413	L.T. 2. E-02
0412	0419	3.00E 08	0424	L.T. 1. E-02
0419	0426	3.00E 08	0427	L.T. 1. E-02
0426	0503	3.00E 08	0508	L.T. 2. E-02
0503	0510	3.10E 08	0513	L.T. 1. E-02
0510	0517	3.00E 08	0520	L.T. 2. E-02
0517	0524	3.00E 08	0526	L.T. 2. E-02
0517*	0524	3.00E 08	0529	L.T. 2. E-02
0524	0531	3.10E 08	0607	L.T. 3. E-02
0531	0608	3.40E 08	0613	L.T. 2. E-02
0608	0615	3.00E 08	0620	L.T. 1. E-02
0615	0621	2.60E 08	0624	L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 37

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0621	0628	3.00E 08	0701	L.T. 1. E-02
0628	0705	3.00E 08	0708	L.T. 1. E-02
0705	0712	2.90E 08	0715	L.T. 1. E-02
0712	0719	3.10E 08	0724	L.T. 2. E-02
0719	0726	2.90E 08	0820	L.T. 6. E-03
0726	0802	3.10E 08	0809	L.T. 3. E-02
0802	0809	3.00E 08	0812	L.T. 1. E-02
0809	0816	3.10E 08	0823	L.T. 2. E-02
0816	0823	2.90E 08	0902	L.T. 2. E-03
0823	0830	2.90E 08	0911	L.T. 2.81E-02
0830	0906	2.90E 08	0928	L.T. 4. E-03
0906	0913	3.90E 08	0922	L.T. 2. E-02
0913	0920	2.90E 08	1002	L.T. 2. E-02
0920	0927	2.90E 08	1012	L.T. 3. E-02
0927	1004	3.00E 08	1013	L.T. 2. E-02
1004	1011	2.90E 08		L.T. 2. E-02
1011	1018	2.90E 08		L.T. 1. E-02
1018	1025	2.90E 08		L.T. 1. E-02
1025	1101	3.00E 08		L.T. 1. E-02
1101	1109	3.40E 08		L.T. 2. E-02
1109	1115	2.40E 08		L.T. 1. E-02
1115	1121	2.60E 08		L.T. 1. E-02
1121	1129	3.30E 08		L.T. 1. E-02
1129	1206	2.90E 08		L.T. 1. E-02
1206	1214	3.30E 08		L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 37

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
1214	1220	2.50E 08		L.T. 2. E-02
1220	1227	2.80E 08		L.T. 1. E-02
1227	0103	2.90E 08		L.T. 2. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 40

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0105	0113	3.50E 08	0117	L.T. 1. E-02
0113	0119	2.50E 08	0121	L.T. 1. E-02
0119	0126	3.10E 08	0131	L.T. 1. E-02
0126*	0202	3.00E 08	0207	L.T. 2. E-02
0126	0202	3.00E 08	0204	L.T. 9. E-03
0202	0209	3.10E 08	0211	L.T. 9. E-03
0209	0216	3.00E 08	0219	L.T. 1. E-02
0216	0223	2.90E 08	0224	L.T. 8. E-03
0223	0301	3.00E 08	0304	L.T. 7. E-03
0301	0308	3.20E 08	0311	L.T. 9. E-03
0308	0315	3.00E 08	0320	L.T. 1. E-02
0315	0322	3.00E 08	0323	L.T. 1. E-02
0322	0330	3.30E 08	0404	L.T. 1. E-02
0330	0405	2.60E 08	0410	L.T. 2. E-02
0405	0412	2.80E 08	0413	L.T. 1. E-02
0412	0419	3.00E 08	0424	L.T. 1. E-02
0419	0426	3.00E 08	0427	L.T. 7. E-03
0426	0503	3.00E 08	0508	L.T. 2. E-02
0503	0510	3.00E 08	0513	L.T. 1. E-02
0503*	0510	3.00E 08	0513	L.T. 8. E-03
0510	0517	3.00E 08	0520	L.T. 7. E-03
0517	0524	3.00E 08	0526	L.T. 1. E-02
0524	0531	3.10E 08	0607	L.T. 2. E-02
0531	0608	3.50E 08	0613	L.T. 1. E-02
0608	0615	2.90E 08	0620	L.T. 1. E-02

\* Duplicate

**Wolf Creek Nuclear Operating Corporation**

Charcoal Filters

STATION NUMBER 40

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
0615	0621	2.60E 08	0624	L.T. 8. E-03
0615*	0621	2.60E 08	0623	L.T. 2. E-02
0621	0628	2.90E 08	0701	L.T. 8. E-03
0628	0705	3.01E 08	0708	L.T. 9. E-03
0705	0712	3.00E 08	0715	L.T. 1. E-02
0712	0719	3.10E 08	0724	L.T. 1. E-02
0719	0726	2.90E 08	0820	L.T. 6. E-03
0726	0802	3.10E 08	0809	L.T. 3. E-02
0802	0809	3.00E 08	0812	L.T. 9. E-03
0809	0816	3.00E 08	0823	L.T. 2. E-02
0816	0823	3.00E 08	0902	L.T. 2. E-03
0823	0830	3.00E 08	0911	L.T. 2.26E-02
0830	0906	3.10E 08	0928	L.T. 4. E-03
0906	0913	3.00E 08	0922	L.T. 1. E-02
0913	0920	3.00E 08	1002	L.T. 2. E-02
0920	0927	2.90E 08	1012	L.T. 2. E-02
0927	1004	3.10E 08	1013	L.T. 1. E-02
1004	1011	2.90E 08		L.T. 2. E-02
1011	1018	3.00E 08		L.T. 1. E-02
1018	1025	3.00E 08		L.T. 1. E-02
1025	1101	3.00E 08		L.T. 1. E-02
1101	1109	3.40E 08		L.T. 2. E-02
1109	1115	2.50E 08		L.T. 1. E-02
1115	1121	2.70E 08		L.T. 1. E-02
1121	1129	3.40E 08		L.T. 1. E-02

\* Duplicate

Wolf Creek Nuclear Operating Corporation

Charcoal Filters

STATION NUMBER 40

Collection Start Date	Collection Stop Date	Volume CC	Mid-Count Date	I-131 Activity (pCi/Cu.M.)
1129	1206	3.00E 08		L.T. 1. E-02
1206	1214	3.40E 08		L.T. 1. E-02
1214	1220	2.40E 08		L.T. 2. E-02
1220	1227	2.90E 08		L.T. 1. E-02
1227	0103	3.00E 08		L.T. 2. E-02

\* Duplicate



Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Surface Water  
(pCi/Liter)  
STATION NUMBER DC  
Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0120</u>	<u>SURFACE WATER</u>	<u>0217</u>	<u>SURFACE WATER</u>	<u>0323</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 5. E 01	K-40	L.T. 5. E 01	K-40	L.T. 6. E 01
MN-54	L.T. 3. E 00	MN-54	L.T. 3. E 00	MN-54	L.T. 3. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 6. E 00	FE-59	L.T. 7. E 00	FE-59	L.T. 6. E 00
CO-60	L.T. 3. E 00	CO-60	L.T. 3. E 00	CO-60	L.T. 3. E 00
ZN-65	L.T. 6. E 00	ZN-65	L.T. 6. E 00	ZN-65	L.T. 6. E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 3. E 00	ZR-95	L.T. 4. E 00
RU-103	L.T. 3. E 00	RU-103	L.T. 4. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 3. E 01	RU-106	L.T. 3. E 01	RU-106	L.T. 3. E 01
I-131	L.T. 6. E 00	I-131	L.T. 7. E 00	I-131	L.T. 5. E 00
CS-134	L.T. 3. E 00	CS-134	L.T. 3. E 00	CS-134	L.T. 3. E 00
CS-137	L.T. 4. E 00	CS-137	L.T. 4. E 00	CS-137	L.T. 4. E 00
BA-140	L.T. 5. E 00	BA-140	L.T. 4. E 00	BA-140	L.T. 5. E 00
CE-141	L.T. 6. E 00	CE-141	L.T. 7. E 00	CE-141	L.T. 5. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 3. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 7. E 01	RA-226	L.T. 8. E 01	RA-226	L.T. 6. E 01
TH-228	L.T. 6. E 00	TH-228	L.T. 7. E 00	TH-228	L.T. 5. E 00
H-3	1.1 +0.1 E 04	H-3	1.1 +0.1 E 04	H-3	1.2 +0.1 E 04

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
 STATION NUMBER DC  
 Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0420</u>	<u>SURFACE WATER</u>	<u>0518</u>	<u>SURFACE WATER</u>	<u>0615</u>
BE-7	L.T. 4. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 6. E 01	K-40	L.T. 4. E 01	K-40	L.T. 7. E 01
MN-54	L.T. 3. E 00	MN-54	L.T. 2. E 00	MN-54	L.T. 3. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 2. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 1. E 01	FE-59	L.T. 6. E 00	FE-59	L.T. 9. E 00
CO-60	L.T. 3. E 00	CO-60	L.T. 2. E 00	CO-60	L.T. 3. E 00
ZN-65	L.T. 6. E 00	ZN-65	L.T. 3. E 00	ZN-65	L.T. 6. E 00
ZR-95	L.T. 4. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 3. E 00
RU-103	L.T. 5. E 00	RU-103	L.T. 3. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 3. E 01	RU-106	L.T. 1. E 01	RU-106	L.T. 3. E 01
I-131	L.T. 4. E 01	I-131	L.T. 4. E 01	I-131	L.T. 1. E 01
CS-134	L.T. 3. E 00	CS-134	L.T. 2. E 00	CS-134	L.T. 3. E 00
CS-137	L.T. 3. E 00	CS-137	L.T. 2. E 00	CS-137	L.T. 3. E 00
BA-140	L.T. 1. E 01	BA-140	L.T. 1. E 01	BA-140	L.T. 6. E 00
CE-141	L.T. 8. E 00	CE-141	L.T. 5. E 00	CE-141	L.T. 6. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 1. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 5. E 01	RA-226	L.T. 3. E 01	RA-226	L.T. 6. E 01
TH-228	L.T. 5. E 00	TH-228	L.T. 2. E 00	TH-228	L.T. 5. E 00
H-3	1.3 +-0.1 E 04	H-3	1.3 +-0.1 E 04	H-3	1.3 +-0.1 E 04

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
 STATION NUMBER DC  
 Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0726</u>	<u>SURFACE WATER</u>	<u>0817</u>	<u>SURFACE WATER</u>	<u>0921</u>
BE-7	L.T. 4.12E+01	BE-7	L.T. 2.31E+01	BE-7	L.T. 7.07E 01
K-40	L.T. 1.07E+02	K-40	L.T. 4.34E+01	K-40	L.T. 5.82E 01
MN-54	L.T. 4.45E+00	MN-54	L.T. 2.75E+00	MN-54	L.T. 3.79E 00
CO-58	L.T. 4.85E+00	CO-58	L.T. 2.78E+00	CO-58	L.T. 6.85E 00
FE-59	L.T. 1.06E+01	FE-59	L.T. 6.36E+00	FE-59	L.T. 2.08E 01
CO-60	L.T. 4.27E+00	CO-60	L.T. 3.24E+00	CO-60	L.T. 5.47E 00
ZN-65	L.T. 8.87E+00	ZN-65	L.T. 5.70E+00	ZN-65	L.T. 8.08E 00
ZR-95	L.T. 9.43E+00	ZR-95	L.T. 5.31E+00	ZR-95	L.T. 1.18E 01
RU-103	L.T. 5.53E+00	RU-103	L.T. 2.99E+00	RU-103	L.T. 1.27E 01
RU-106	L.T. 3.81E+01	RU-106	L.T. 2.27E+01	RU-106	L.T. 3.11E 01
I-131	L.T. 2.14E+01	I-131	L.T. 7.74E+00	I-131	L.T. 3.97E 03
CS-134	L.T. 3.77E+00	CS-134	L.T. 2.21E+00	CS-134	L.T. 3.15E 00
CS-137	L.T. 4.72E+00	CS-137	L.T. 3.11E+00	CS-137	L.T. 3.62E 00
BA-140	L.T. 4.13E+01	BA-140	L.T. 1.86E+01	BA-140	L.T. 9.25E 02
CE-141	L.T. 8.80E+00	CE-141	L.T. 4.66E+00	CE-141	L.T. 2.37E 01
CE-144	L.T. 2.73E+01	CE-144	L.T. 1.54E+01	CE-144	L.T. 2.20E 01
RA-226	L.T. 9.04E+00	RA-226	L.T. 6.15E+00	RA-226	L.T. 7.89E 00
TH-228	L.T. 7.20E+00	TH-228	L.T. 4.38E+00	TH-228	L.T. 5.48E 00
H-3	17,357+-375	H-3	1.6 +-0.1 E 04	H-3	2.86+-0.05E 04

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
**STATION NUMBER DC**  
**Gamma Spectrum and Tritium Analysis**

<u>SURFACE WATER</u>	<u>1019</u>	<u>SURFACE WATER</u>	<u>1116</u>	<u>SURFACE WATER</u>	<u>1229</u>
MN-54	L.T. 2.0E 00	MN-54	L.T. 5.5E 00	MN-54	L.T. 5.0E 00
CO-58	L.T. 1.9E 00	CO-58	L.T. 5.9E 00	CO-58	L.T. 3.1E 00
FE-59	L.T. 5.6E 00	FE-59	L.T. 6.1E 00	FE-59	L.T. 9.6E 00
CO-60	L.T. 2.9E 00	CO-60	L.T. 4.9E 00	CO-60	L.T. 3.9E 00
ZN-65	L.T. 3.8E 00	ZN-65	L.T. 6.4E 00	ZN-65	L.T. 5.8E 00
ZR-95	L.T. 3.1E 00	ZR-95	L.T. 7.1E 00	ZR-95	L.T. 4.5E 00
I-131	L.T. 5.6E 00	I-131	L.T. 8.3E 00	I-131	L.T. 2.91E 01
CS-134	L.T. 3.6E 00	CS-134	L.T. 4.6E 00	CS-134	L.T. 4.2E 00
CS-137	L.T. 2.4E 00	CS-137	L.T. 5.5E 00	CS-137	L.T. 5.6E 00
BA-140	L.T. 2.9E 00	BA-140	L.T. 4.3E 00	BA-140	L.T. 6.5E 00
H-3	16740+-375	H-3	15578+-350	H-3	15189+-347

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
**STATION NUMBER DC**  
**Gamma Spectrum and Tritium Analysis**

<u>SURFACE WATER DUP</u>	<u>0323</u>
BE-7	L.T. 3. E 01
K-40	L.T. 8. E 01
MN-54	L.T. 3. E 00
CO-58	L.T. 3. E 00
FE-59	L.T. 6. E 00
CO-60	L.T. 3. E 00
ZN-65	L.T. 6. E 00
ZR-95	L.T. 3. E 00
RU-103	L.T. 3. E 00
RU-106	L.T. 3. E 01
I-131	L.T. 5. E 00
CS-134	L.T. 3. E 00
CS-137	L.T. 3. E 00
BA-140	L.T. 3. E 00
CE-141	L.T. 5. E 00
CE-144	L.T. 2. E 01
RA-226	L.T. 6. E 01
TH-228	L.T. 5. E 00
H-3	1.1 +/-0.1 E 04

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
**STATION NUMBER MUSH**  
 Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0120</u>	<u>SURFACE WATER</u>	<u>0217</u>	<u>SURFACE WATER</u>	<u>0323</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 4. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 5. E 01	K-40	L.T. 1. E 02	K-40	L.T. 5. E 01
MN-54	L.T. 3. E 00	MN-54	L.T. 4. E 00	MN-54	L.T. 3. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 4. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 6. E 00	FE-59	L.T. 9. E 00	FE-59	L.T. 7. E 00
CO-60	L.T. 3. E 00	CO-60	L.T. 4. E 00	CO-60	L.T. 4. E 00
ZN-65	L.T. 6. E 00	ZN-65	L.T. 9. E 00	ZN-65	L.T. 7. E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 5. E 00	ZR-95	L.T. 3. E 00
RU-103	L.T. 3. E 00	RU-103	L.T. 5. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 3. E 01	RU-106	L.T. 4. E 01	RU-106	L.T. 3. E 01
I-131	L.T. 6. E 00	I-131	L.T. 8. E 00	I-131	L.T. 6. E 00
CS-134	L.T. 3. E 00	CS-134	L.T. 5. E 00	CS-134	L.T. 4. E 00
CS-137	L.T. 3. E 00	CS-137	L.T. 5. E 00	CS-137	L.T. 4. E 00
BA-140	L.T. 4. E 00	BA-140	L.T. 6. E 00	BA-140	L.T. 5. E 00
CE-141	L.T. 6. E 00	CE-141	L.T. 8. E 00	CE-141	L.T. 8. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 3. E 01	CE-144	L.T. 3. E 01
RA-226	L.T. 7. E 01	RA-226	L.T. 8. E 01	RA-226	L.T. 8. E 01
TH-228	L.T. 7. E 00	TH-228	L.T. 7. E 00	TH-228	L.T. 7. E 00
H-3	L.T. 2. E 02	H-3	L.T. 2. E 02	H-3	L.T. 2. E 02

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Surface Water

(pCi/Liter)

**STATION NUMBER MUSH**

Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0420</u>	<u>SURFACE WATER</u>	<u>0518</u>	<u>SURFACE WATER</u>	<u>0615</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 4. E 01
K-40	L.T. 5. E 01	K-40	L.T. 3. E 01	K-40	L.T. 1. E 02
MN-54	L.T. 3. E 00	MN-54	L.T. 1. E 00	MN-54	L.T. 4. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 2. E 00	CO-58	L.T. 4. E 00
FE-59	L.T. 9. E 00	FE-59	L.T. 5. E 00	FE-59	L.T. 1. E 01
CO-60	L.T. 3. E 00	CO-60	L.T. 1. E 00	CO-60	L.T. 4. E 00
ZN-65	L.T. 6. E 00	ZN-65	L.T. 3. E 00	ZN-65	L.T. 1. E 01
ZR-95	L.T. 3. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 5. E 00
RU-103	L.T. 4. E 00	RU-103	L.T. 3. E 00	RU-103	L.T. 5. E 00
RU-106	L.T. 2. E 01	RU-106	L.T. 1. E 01	RU-106	L.T. 4. E 01
I-131	L.T. 4. E 01	I-131	L.T. 3. E 01	I-131	L.T. 2. E 01
CS-134	L.T. 3. E 00	CS-134	L.T. 1. E 00	CS-134	L.T. 5. E 00
CS-137	L.T. 3. E 00	CS-137	L.T. 2. E 00	CS-137	L.T. 5. E 00
BA-140	L.T. 1.5 E 01	BA-140	L.T. 1. E 01	BA-140	L.T. 8. E 00
CE-141	L.T. 7. E 00	CE-141	L.T. 4. E 00	CE-141	L.T. 9. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 9. E 00	CE-144	L.T. 3. E 01
RA-226	L.T. 5. E 01	RA-226	L.T. 3. E 01	RA-226	L.T. 9. E 01
TH-228	L.T. 5. E 00	TH-228	L.T. 3. E 00	TH-228	L.T. 7. E 00
H-3	L.T. 2. E 02	H-3	L.T. 2. E 02	H-3	L.T. 2. E 02

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
**STATION NUMBER MUSH**  
 Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0726</u>	<u>SURFACE WATER</u>	<u>0817</u>	<u>SURFACE WATER</u>	<u>0921</u>
BE-7	L.T. 5.46E+01	BE-7	L.T. 3. E 01	BE-7	L.T. 1.12E 02
K-40	L.T. 1.04E+02	K-40	L.T. 8. E 01	K-40	L.T. 1.26E 02
MN-54	L.T. 4.98E+00	MN-54	L.T. 3. E 00	MN-54	L.T. 5.91E 00
CO-58	L.T. 5.63E+00	CO-58	L.T. 3. E 00	CO-58	L.T. 1.09E 01
FE-59	L.T. 1.30E+01	FE-59	L.T. 8. E 00	FE-59	L.T. 3.25E 01
CO-60	L.T. 7.19E+00	CO-60	L.T. 3. E 00	CO-60	L.T. 4.91E 00
ZN-65	L.T. 1.26E+01	ZN-65	L.T. 6. E 00	ZN-65	L.T. 1.31E 01
ZR-95	L.T. 1.01E+01	ZR-95	L.T. 3. E 00	ZR-95	L.T. 1.91E 01
RU-103	L.T. 7.01E+00	RU-103	L.T. 3. E 00	RU-103	L.T. 2.01E 01
RU-106	L.T. 4.71E+01	RU-106	L.T. 3. E 01	RU-106	L.T. 4.99E 01
I-131	L.T. 2.42E+01	I-131	L.T. 7. E 00	I-131	L.T. 5.97E 03
CS-134	L.T. 4.95E+00	CS-134	L.T. 3. E 00	CS-134	L.T. 4.89E 00
CS-137	L.T. 6.46E+00	CS-137	L.T. 3. E 00	CS-137	L.T. 5.10E 00
BA-140	L.T. 4.95E+01	BA-140	L.T. 5. E 00	BA-140	L.T. 1.50E 03
CE-141	L.T. 1.06E+01	CE-141	L.T. 5. E 00	CE-141	L.T. 3.57E 01
CE-144	L.T. 3.34E+01	CE-144	L.T. 2. E 01	CE-144	L.T. 3.41E 01
RA-226	L.T. 1.14E+01	RA-226	L.T. 5. E 01	RA-226	L.T. 1.20E 01
TH-228	L.T. 8.75E+00	TH-228	L.T. 5. E 00	TH-228	L.T. 7.55E 00
H-3	L.T. 1.60E+02	H-3	L.T. 2. E 02	H-3	L.T. 1.82E 02



**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
**STATION NUMBER MUSH**  
 Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>1019</u>	<u>SURFACE WATER</u>	<u>1116</u>	<u>SURFACE WATER</u>	<u>1229</u>
MN-54	L.T. 3.4E 00	MN-54	L.T. 5.1E 00	MN-54	L.T. 5.5E 00
CO-58	L.T. 1.7E 00	CO-58	L.T. 3.5E 00	CO-58	L.T. 4.7E 00
FE-59	L.T. 5.7E 00	FE-59	L.T. 6.1E 00	FE-59	L.T. 1.14E 01
CO-60	L.T. 3.4E 00	CO-60	L.T. 5.4E 00	CO-60	L.T. 1.9E 00
ZN-65	L.T. 4.1E 00	ZN-65	L.T. 9.0E 00	ZN-65	L.T. 8.7E 00
ZR-95	L.T. 3.4E 00	ZR-95	L.T. 5.0E 00	ZR-95	L.T. 4.4E 00
I-131	L.T. 4.9E 00	I-131	L.T. 4.9E 00	I-131	L.T. 2.78E 01
CS-134	L.T. 2.0E 00	CS-134	L.T. 4.3E 00	CS-134	L.T. 6.0E 00
CS-137	L.T. 2.6E 00	CS-137	L.T. 5.1E 00	CS-137	L.T. 6.4E 00
BA-140	L.T. 3.0E 00	BA-140	L.T. 5.9E 00	BA-140	L.T. 1.06E 01
H-3	L.T. 1.81E 02	H-3	L.T. 1.52E 02	H-3	L.T. 1.59E 02

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Surface Water  
 (pCi/Liter)  
**STATION NUMBER SP**  
**Gamma Spectrum and Tritium Analysis**

<u>SURFACE WATER</u>	<u>0120</u>	<u>SURFACE WATER</u>	<u>0217</u>	<u>SURFACE WATER</u>	<u>0323</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 5. E 01	K-40	L.T. 5. E 01	K-40	L.T. 5. E 01
MN-54	L.T. 3. E 00	MN-54	L.T. 3. E 00	MN-54	L.T. 3. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 7. E 00	FE-59	L.T. 7. E 00	FE-59	L.T. 6. E 00
CO-60	L.T. 3. E 00	CO-60	L.T. 3. E 00	CO-60	L.T. 3. E 00
ZN-65	L.T. 7. E 00	ZN-65	L.T. 7. E 00	ZN-65	L.T. 6. E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 3. E 00	ZR-95	L.T. 3. E 00
RU-103	L.T. 4. E 00	RU-103	L.T. 3. E 00	RU-103	L.T. 3. E 00
RU-106	L.T. 3. E 01	RU-106	L.T. 3. E 01	RU-106	L.T. 2. E 01
I-131	L.T. 6. E 00	I-131	L.T. 6. E 00	I-131	L.T. 5. E 00
CS-134	L.T. 3. E 00	CS-134	L.T. 3. E 00	CS-134	L.T. 3. E 00
CS-137	L.T. 4. E 00	CS-137	L.T. 3. E 00	CS-137	L.T. 3. E 00
BA-140	L.T. 6. E 00	BA-140	L.T. 5. E 00	BA-140	L.T. 4. E 00
CE-141	L.T. 6. E 00	CE-141	L.T. 6. E 00	CE-141	L.T. 6. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 7. E 01	RA-226	L.T. 6. E 01	RA-226	L.T. 7. E 01
TH-228	L.T. 7. E 00	TH-228	L.T. 6. E 00	TH-228	L.T. 6. E 00
H-3	1.1 $\pm$ 0.1 E 04	H-3	1.2 $\pm$ 0.1 E 04	H-3	1.1 $\pm$ 0.1 E 04

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Surface Water

(pCi/Liter)

STATION NUMBER SP

Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0420</u>	<u>SURFACE WATER</u>	<u>0518</u>	<u>SURFACE WATER</u>	<u>0615</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 7. E 01	K-40	L.T. 4. E 01	K-40	L.T. 3. E 01
MN-54	L.T. 2. E 00	MN-54	L.T. 1. E 00	MN-54	L.T. 3. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 2. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 8. E 00	FE-59	L.T. 6. E 00	FE-59	L.T. 6. E 00
CO-60	L.T. 2. E 00	CO-60	L.T. 1. E 00	CO-60	L.T. 3. E 00
ZN-65	L.T. 5. E 00	ZN-65	L.T. 3. E 00	ZN-65	L.T. 6. E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 3. E 00
RU-103	L.T. 4. E 00	RU-103	L.T. 3. E 00	RU-103	L.T. 3. E 00
RU-106	L.T. 2. E 01	RU-106	L.T. 1. E 01	RU-106	L.T. 2. E 01
I-131	L.T. 4. E 01	I-131	L.T. 4. E 01	I-131	L.T. 1. E 01
CS-134	L.T. 2. E 00	CS-134	L.T. 2. E 00	CS-134	L.T. 2. E 00
CS-137	L.T. 2. E 00	CS-137	L.T. 1. E 00	CS-137	L.T. 3. E 00
BA-140	L.T. 1. E 01	BA-140	L.T. 1. E 01	BA-140	L.T. 6. E 00
CE-141	L.T. 7. E 00	CE-141	L.T. 4. E 00	CE-141	L.T. 7. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 1. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 4. E 01	RA-226	L.T. 3. E 01	RA-226	L.T. 6. E 01
TH-228	L.T. 4. E 00	TH-228	L.T. 2. E 00	TH-228	L.T. 5. E 00
H-3	1.4 +-0.1 E 04	H-3	1.4 +-0.1 E 04	H-3	1.3 +-0.1 E 04

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Surface Water

(pCi/Liter)

STATION NUMBER SP

Gamma Spectrum and Tritium Analysis

<u>SURFACE WATER</u>	<u>0726</u>	<u>SURFACE WATER</u>	<u>0817</u>
BE-7	L.T. 5. E 01	BE-7	L.T. 3.25E+01
K-40	L.T. 8. E 01	K-40	L.T. 5.71E+01
MN-54	L.T. 3. E 00	MN-54	L.T. 2.83E+00
CO-58	L.T. 5. E 00	CO-58	L.T. 3.32E+00
FE-59	L.T. 2. E 01	FE-59	L.T. 5.88E+00
CO-60	L.T. 3. E 00	CO-60	L.T. 3.36E+00
ZN-65	L.T. 7. E 00	ZN-65	L.T. 5.79E+00
ZR-95	L.T. 5. E 00	ZR-95	L.T. 5.54E+00
RU-103	L.T. 8. E 00	RU-103	L.T. 4.00E+00
RU-106	L.T. 3. E 01	RU-106	L.T. 2.81E+01
I-131	L.T. 3. E 02	I-131	L.T. 1.21E+01
CS-134	L.T. 3. E 00	CS-134	L.T. 2.78E+00
CS-137	L.T. 3. E 00	CS-137	L.T. 3.68E+00
BA-140	L.T. 6. E 01	BA-140	L.T. 2.36E+01
CE-141	L.T. 1. E 01	CE-141	L.T. 9.16E+00
CE-144	L.T. 2. E 01	CE-144	L.T. 3.20E+01
RA-226	L.T. 5. E 01	RA-226	L.T. 6.65E+00
TH-228	L.T. 5. E 00	TH-228	L.T. 6.59E+00
H-3	14,293+-342	H-3	1.4 +-0.1 E 04

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Ground Water

(pCi/Liter)

STATION NUMBER B-12

Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>0217</u>	<u>GROUND WATER</u>	<u>0518</u>	<u>GROUND WATER</u>	<u>0817</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 3.35E+01
K-40	L.T. 5. E 01	K-40	1.87+-1.03E 01	K-40	L.T. 6.02E+01
MN-54	L.T. 3. E 00	MN-54	L.T. 2. E 00	MN-54	L.T. 3.41E+00
CO-58	L.T. 3. E 00	CO-58	L.T. 2. E 00	CO-58	L.T. 3.74E+00
FE-59	L.T. 6. E 00	FE-59	L.T. 5. E 00	FE-59	L.T. 6.84E+00
CO-60	L.T. 4. E 00	CO-60	L.T. 1. E 00	CO-60	L.T. 3.62E+00
ZN-65	L.T. 6. E 00	ZN-65	L.T. 3. E 00	ZN-65	L.T. 7.07E+00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 6.25E+00
RU-103	L.T. 4. E 00	RU-103	L.T. 2. E 00	RU-103	L.T. 4.05E+00
RU-106	L.T. 3. E 01	RU-106	L.T. 1. E 01	RU-106	L.T. 2.82E+01
I-131	L.T. 6. E 00	I-131	L.T. 2. E 01	I-131	L.T. 1.25E+01
CS-134	L.T. 3. E 00	CS-134	L.T. 2. E 00	CS-134	L.T. 3.13E+00
CS-137	L.T. 3. E 00	CS-137	L.T. 2. E 00	CS-137	L.T. 3.96E+00
BA-140	L.T. 5. E 00	BA-140	L.T. 9. E 00	BA-140	L.T. 2.54E+01
CE-141	L.T. 7. E 00	CE-141	L.T. 4. E 00	CE-141	L.T. 8.52E+00
CE-144	L.T. 3. E 01	CE-144	L.T. 1. E 01	CE-144	L.T. 2.92E+01
RA-226	L.T. 8. E 01	RA-226	L.T. 3. E 01	RA-226	L.T. 8.23E+00
TH-228	L.T. 7. E 00	TH-228	L.T. 2. E 00	TH-228	L.T. 6.64E+00

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Ground Water  
(pCi/Liter)  
STATION NUMBER B-12  
Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>1117</u>
MN-54	L.T. 1.2E 00
CO-58	L.T. 1.6E 00
FE-59	L.T. 5.1E 00
CO-60	L.T. 1.5E 00
ZN-65	L.T. 3.9E 00
ZR-95	L.T. 1.8E 00
CS-134	L.T. 1.6E 00
CS-137	L.T. 2.5E 00
BA-140	L.T. 4.1E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
**STATION NUMBER B-12**  
Radiochemical Analysis

**Collection Date: I-131**

0217	L.T. 2. E-01
0518	L.T. 2. E-01
0817	L.T. 6. E-01
1117	L.T. 4. E-01

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
**STATION NUMBER B-12**  
Tritium Analysis

**Collection Date: H-3**

0217	L.T. 2. E 02
0518	L.T. 2. E 02
0817	L.T. 2. E 02
1117	L.T. 1.78E 02



**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Ground Water

(pCi/Liter)

STATION NUMBER C-10

Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>0217</u>	<u>GROUND WATER</u>	<u>0609</u>	<u>GROUND WATER</u>	<u>0906</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 4. E 01	BE-7	L.T. 2.37E 01
K-40	L.T. 5. E 01	K-40	L.T. 7. E 01	K-40	L.T. 4.55E 01
MN-54	L.T. 2. E 00	MN-54	L.T. 3. E 00	MN-54	L.T. 2.69E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00	CO-58	L.T. 3.04E 00
FE-59	L.T. 5. E 00	FE-59	L.T. 1. E 01	FE-59	L.T. 5.58E 00
CO-60	L.T. 3. E 00	CO-60	L.T. 3. E 00	CO-60	L.T. 3.33E 00
ZN-65	L.T. 6. E 00	ZN-65	L.T. 6. E 00	ZN-65	L.T. 5.64E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 4. E 00	ZR-95	L.T. 4.95E 00
RU-103	L.T. 3. E 00	RU-103	L.T. 5. E 00	RU-103	L.T. 2.70E 00
RU-106	L.T. 2. E 01	RU-106	L.T. 3. E 01	RU-106	L.T. 2.33E 01
I-131	L.T. 5. E 00	I-131	L.T. 3. E 01	I-131	L.T. 4.38E 00
CS-134	L.T. 3. E 00	CS-134	L.T. 3. E 00	CS-134	L.T. 2.38E 00
CS-137	L.T. 3. E 00	CS-137	L.T. 3. E 00	CS-137	L.T. 3.11E 00
BA-140	L.T. 4. E 00	BA-140	L.T. 1. E 01	BA-140	L.T. 1.24E 01
CE-141	L.T. 6. E 00	CE-141	L.T. 8. E 00	CE-141	L.T. 4.15E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01	CE-144	L.T. 1.57E 01
RA-226	L.T. 7. E 01	RA-226	L.T. 6. E 01	RA-226	L.T. 7.35E 00
TH-228	L.T. 6. E 00	TH-228	L.T. 6. E 00	TH-228	L.T. 4.91E 00

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Ground Water

(pCi/Liter)

STATION NUMBER C-10

Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>1117</u>	<u>GROUND WATER DUP</u>	<u>0906</u>
MN-54	L.T. 2.8E 00	BE-7	L.T. 3. E 01
CO-58	L.T. 2.7E 00	K-40	L.T. 6. E 01
FE-59	L.T. 4.3E 00	MN-54	L.T. 3. E 00
CO-60	L.T. 1.0E 00	CO-58	L.T. 3. E 00
ZN-65	L.T. 2.5E 00	FE-59	L.T. 8. E 00
ZR-95	L.T. 2.1E 00	CO-60	L.T. 4. E 00
CS-134	L.T. 2.9E 00	ZN-65	L.T. 6. E 00
CS-137	L.T. 2.8E 00	ZR-95	L.T. 3. E 00
BA-140	L.T. 3.8E 00	RU-103	L.T. 4. E 00
		RU-106	L.T. 3. E 01
		I-131	L.T. 9. E 00
		CS-134	L.T. 4. E 00
		CS-137	L.T. 4. E 00
		BA-140	L.T. 5. E 00
		CE-141	L.T. 7. E 00
		CE-144	L.T. 3. E 01
		RA-226	L.T. 8. E 01
		TH-228	L.T. 6. E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
STATION NUMBER C-10  
Radiochemical Analysis

**Collection Date: I-131**

0217	L.T. 2. E-01
0609	L.T. 2. E-01
0906*	L.T. 3. E-01
0906	L.T. 4. E-01
1117	L.T. 5. E-01

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Ground Water  
(pCi/Liter)  
STATION NUMBER C-10  
Tritium Analysis

Collection Date: H-3

0217	L.T. 2. E 02
0609	L.T. 2. E 02
0906*	L.T. 1.55E 02
0906	L.T. 1.55E 02
1117	L.T. 1.78E 02

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Ground Water  
 (pCi/Liter)  
**STATION NUMBER C-49**  
**Gamma Spectrum Analysis**

<u>GROUND WATER</u>	<u>0217</u>	<u>GROUND WATER</u>	<u>0518</u>	<u>GROUND WATER</u>	<u>0817</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 4.86E+01
K-40	L.T. 6. E 01	K-40	L.T. 2. E 01	K-40	L.T. 9.45E+01
MN-54	L.T. 3. E 00	MN-54	L.T. 2. E 00	MN-54	L.T. 4.85E+00
CO-58	L.T. 3. E 00	CO-58	L.T. 2. E 00	CO-58	L.T. 5.21E+00
FE-59	L.T. 7. E 00	FE-59	L.T. 6. E 00	FE-59	L.T. 1.19E+01
CO-60	L.T. 3. E 00	CO-60	L.T. 2. E 00	CO-60	L.T. 7.91E+00
ZN-65	L.T. 7. E 00	ZN-65	L.T. 3. E 00	ZN-65	L.T. 1.22E+01
ZR-95	L.T. 4. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 9.31E+00
RU-103	L.T. 4. E 00	RU-103	L.T. 3. E 00	RU-103	L.T. 6.13E+00
RU-106	L.T. 3. E 01	RU-106	L.T. 1. E 01	RU-106	L.T. 4.63E+01
I-131	L.T. 6. E 00	I-131	L.T. 2. E 01	I-131	L.T. 1.48E+01
CS-134	L.T. 3. E 00	CS-134	L.T. 1. E 00	CS-134	L.T. 5.42E+00
CS-137	L.T. 4. E 00	CS-137	L.T. 2. E 00	CS-137	L.T. 6.40E+00
BA-140	L.T. 5. E 00	BA-140	L.T. 9. E 00	BA-140	L.T. 3.67E+01
CE-141	L.T. 5. E 00	CE-141	L.T. 6. E 00	CE-141	L.T. 9.24E+00
CE-144	L.T. 2. E 01	CE-144	L.T. 1. E 01	CE-144	L.T. 3.12E+01
RA-226	L.T. 6. E 01	RA-226	L.T. 4. E 01	RA-226	L.T. 1.46E+01
TH-228	L.T. 6. E 00	TH-228	L.T. 3. E 00	TH-228	L.T. 8.06E+00

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Ground Water  
(pCi/Liter)  
STATION NUMBER C-49  
Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>1117</u>
MN-54	L.T. 2.7E 00
CO-58	L.T. 2.9E 00
FE-59	L.T. 4.5E 00
CO-60	L.T. 1.5E 00
ZN-65	L.T. 4.7E 00
ZR-95	L.T. 3.0E 00
CS-134	L.T. 3.0E 00
CS-137	L.T. 2.4E 00
BA-140	L.T. 5.5E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
**STATION NUMBER C-49**  
Radiochemical Analysis

<b>Collection Date</b>	<b>I-131</b>
0217	L.T. 2. E-01
0518	L.T. 2. E-01
0817	L.T. 7. E-01
1117	L.T. 5. E-01

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
STATION NUMBER C-49  
Tritium Analysis

**Collection Date: H-3**

0217	L.T. 2. E 02
0518	L.T. 2. E 02
0817	L.T. 2. E 02
1117	L.T. 1.78E 02



**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Ground Water

(pCi/Liter)

STATION NUMBER D-65

Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>0217</u>	<u>GROUND WATER</u>	<u>0518</u>	<u>GROUND WATER</u>	<u>0817</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 3.64E+01
K-40	L.T. 5. E 01	K-40	L.T. 2. E 01	K-40	L.T. 1.06E+02
MN-54	L.T. 3. E 00	MN-54	L.T. 1. E 00	MN-54	L.T. 3.63E+00
CO-58	L.T. 3. E 00	CO-58	L.T. 1. E 00	CO-58	L.T. 4.02E+00
FE-59	L.T. 7. E 00	FE-59	L.T. 5. E 00	FE-59	L.T. 9.54E+00
CO-60	L.T. 3. E 00	CO-60	L.T. 1. E 00	CO-60	L.T. 3.73E+00
ZN-65	L.T. 7. E 00	ZN-65	L.T. 3. E 00	ZN-65	L.T. 7.76E+00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 7.29E+00
RU-103	L.T. 4. E 00	RU-103	L.T. 2. E 00	RU-103	L.T. 4.57E+00
RU-106	L.T. 3. E 01	RU-106	L.T. 1. E 01	RU-106	L.T. 3.36E+01
I-131	L.T. 6. E 00	I-131	L.T. 2. E 01	I-131	L.T. 1.08E+01
CS-134	L.T. 4. E 00	CS-134	L.T. 1. E 00	CS-134	L.T. 3.33E+00
CS-137	L.T. 4. E 00	CS-137	L.T. 1. E 00	CS-137	L.T. 4.36E+00
BA-140	L.T. 5. E 00	BA-140	L.T. 6. E 00	BA-140	L.T. 2.83E+01
CE-141	L.T. 6. E 00	CE-141	L.T. 4. E 00	CE-141	L.T. 7.07E+00
CE-144	L.T. 2. E 01	CE-144	L.T. 1. E 01	CE-144	L.T. 2.45E+01
RA-226	L.T. 7. E 01	RA-226	L.T. 3. E 01	RA-226	L.T. 8.05E+00
TH-228	L.T. 6. E 00	TH-228	L.T. 3. E 00	TH-228	L.T. 5.73E+00

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Ground Water

(pCi/Liter)

STATION NUMBER D-65

Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>1117</u>
MN-54	L.T. 3.0E 00
CO-58	L.T. 2.7E 00
FE-59	L.T. 9.7E 00
CO-60	L.T. 2.7E 00
ZN-65	L.T. 3.6E 00
ZR-95	L.T. 4.0E 00
CS-134	L.T. 3.0E 00
CS-137	L.T. 4.1E 00
BA-140	L.T. 5.8E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
STATION NUMBER D-65  
Radiochemical Analysis

<b>Collection Date</b>	<b>I-131</b>
0217	L.T. 2. E-01
0518	L.T. 2. E-01
0817	L.T. 5. E-01
1117	L.T. 4. E-01

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
STATION NUMBER D-65  
Tritium Analysis

**Collection Date: H-3**

0217	L.T. 2. E 02
0518	L.T. 2. E 02
0817	L.T. 2. E 02
1117	L.T. 1.78E 02

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Ground Water

(pCi/Liter)

STATION NUMBER L-49

Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>0217</u>	<u>GROUND WATER</u>	<u>0518</u>	<u>GROUND WATER</u>	<u>0817</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 3.37E+01
K-40	L.T. 9. E 01	K-40	L.T. 4. E 01	K-40	L.T. 8.09E+01
MN-54	L.T. 4. E 00	MN-54	L.T. 2. E 00	MN-54	L.T. 3.70E+00
CO-58	L.T. 4. E 00	CO-58	L.T. 2. E 00	CO-58	L.T. 3.82E+00
FE-59	L.T. 8. E 00	FE-59	L.T. 6. E 00	FE-59	L.T. 8.19E+00
CO-60	L.T. 4. E 00	CO-60	L.T. 2. E 00	CO-60	L.T. 3.42E+00
ZN-65	L.T. 8. E 00	ZN-65	L.T. 3. E 00	ZN-65	L.T. 7.28E+00
ZR-95	L.T. 4. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 6.34E+00
RU-103	L.T. 4. E 00	RU-103	L.T. 3. E 00	RU-103	L.T. 4.44E+00
RU-106	L.T. 3. E 01	RU-106	L.T. 1. E 01	RU-106	L.T. 3.20E+01
I-131	L.T. 7. E 00	I-131	L.T. 2. E 01	I-131	L.T. 1.24E+01
CS-134	L.T. 4. E 00	CS-134	L.T. 2. E 00	CS-134	L.T. 3.30E+00
CS-137	L.T. 4. E 00	CS-137	L.T. 2. E 00	CS-137	L.T. 3.63E+00
BA-140	L.T. 6. E 00	BA-140	L.T. 9. E 00	BA-140	L.T. 2.66E+01
CE-141	L.T. 6. E 00	CE-141	L.T. 4. E 00	CE-141	L.T. 7.02E+00
CE-144	L.T. 2. E 01	CE-144	L.T. 1. E 01	CE-144	L.T. 2.49E+01
RA-226	L.T. 7. E 01	RA-226	L.T. 3. E 01	RA-226	L.T. 9.55E+00
TH-228	L.T. 6. E 00	TH-228	L.T. 3. E 00	TH-228	L.T. 6.12E+00

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Ground Water

(pCi/Liter)

STATION NUMBER L-49

Gamma Spectrum Analysis

<u>GROUND WATER</u>	<u>1117</u>	<u>GROUND WATER DUP</u>	<u>1117</u>
MN-54	L.T. 2.6E 00	MN-54	L.T. 2.5E 00
CO-58	L.T. 2.6E 00	CO-58	L.T. 2.9E 00
FE-59	L.T. 5.3E 00	FE-59	L.T. 5.6E 00
CO-60	L.T. 2.6E 00	CO-60	L.T. 1.8E 00
ZN-65	L.T. 3.0E 00	ZN-65	L.T. 4.0E 00
ZR-95	L.T. 3.1E 00	ZR-95	L.T. 4.4E 00
CS-134	L.T. 3.2E 00	CS-134	L.T. 2.1E 00
CS-137	L.T. 3.4E 00	CS-137	L.T. 2.8E 00
BA-140	L.T. 5.8E 00	BA-140	L.T. 4.1E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Ground Water  
(pCi/Liter)  
STATION NUMBER L-49  
Radiochemical Analysis

**Collection Date: I-131**

0217	L.T. 2. E-01
0518	L.T. 2. E-01
0817	L.T. 6. E-01
1117*	L.T. 4. E-01
1117	L.T. 4. E-01

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Ground Water  
(pCi/Liter)  
STATION NUMBER L-49  
Tritium Analysis

Collection Date: **H-3**

0217	L.T. 2. E 02
0518	L.T. 2. E 02
0817	L.T. 2. E 02
1117*	L.T. 1.78E 02
1117	L.T. 1.78E 02



**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Drinking Water  
(pCi/Liter)  
**STATION NUMBER BW15**  
Gamma Spectrum Analysis

<u>DRINKING WATER</u>	<u>0105</u> / <u>0202</u>	<u>DRINKING WATER</u>	<u>0202</u> / <u>0301</u>	<u>DRINKING WATER</u>	<u>0301</u> / <u>0406</u>
BE-7	L.T. 4. E 01	BE-7	L.T. 4. E 01	BE-7	L.T. 4. E 01
K-40	L.T. 1. E 02	K-40	L.T. 1. E 02	K-40	L.T. 9. E 01
MN-54	L.T. 4. E 00	MN-54	L.T. 4. E 00	MN-54	L.T. 4. E 00
CO-58	L.T. 4. E 00	CO-58	L.T. 5. E 00	CO-58	L.T. 4. E 00
FE-59	L.T. 1. E 01	FE-59	L.T. 1. E 01	FE-59	L.T. 9. E 00
CO-60	L.T. 4. E 00	CO-60	L.T. 4. E 00	CO-60	L.T. 4. E 00
ZN-65	L.T. 9. E 00	ZN-65	L.T. 1. E 01	ZN-65	L.T. 7. E 00
ZR-95	L.T. 5. E 00	ZR-95	L.T. 5. E 00	ZR-95	L.T. 4. E 00
RU-103	L.T. 5. E 00	RU-103	L.T. 6. E 00	RU-103	L.T. 5. E 00
RU-106	L.T. 4. E 01	RU-106	L.T. 4. E 01	RU-106	L.T. 3. E 01
I-131	L.T. 9. E 00	I-131	L.T. 1. E 01	I-131	L.T. 1. E 01
CS-134	L.T. 5. E 00	CS-134	L.T. 5. E 00	CS-134	L.T. 4. E 00
CS-137	L.T. 5. E 00	CS-137	L.T. 5. E 00	CS-137	L.T. 4. E 00
BA-140	L.T. 7. E 00	BA-140	L.T. 9. E 00	BA-140	L.T. 8. E 00
CE-141	L.T. 8. E 00	CE-141	L.T. 9. E 00	CE-141	L.T. 7. E 00
CE-144	L.T. 3. E 01	CE-144	L.T. 3. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 9. E 01	RA-226	L.T. 9. E 01	RA-226	L.T. 7. E 01
TH-228	L.T. 7. E 00	TH-228	L.T. 7. E 00	TH-228	L.T. 6. E 00

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Drinking Water

(pCi/Liter)

STATION NUMBER BW15

Gamma Spectrum Analysis

<u>DRINKING WATER</u>	<u>0406</u> / <u>0503</u>	<u>DRINKING WATER</u>	<u>0503</u> / <u>0609</u>	<u>DRINKING WATER</u>	<u>0609</u> / <u>0705</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 3. E 01	K-40	L.T. 8. E 01	K-40	L.T. 5. E 01
MN-54	L.T. 2. E 00	MN-54	L.T. 3. E 00	MN-54	L.T. 2. E 00
CO-58	L.T. 2. E 00	CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 7. E 00	FE-59	L.T. 1. E 01	FE-59	L.T. 8. E 00
CO-60	L.T. 2. E 00	CO-60	L.T. 3. E 00	CO-60	L.T. 2. E 00
ZN-65	L.T. 4. E 00	ZN-65	L.T. 6. E 00	ZN-65	L.T. 5. E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 4. E 00	ZR-95	L.T. 3. E 00
RU-103	L.T. 4. E 00	RU-103	L.T. 4. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 2. E 01	RU-106	L.T. 3. E 01	RU-106	L.T. 2. E 01
I-131	L.T. 2. E 02	I-131	L.T. 2. E 01	I-131	L.T. 3. E 01
CS-134	L.T. 2. E 00	CS-134	L.T. 3. E 00	CS-134	L.T. 2. E 00
CS-137	L.T. 2. E 00	CS-137	L.T. 3. E 00	CS-137	L.T. 2. E 00
BA-140	L.T. 3. E 01	BA-140	L.T. 1. E 01	BA-140	L.T. 1. E 01
CE-141	L.T. 9. E 00	CE-141	L.T. 6. E 00	CE-141	L.T. 6. E 00
CE-144	L.T. 1. E 01	CE-144	L.T. 2. E 01	CE-144	L.T. 1. E 01
RA-226	L.T. 4. E 01	RA-226	L.T. 5. E 01	RA-226	L.T. 4. E 01
TH-228	L.T. 4. E 00	TH-228	L.T. 4. E 00	TH-228	L.T. 4. E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Drinking Water  
(pCi/Liter)  
**STATION NUMBER BW15**  
**Gamma Spectrum Analysis**

<u>DRINKING WATER</u>	<u>0705</u> / <u>0804</u>	<u>DRINKING WATER</u>	<u>0804</u> / <u>0906</u>	<u>DRINKING WATER</u>	<u>0906</u> / <u>1004</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 5. E 01	K-40	L.T. 5. E 01	K-40	L.T. 9. E 01
MN-54	L.T. 2. E 00	MN-54	L.T. 3. E 00	MN-54	L.T. 3. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 7. E 00	FE-59	L.T. 7. E 00	FE-59	L.T. 9. E 00
CO-60	L.T. 3. E 00	CO-60	L.T. 3. E 00	CO-60	L.T. 4. E 00
ZN-65	L.T. 5. E 00	ZN-65	L.T. 5. E 00	ZN-65	L.T. 8. E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 3. E 00	ZR-95	L.T. 4. E 00
RU-103	L.T. 4. E 00	RU-103	L.T. 4. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 3. E 01	RU-106	L.T. 2. E 01	RU-106	L.T. 3. E 01
I-131	L.T. 1. E 01	I-131	L.T. 8. E 00	I-131	L.T. 7. E 00
CS-134	L.T. 3. E 00	CS-134	L.T. 3. E 00	CS-134	L.T. 4. E 00
CS-137	L.T. 3. E 00	CS-137	L.T. 3. E 00	CS-137	L.T. 4. E 00
BA-140	L.T. 6. E 00	BA-140	L.T. 5. E 00	BA-140	L.T. 6. E 00
CE-141	L.T. 5. E 00	CE-141	L.T. 6. E 00	CE-141	L.T. 6. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 5. E 01	RA-226	L.T. 7. E 01	RA-226	L.T. 6. E 01
TH-228	L.T. 5. E 00	TH-228	L.T. 6. E 00	TH-228	L.T. 6. E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Drinking Water  
 (pCi/Liter)  
**STATION NUMBER BW15**  
**Gamma Spectrum Analysis**

<u>DRINKING WATER</u>	<u>1004</u> / <u>1101</u>	<u>DRINKING WATER</u>	<u>1101</u> / <u>1206</u>	<u>DRINKING WATER</u>	<u>1206</u> / <u>0104</u>
MN-54	L.T. 2.5 E 00	MN-54	L.T. 2.2 E 00	MN-54	L.T. 3.5 E 00
CO-58	L.T. 1.6 E 00	CO-58	L.T. 2.8 E 00	CO-58	L.T. 4.3 E 00
FE-59	L.T. 6.9 E 00	FE-59	L.T. 1.8 E 00	FE-59	L.T. 5.0 E 00
CO-60	L.T. 2.7 E 00	CO-60	L.T. 1.4 E 00	CO-60	L.T. 1.6 E 00
ZN-65	L.T. 2.7 E 00	ZN-65	L.T. 5.8 E 00	ZN-65	L.T. 3.1 E 00
ZR-95	L.T. 2.7 E 00	ZR-95	L.T. 4.5 E 00	ZR-95	L.T. 4.7 E 00
CS-134	L.T. 2.9 E 00	CS-134	L.T. 3.3 E 00	CS-134	L.T. 2.6 E 00
CS-137	L.T. 2.6 E 00	CS-137	L.T. 3.1 E 00	CS-137	L.T. 3.3 E 00
BA-140	L.T. 2.5 E 00	BA-140	L.T. 1.7 E 00	BA-140	L.T. 4.3 E 00

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Drinking Water  
(pCi/Liter)  
STATION NUMBER BW15  
Gamma Spectrum Analysis

DRINKING WATER    1004    /    1101  
DUP

MN-54	L.T. 1.8 E 00
CO-58	L.T. 2.1 E 00
FE-59	L.T. 5.1 E 00
CO-60	L.T. 2.8 E 00
ZN-65	L.T. 2.4 E 00
ZR-95	L.T. 3.5 E 00
CS-134	L.T. 2.7 E 00
CS-137	L.T. 2.4 E 00
BA-140	L.T. 1.3 E 00

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Drinking Water  
(pCi/Liter)  
STATION NUMBER BW15  
Radiochemical Analysis

Start Date:	Stop Date:	I-131
0105	0202	L.T. 9. E-01
0202	0301	L.T. 7. E-01
0301	0406	L.T. 1. E 00
0406	0503	L.T. 1. E 00
0503	0609	L.T. 1. E 00
0609	0705	L.T. 1. E 00
0705	0804	L.T. 1. E 00
0804	0906	L.T. 1. E 00
0906	1004	L.T. 8. E-01
1004*	1101	L.T. 6. E-01
1004	1101	L.T. 6. E-01
1101	1206	L.T. 5. E-01
1206	0104	L.T. 1 E 00

\* Duplicate

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Drinking Water  
 (pCi/Liter)  
**STATION NUMBER BW15**  
**Radiochemical Analysis**

Start Date:	Stop Date:	GR-B
0105	0202	5.7 +-1.2 E 00
0202	0301	5.4 +-1.2 E 00
0301	0406	5.4 +-1.3 E 00
0406	0503	6.2 +-1.3 E 00
0503	0609	4.6 +-1.2 E 00
0609	0705	5.4 +-1.2 E 00
0705	0804	7.5 +-2.5 E 00
0804	0906	6.3 +-2.4 E 00
0906	1004	8.5 +-2.6 E 00
1004*	1101	6.0 +-1.1 E 00
1004	1101	5.3 +-1.0 E 00
1101	1206	4.8 +-1.8 E 00
1206	0104	5.0 +-1.2 E 00

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Drinking Water  
(pCi/Liter)  
STATION NUMBER BW15  
Tritium Analysis

Start Date:	Stop Date:	H-3
0105	0406	L.T. 2. E 02
0406	0705	L.T. 2. E 02
0705	1004	L.T. 1.67E 02
1004	0104	L.T. 1.59E 02



**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Drinking Water  
 (pCi/Liter)  
**STATION NUMBER LW40**  
**Gamma Spectrum Analysis**

<u>DRINKING WATER</u>	<u>0105</u> / <u>0202</u>	<u>DRINKING WATER</u>	<u>0202</u> / <u>0301</u>	<u>DRINKING WATER</u>	<u>0301</u> / <u>0406</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 4. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 9. E 01	K-40	L.T. 1. E 02	K-40	L.T. 5. E 01
MN-54	L.T. 4. E 00	MN-54	L.T. 4. E 00	MN-54	L.T. 3. E 00
CO-58	L.T. 4. E 00	CO-58	L.T. 4. E 00	CO-58	L.T. 4. E 00
FE-59	L.T. 8. E 00	FE-59	L.T. 9. E 00	FE-59	L.T. 8. E 00
CO-60	L.T. 4. E 00	CO-60	L.T. 4. E 00	CO-60	L.T. 4. E 00
ZN-65	L.T. 8. E 00	ZN-65	L.T. 8. E 00	ZN-65	L.T. 7. E 00
ZR-95	L.T. 4. E 00	ZR-95	L.T. 4. E 00	ZR-95	L.T. 3. E 00
RU-103	L.T. 4. E 00	RU-103	L.T. 5. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 3. E 01	RU-106	L.T. 3. E 01	RU-106	L.T. 3. E 01
I-131	L.T. 8. E 00	I-131	L.T. 1. E 01	I-131	L.T. 1. E 01
CS-134	L.T. 4. E 00	CS-134	L.T. 4. E 00	CS-134	L.T. 4. E 00
CS-137	L.T. 4. E 00	CS-137	L.T. 4. E 00	CS-137	L.T. 4. E 00
BA-140	L.T. 6. E 00	BA-140	L.T. 7. E 00	BA-140	L.T. 6. E 00
CE-141	L.T. 6. E 00	CE-141	L.T. 7. E 00	CE-141	L.T. 7. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 7. E 01	RA-226	L.T. 7. E 01	RA-226	L.T. 7. E 01
TH-228	L.T. 6. E 00	TH-228	L.T. 6. E 00	TH-228	L.T. 6. E 00

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Drinking Water

(pCi/Liter)

STATION NUMBER LW40

Gamma Spectrum Analysis

<u>DRINKING WATER</u>	<u>0406</u> / <u>0503</u>	<u>DRINKING WATER</u>	<u>0503</u> / <u>0609</u>	<u>DRINKING WATER</u>	<u>0609</u> / <u>0705</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 4. E 01	BE-7	L.T. 3. E 01
K-40	L.T. 3. E 01	K-40	L.T. 1. E 02	K-40	L.T. 4. E 01
MN-54	L.T. 2. E 00	MN-54	L.T. 4. E 00	MN-54	L.T. 2. E 00
CO-58	L.T. 3. E 00	CO-58	L.T. 4. E 00	CO-58	L.T. 2. E 00
FE-59	L.T. 1. E 01	FE-59	L.T. 1. E 01	FE-59	L.T. 8. E 00
CO-60	L.T. 2. E 00	CO-60	L.T. 4. E 00	CO-60	L.T. 2. E 00
ZN-65	L.T. 4. E 00	ZN-65	L.T. 9. E 00	ZN-65	L.T. 4. E 00
ZR-95	L.T. 3. E 00	ZR-95	L.T. 5. E 00	ZR-95	L.T. 3. E 00
RU-103	L.T. 5. E 00	RU-103	L.T. 6. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 2. E 01	RU-106	L.T. 3. E 01	RU-106	L.T. 2. E 01
I-131	L.T. 2. E 02	I-131	L.T. 3. E 01	I-131	L.T. 4. E 01
CS-134	L.T. 2. E 00	CS-134	L.T. 4. E 00	CS-134	L.T. 2. E 00
CS-137	L.T. 2. E 00	CS-137	L.T. 4. E 00	CS-137	L.T. 2. E 00
BA-140	L.T. 4. E 01	BA-140	L.T. 1. E 01	BA-140	L.T. 1. E 01
CE-141	L.T. 9. E 00	CE-141	L.T. 9. E 00	CE-141	L.T. 8. E 00
CE-144	L.T. 1. E 01	CE-144	L.T. 2. E 01	CE-144	L.T. 2. E 01
RA-226	L.T. 4. E 01	RA-226	L.T. 7. E 01	RA-226	L.T. 6. E 01
TH-228	L.T. 4. E 00	TH-228	L.T. 6. E 00	TH-228	L.T. 5. E 00

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Drinking Water

(pCi/Liter)

STATION NUMBER LW40

Gamma Spectrum Analysis

<u>DRINKING WATER</u>	<u>0705</u> / <u>0804</u>	<u>DRINKING WATER</u>	<u>0804</u> / <u>0906</u>	<u>DRINKING WATER</u>	<u>0906</u> / <u>1004</u>
BE-7	L.T. 3. E 01	BE-7	L.T. 2. E 01	BE-7	L.T. 4. E 01
K-40	L.T. 9. E 01	K-40	L.T. 4. E 01	K-40	L.T. 8. E 01
MN-54	L.T. 3. E 00	MN-54	L.T. 2. E 00	MN-54	L.T. 4. E 00
CO-58	L.T. 4. E 00	CO-58	L.T. 2. E 00	CO-58	L.T. 3. E 00
FE-59	L.T. 1. E 01	FE-59	L.T. 6. E 00	FE-59	L.T. 8. E 00
CO-60	L.T. 3. E 00	CO-60	L.T. 2. E 00	CO-60	L.T. 4. E 00
ZN-65	L.T. 7. E 00	ZN-65	L.T. 4. E 00	ZN-65	L.T. 8. E 00
ZR-95	L.T. 4. E 00	ZR-95	L.T. 2. E 00	ZR-95	L.T. 4. E 00
RU-103	L.T. 4. E 00	RU-103	L.T. 2. E 00	RU-103	L.T. 4. E 00
RU-106	L.T. 3. E 01	RU-106	L.T. 2. E 01	RU-106	L.T. 3. E 01
I-131	L.T. 1. E 01	I-131	L.T. 5. E 00	I-131	L.T. 8. E 00
CS-134	L.T. 4. E 00	CS-134	L.T. 2. E 00	CS-134	L.T. 4. E 00
CS-137	L.T. 4. E 00	CS-137	L.T. 2. E 00	CS-137	L.T. 5. E 00
BA-140	L.T. 8. E 00	BA-140	L.T. 4. E 00	BA-140	L.T. 5. E 00
CE-141	L.T. 6. E 00	CE-141	L.T. 4. E 00	CE-141	L.T. 8. E 00
CE-144	L.T. 2. E 01	CE-144	L.T. 1. E 01	CE-144	L.T. 3. E 01
RA-226	L.T. 6. E 01	RA-226	L.T. 4. E 01	RA-226	L.T. 9. E 01
TH-228	L.T. 5. E 00	TH-228	L.T. 4. E 00	TH-228	L.T. 7. E 00

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne**

Drinking Water

(pCi/Liter)

STATION NUMBER LW40

Gamma Spectrum Analysis

<u>DRINKING WATER</u>	<u>1004</u> / <u>1101</u>	<u>DRINKING WATER</u>	<u>1101</u> / <u>1206</u>	<u>DRINKING WATER</u>	<u>1206</u> / <u>0104</u>
MN-54	L.T. 2.0 E 00	MN-54	L.T. 2.6 E 00	MN-54	L.T. 3.1 E 00
CO-58	L.T. 1.6 E 00	CO-58	L.T. 2.7 E 00	CO-58	L.T. 3.1 E 00
FE-59	L.T. 3.7 E 00	FE-59	L.T. 2.0 E 00	FE-59	L.T. 4.1 E 00
CO-60	L.T. 2.9 E 00	CO-60	L.T. 1.1 E 00	CO-60	L.T. 1.7 E 00
ZN-65	L.T. 4.0 E 00	ZN-65	L.T. 2.8 E 00	ZN-65	L.T. 4.7 E 00
ZR-95	L.T. 2.8 E 00	ZR-95	L.T. 3.4 E 00	ZR-95	L.T. 4.8 E 00
CS-134	L.T. 3.2 E 00	CS-134	L.T. 2.5 E 00	CS-134	L.T. 2.1 E 00
CS-137	L.T. 2.6 E 00	CS-137	L.T. 1.9 E 00	CS-137	L.T. 1.3 E 00
BA-140	L.T. 3.8 E 00	BA-140	L.T. 2.3 E 00	BA-140	L.T. 6.0 E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
Drinking Water  
(pCi/Liter)  
STATION NUMBER LW40  
Gamma Spectrum Analysis

**DRINKING WATER DUP    0705    /    0804**

BE-7	L.T. 4. E 01
K-40	L.T. 1. E 02
MN-54	L.T. 4. E 00
CO-58	L.T. 4. E 00
FE-59	L.T. 1. E 01
CO-60	L.T. 4. E 00
ZN-65	L.T. 9. E 00
ZR-95	L.T. 4. E 00
RU-103	L.T. 5. E 00
RU-106	L.T. 3. E 01
I-131	L.T. 2. E 01
CS-134	L.T. 4. E 00
CS-137	L.T. 4. E 00
BA-140	L.T. 8. E 00
CE-141	L.T. 1. E 01
CE-144	L.T. 4. E 01
RA-226	L.T. 9. E 01
TH-228	L.T. 7. E 00

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Drinking Water  
 (pCi/Liter)  
**STATION NUMBER LW40**  
**Radiochemical Analysis**

<b>Start Date:</b>	<b>Stop Date:</b>	<b>I-131</b>
0105	0202	L.T. 9. E-01
0202	0301	L.T. 6. E-01
0301	0406	L.T. 7. E-01
0406	0503	L.T. 7. E-01
0503	0609	L.T. 9. E-01
0609	0705	L.T. 1. E 00
0705*	0804	L.T. 1. E 00
0705	0804	L.T. 1. E 00
0804	0906	L.T. 1. E 00
0906	1004	L.T. 8. E-01
1004	1101	L.T. 4. E-01
1101	1206	L.T. 4. E-01
1206	0104	L.T. 1 E 00

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\* Duplicate

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Drinking Water  
 (pCi/Liter)  
**STATION NUMBER LW40**  
**Radiochemical Analysis**

<b>Start Date:</b>	<b>Stop Date:</b>	<b>GR-B</b>
0105	0202	6.6 +-1.2 E 00
0202	0301	5.7 +-1.2 E 00
0301	0406	5.2 +-1.2 E 00
0406	0503	5.2 +-1.2 E 00
0503	0609	4.6 +-1.1 E 00
0609	0705	5.2 +-1.1 E 00
0705*	0804	5.6 +-2.2 E 00
0705	0804	5.9 +-2.2 E 00
0804	0906	7.8 +-2.5 E 00
0906	1004	7.5 +-2.4 E 00
1004	1101	5.9 +-1.0 E 00
1101	1206	2.4 +-1.7 E 00
1206	0104	5.4 +-1.3 E 00

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\* Duplicate

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Waterborne  
Drinking Water  
(pCi/Liter)  
STATION NUMBER LW40  
Tritium Analysis

Start Date:	Stop Date:	H-3
0105	0406	L.T. 2. E 02
0406	0705	L.T. 2. E 02
0705	1004	L.T. 1.67E 02
1004	0104	L.T. 1.59E 02



**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Shoreline Sediment  
 (pCi/KG DRY)  
 STATION NUMBER DC  
 Gamma Spectrum Analysis

<u>0418</u>	<u>SHORELINE SEDIMENT</u>	<u>1114</u>	<u>SHORELINE SEDIMENT</u>
BE-7	L.T. 6. E 02	K-40	9466+-330
K-40	1.18+-0.12E 04	MN-54	L.T. 15.0
MN-54	L.T. 4. E 01	CO-58	L.T. 14.5
CO-58	L.T. 6. E 01	FE-59	L.T. 39.3
FE-59	L.T. 2. E 02	CO-60	51.7+-14.0
CO-60	L.T. 4. E 01	ZN-65	L.T. 34.7
ZN-65	L.T. 9. E 01	CS-134	L.T. 20.7
ZR-95	L.T. 8. E 01	CS-137	66.8+-15.5
RU-103	L.T. 8. E 01		
RU-106	L.T. 4. E 02		
I-131	L.T. 2. E 03		
CS-134	L.T. 6. E 01		
CS-137	L.T. 5. E 01		
BA-140	L.T. 5. E 02		
CE-141	L.T. 2. E 02		
CE-144	L.T. 3. E 02		
RA-226	2.76+-0.78E 03		
TH-228	1.33+-0.13E 03		

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Shoreline Sediment  
 (pCi/KG DRY)  
 STATION NUMBER EEA  
 Gamma Spectrum Analysis

**0614**                      **SHORELINE SEDIMENT**

BE-7	8.68+-4.26E 02
K-40	1.20+-0.12E 04
MN-54	L.T. 5. E 01
CO-58	L.T. 4. E 01
FE-59	L.T. 2. E 02
CO-60	L.T. 5. E 01
ZN-65	L.T. 1. E 02
ZR-95	L.T. 6. E 01
RU-103	L.T. 7. E 01
RU-106	L.T. 4. E 02
I-131	L.T. 2. E 02
CS-134	L.T. 5. E 01
CS-137	2.64+-0.52E 02
BA-140	L.T. 1. E 02
CE-141	L.T. 1. E 02
CE-144	L.T. 3. E 02
RA-226	2.32+-0.73E 03
TH-228	1.11+-0.11E 03

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Shoreline Sediment  
 (pCi/KG DRY)  
 STATION NUMBER JRR  
 Gamma Spectrum Analysis

<u>0425</u>	<u>SHORELINE SEDIMENT</u>	<u>1114</u>	<u>SHORELINE SEDIMENT</u>
BE-7	L.T. 6. E 02	K-40	11831+-340
K-40	9.61+-0.96E 03	MN-54	L.T. 13.5
MN-54	L.T. 5. E 01	CO-58	L.T. 8.4
CO-58	L.T. 6. E 01	FE-59	L.T. 42.3
FE-59	L.T. 2. E 02	CO-60	L.T. 13.2
CO-60	L.T. 4. E 01	ZN-65	L.T. 31.3
ZN-65	L.T. 1. E 02	CS-134	L.T. 20.8
ZR-95	L.T. 8. E 01	CS-137	L.T. 14.4
RU-103	L.T. 8. E 01		
RU-106	L.T. 4. E 02		
I-131	L.T. 1. E 03		
CS-134	L.T. 6. E 01		
CS-137	L.T. 5. E 01		
BA-140	L.T. 4. E 02		
CE-141	L.T. 1. E 02		
CE-144	L.T. 3. E 02		
RA-226	4.52+-0.74E 03		
TH-228	1.91+-0.19E 03		

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Waterborne**  
 Shoreline Sediment  
 (pCi/KG DRY)  
**STATION NUMBER MUDS**  
 Gamma Spectrum Analysis

<u>SHORELINE SEDIMENT</u>	<u>0612</u>
BE-7	L.T. 4. E 02
K-40	9.58+-0.96E 03
MN-54	L.T. 3. E 01
CO-58	L.T. 3. E 01
FE-59	L.T. 1. E 02
CO-60	L.T. 3. E 01
ZN-65	L.T. 7. E 01
ZR-95	L.T. 5. E 01
RU-103	L.T. 4. E 01
RU-106	L.T. 2. E 02
I-131	L.T. 3. E 02
CS-134	L.T. 3. E 01
CS-137	L.T. 4. E 01
BA-140	L.T. 1. E 02
CE-141	L.T. 1. E 02
CE-144	L.T. 2. E 02
RA-226	3.19+-0.50E 03
TH-228	1.34+-0.13E 03

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion**

Fish

(pCi/KG WET)

STATION NUMBER JRR

Gamma Spectrum and Tritium Analysis

<u>CHANNEL CATFISH</u>	<u>0425</u>	<u>COMMON CARP</u>	<u>0425</u>	<u>COMMON CARP</u>	<u>1107</u>
BE-7	L.T. 2. E 02	BE-7	L.T. 2. E 02	K-40	3249+-319
K-40	3.39+-0.34E 03	K-40	3.75+-0.38E 03	MN-54	L.T. 10.5
MN-54	L.T. 2. E 01	MN-54	L.T. 1. E 01	CO-58	L.T. 10.1
CO-58	L.T. 2. E 01	CO-58	L.T. 2. E 01	FE-59	L.T. 13.3
FE-59	L.T. 6. E 01	FE-59	L.T. 5. E 01	CO-60	L.T. 6.3
CO-60	L.T. 2. E 01	CO-60	L.T. 1. E 01	ZN-65	L.T. 18.8
ZN-65	L.T. 4. E 01	ZN-65	L.T. 3. E 01	CS-134	L.T. 10.6
ZR-95	L.T. 2. E 01	ZR-95	L.T. 2. E 01	CS-137	L.T. 8.9
RU-103	L.T. 3. E 01	RU-103	L.T. 2. E 01	H-3	94+-64
RU-106	L.T. 1. E 02	RU-106	L.T. 1. E 02		
I-131	L.T. 2. E 02	I-131	L.T. 2. E 02		
CS-134	L.T. 2. E 01	CS-134	L.T. 1. E 01		
CS-137	L.T. 2. E 01	CS-137	L.T. 1. E 01		
BA-140	L.T. 7. E 01	BA-140	L.T. 6. E 01		
CE-141	L.T. 4. E 01	CE-141	L.T. 4. E 01		
CE-144	L.T. 1. E 02	CE-144	L.T. 1. E 02		
RA-226	L.T. 3. E 02	RA-226	L.T. 3. E 02		
TH-228	L.T. 3. E 01	TH-228	L.T. 3. E 01		
H-3	L.T. 2. E 02	H-3	L.T. 2. E 02		

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Ingestion**  
 Fish  
 (pCi/KG WET)  
**STATION NUMBER JRR**  
**Gamma Spectrum and Tritium Analysis**

<u>LM BASS</u>	<u>0425</u>	<u>LM BASS</u>	<u>1107</u>	<u>SM BUFFALO</u>	<u>1107</u>
BE-7	L.T. 1. E 02	K-40	3204+-447	K-40	2341+-267
K-40	2.98+-0.30E 03	MN-54	L.T. 12.0	MN-54	L.T. 10.4
MN-54	L.T. 1. E 01	CO-58	L.T. 12.1	CO-58	L.T. 5.9
CO-58	L.T. 2. E 01	FE-59	L.T. 22.6	FE-59	L.T. 27.1
FE-59	L.T. 5. E 01	CO-60	L.T. 16.5	CO-60	L.T. 11.0
CO-60	L.T. 1. E 01	ZN-65	L.T. 37.4	ZN-65	L.T. 17.2
ZN-65	L.T. 3. E 01	CS-134	L.T. 15.1	CS-134	L.T. 13.9
ZR-95	L.T. 2. E 01	CS-137	L.T. 14.6	CS-137	L.T. 8.8
RU-103	L.T. 2. E 01	H-3	109+-65	H-3	68+-63
RU-106	L.T. 1. E 02				
I-131	L.T. 2. E 02				
CS-134	L.T. 1. E 01				
CS-137	L.T. 1. E 01				
BA-140	L.T. 5. E 01				
CE-141	L.T. 3. E 01				
CE-144	L.T. 7. E 01				
RA-226	L.T. 2. E 02				
TH-228	L.T. 2. E 01				
H-3	L.T. 2. E 02				

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion  
Fish  
(pCi/KG WET)  
STATION NUMBER JRR  
Gamma Spectrum and Tritium Analysis

WHITE CRAPPIE

0425

BE-7	L.T. 2. E 02
K-40	3.39+-0.34E 03
MN-54	L.T. 1. E 01
CO-58	L.T. 2. E 01
FE-59	L.T. 6. E 01
CO-60	L.T. 2. E 01
ZN-65	L.T. 3. E 01
ZR-95	L.T. 2. E 01
RU-103	L.T. 2. E 01
RU-106	L.T. 1. E 02
I-131	L.T. 2. E 02
CS-134	L.T. 2. E 01
CS-137	L.T. 2. E 01
BA-140	L.T. 7. E 01
CE-141	L.T. 4. E 01
CE-144	L.T. 1. E 02
RA-226	L.T. 3. E 02
TH-228	L.T. 3. E 01
H-3	L.T. 2. E 02

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Ingestion**  
 Fish  
 (pCi/KG WET)  
 STATION NUMBER WCL  
 Gamma Spectrum and Tritium Analysis

<u>CHANNEL CATFISH</u>	<u>0418</u>	<u>COMMON CARP</u>	<u>1114</u>
BE-7	L.T. 1. E 02	K-40	3759+-422
K-40	3.24+-0.32E 03	MN-54	L.T. 14.1
MN-54	L.T. 1. E 01	CO-58	L.T. 16.0
CO-58	L.T. 1. E 01	FE-59	L.T. 33.2
FE-59	L.T. 3. E 01	CO-60	L.T. 15.1
CO-60	L.T. 1. E 01	ZN-65	L.T. 21.2
ZN-65	L.T. 2. E 01	CS-134	L.T. 10.4
ZR-95	L.T. 1. E 01	CS-137	L.T. 17.1
RU-103	L.T. 1. E 01	H-3	10362+-255
RU-106	L.T. 9. E 01		
I-131	L.T. 8. E 01		
CS-134	L.T. 1. E 01		
CS-137	L.T. 1. E 01		
BA-140	L.T. 4. E 01		
CE-141	L.T. 2. E 01		
CE-144	L.T. 5. E 01		
RA-226	L.T. 2. E 02		
TH-228	L.T. 2. E 01		
H-3	7.0 +-0.3 E 03		



Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion  
Fish  
(pCi/KG WET)  
STATION NUMBER WCL  
Gamma Spectrum and Tritium Analysis

<u>LM BASS</u>	<u>0418</u>	<u>LM BASS</u>	<u>1114</u>	<u>SM BUFFALO</u>	<u>0418</u>
BE-7	L.T. 1. E 02	K-40	3443+-297	BE-7	L.T. 1. E 02
K-40	3.42+-0.34E 03	MN-54	L.T. 8.3	K-40	2.79+-0.28E 03
MN-54	L.T. 9. E 00	CO-58	L.T. 7.4	MN-54	L.T. 1. E 01
CO-58	L.T. 1. E 01	FE-59	L.T. 19.4	CO-58	L.T. 1. E 01
FE-59	L.T. 4. E 01	CO-60	L.T. 10.9	FE-59	L.T. 4. E 01
CO-60	L.T. 9. E 00	ZN-65	L.T. 22.4	CO-60	L.T. 1. E 01
ZN-65	L.T. 2. E 01	CS-134	L.T. 8.0	ZN-65	L.T. 3. E 01
ZR-95	L.T. 1. E 01	CS-137	L.T. 10.4	ZR-95	L.T. 1. E 01
RU-103	L.T. 1. E 01	H-3	9749+-240	RU-103	L.T. 2. E 01
RU-106	L.T. 7. E 01			RU-106	L.T. 9. E 01
I-131	L.T. 8. E 01			I-131	L.T. 9. E 01
CS-134	L.T. 9. E 00			CS-134	L.T. 1. E 01
CS-137	L.T. 1. E 01			CS-137	L.T. 1. E 01
BA-140	L.T. 3. E 01			BA-140	L.T. 4. E 01
CE-141	L.T. 3. E 01			CE-141	L.T. 4. E 01
CE-144	L.T. 8. E 01			CE-144	L.T. 1. E 02
RA-226	L.T. 2. E 02			RA-226	L.T. 3. E 02
TH-228	L.T. 2. E 01			TH-228	L.T. 2. E 01
H-3	6.4 +-0.3 E 03			H-3	7.1 +-0.3 E 03

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion**

Fish

(pCi/KG WET)

STATION NUMBER WCL

Gamma Spectrum and Tritium Analysis

<u>WHITE BASS</u>	<u>0418</u>	<u>WHITE BASS</u>	<u>1114</u>
BE-7	L.T. 1. E 02	K-40	3505+-393
K-40	1.99+-0.20E 03	MN-54	L.T. 16.6
MN-54	L.T. 1. E 01	CO-58	L.T. 11.1
CO-58	L.T. 1. E 01	FE-59	L.T. 41.3
FE-59	L.T. 4. E 01	CO-60	L.T. 12.7
CO-60	L.T. 1. E 01	ZN-65	L.T. 18.5
ZN-65	L.T. 3. E 01	CS-134	L.T. 8.4
ZR-95	L.T. 1. E 01	CS-137	L.T. 16.0
RU-103	L.T. 2. E 01	H-3	9775+-235
RU-106	L.T. 1. E 02		
I-131	L.T. 9. E 01		
CS-134	L.T. 1. E 01		
CS-137	L.T. 1. E 01		
BA-140	L.T. 4. E 01		
CE-141	L.T. 2. E 01		
CE-144	L.T. 7. E 01		
RA-226	L.T. 2. E 02		
TH-228	L.T. 2. E 01		
H-3	6.3 +-0.30E 03		

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion  
Fish  
(pCi/KG WET)  
STATION NUMBER WCL  
Gamma Spectrum and Tritium Analysis

<u>WIPER</u>	<u>0418</u>	<u>WIPER</u>	<u>1114</u>
BE-7	L.T. 1. E 02	K-40	4362+-507
K-40	3.64+-0.36E 03	MN-54	L.T. 17.1
MN-54	L.T. 1. E 01	CO-58	L.T. 19.8
CO-58	L.T. 1. E 01	FE-59	L.T. 27.5
FE-59	L.T. 4. E 01	CO-60	L.T. 11.6
CO-60	L.T. 1. E 01	ZN-65	L.T. 14.4
ZN-65	L.T. 3. E 01	CS-134	L.T. 11.7
ZR-95	L.T. 1. E 01	CS-137	L.T. 19.3
RU-103	L.T. 2. E 01	H-3	10247+-250
RU-106	L.T. 1. E 02		
I-131	L.T. 1. E 02		
CS-134	L.T. 1. E 01		
CS-137	L.T. 1. E 01		
BA-140	L.T. 4. E 01		
CE-141	L.T. 3. E 01		
CE-144	L.T. 9. E 01		
RA-226	L.T. 3. E 02		
TH-228	L.T. 2. E 01		
H-3	7.7 +-0.3 E 03		

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Ingestion**  
 Food/Garden Crops  
 (pCi/KG WET)  
 STATION NUMBER E-1  
 Gamma Spectrum Analysis

<u>0628</u>	<u>LETTUCE</u>	<u>0726</u>	<u>SQUASH LEAVES</u>
BE-7	4.79+-1.03E 02	BE-7	1.53+-1.13E 03
K-40	3.89+-0.39E 03	K-40	3.53+-2.75E 03
MN-54	L.T. 1. E 01	MN-54	L.T. 1.53 E 01
CO-58	L.T. 1. E 01	CO-58	L.T. 1.48 E 01
FE-59	L.T. 4. E 01	FE-59	L.T. 3.06 E 01
CO-60	L.T. 1. E 01	CO-60	L.T. 1.58 E 01
ZN-65	L.T. 3. E 01	ZN-65	L.T. 3.17 E 01
ZR-95	L.T. 1. E 01	ZR-95	L.T. 2.74 E 01
RU-103	L.T. 1. E 01	RU-103	L.T. 1.53 E 01
RU-106	L.T. 1. E 02	RU-106	L.T. 1.25 E 02
I-131	L.T. 4. E 01	I-131	L.T. 2.70 E 01
CS-134	L.T. 1. E 01	CS-134	L.T. 1.38 E 01
CS-137	L.T. 1. E 01	CS-137	L.T. 1.60 E 01
BA-140	L.T. 3. E 01	BA-140	L.T. 7.01 E 01
CE-141	L.T. 2. E 01	CE-141	L.T. 2.22 E 01
CE-144	L.T. 7. E 01	CE-144	L.T. 8.46 E 01
RA-226	L.T. 2. E 02	RA-226	L.T. 3.42 E 01
TH-228	L.T. 2. E 01	TH-228	L.T. 2.39 E 01

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion  
Food/Garden Crops  
(pCi/KG WET)  
STATION NUMBER F-1  
Gamma Spectrum Analysis

<u>0608</u>	<u>HORSERADISH LEAVES</u>	<u>0726</u>	<u>HORSERADISH LEAVES</u>
BE-7	L.T. 1. E 02	BE-7	6.23+-1.05E 02
K-40	4.77+-0.48E 03	K-40	4.73+-0.47E 03
MN-54	L.T. 1. E 01	MN-54	L.T. 1. E 01
CO-58	L.T. 1. E 01	CO-58	L.T. 2. E 01
FE-59	L.T. 3. E 01	FE-59	L.T. 4. E 01
CO-60	L.T. 1. E 01	CO-60	L.T. 2. E 01
ZN-65	L.T. 3. E 01	ZN-65	L.T. 3. E 01
ZR-95	L.T. 1. E 01	ZR-95	L.T. 2. E 01
RU-103	L.T. 1. E 01	RU-103	L.T. 2. E 01
RU-106	L.T. 1. E 02	RU-106	L.T. 1. E 02
I-131	L.T. 2. E 01	I-131	L.T. 3. E 01
CS-134	L.T. 1. E 01	CS-134	L.T. 2. E 01
CS-137	L.T. 1. E 01	CS-137	L.T. 2. E 01
BA-140	L.T. 2. E 01	BA-140	L.T. 2. E 01
CE-141	L.T. 2. E 01	CE-141	L.T. 2. E 01
CE-144	L.T. 7. E 01	CE-144	L.T. 9. E 01
RA-226	L.T. 2. E 02	RA-226	L.T. 2. E 02
TH-228	L.T. 2. E 01	TH-228	L.T. 2. E 01

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion  
Food/Garden Crops  
(pCi/KG WET)  
STATION NUMBER G-1  
Gamma Spectrum Analysis

<u>0628</u>	<u>CABBAGE</u>	<u>0726</u>	<u>COLLARD GREENS</u>	<u>0823</u>	<u>SQUASH LEAVES</u>
BE-7	3.78+-1.28E 02	BE-7	3.75+-0.68E 02	BE-7	2.08+-0.21E 03
K-40	2.69+-0.27E 03	K-40	5.48+-0.55E 03	K-40	5.87+-0.59E 03
MN-54	L.T. 2. E 01	MN-54	L.T. 8. E 00	MN-54	L.T. 1. E 01
CO-58	L.T. 2. E 01	CO-58	L.T. 9. E 00	CO-58	L.T. 1. E 01
FE-59	L.T. 4. E 01	FE-59	L.T. 2. E 01	FE-59	L.T. 4. E 01
CO-60	L.T. 1. E 01	CO-60	L.T. 9. E 00	CO-60	L.T. 1. E 01
ZN-65	L.T. 3. E 01	ZN-65	L.T. 2. E 01	ZN-65	L.T. 3. E 01
ZR-95	L.T. 2. E 01	ZR-95	L.T. 9. E 00	ZR-95	L.T. 1. E 01
RU-103	L.T. 2. E 01	RU-103	L.T. 9. E 00	RU-103	L.T. 1. E 01
RU-106	L.T. 1. E 02	RU-106	L.T. 8. E 01	RU-106	L.T. 1. E 02
I-131	L.T. 6. E 01	I-131	L.T. 2. E 01	I-131	L.T. 3. E 01
CS-134	L.T. 2. E 01	CS-134	L.T. 9. E 00	CS-134	L.T. 1. E 01
CS-137	L.T. 2. E 01	CS-137	L.T. 1. E 01	CS-137	L.T. 1. E 01
BA-140	L.T. 3. E 01	BA-140	L.T. 1. E 01	BA-140	L.T. 2. E 01
CE-141	L.T. 3. E 01	CE-141	L.T. 1. E 01	CE-141	L.T. 2. E 01
CE-144	L.T. 9. E 01	CE-144	L.T. 5. E 01	CE-144	L.T. 7. E 01
RA-226	L.T. 3. E 02	RA-226	L.T. 2. E 02	RA-226	L.T. 2. E 02
TH-228	L.T. 2. E 01	TH-228	L.T. 1. E 01	TH-228	L.T. 2. E 01

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Ingestion**  
Food/Garden Crops  
(pCi/KG WET)  
STATION NUMBER S-4  
Gamma Spectrum Analysis

<u>0524</u>	<u>CABBAGE</u>	<u>0628</u>	<u>CABBAGE</u>	<u>0726</u>	<u>CABBAGE</u>
BE-7	1.84+-0.65E 02	BE-7	1.17+-0.13E 03	BE-7	1.03+-0.10E 03
K-40	3.71+-0.37E 03	K-40	4.08+-0.41E 03	K-40	5.61+-0.56E 03
MN-54	L.T. 9. E 00	MN-54	L.T. 1. E 01	MN-54	L.T. 1. E 01
CO-58	L.T. 9. E 00	CO-58	L.T. 1. E 01	CO-58	L.T. 1. E 01
FE-59	L.T. 2. E 01	FE-59	L.T. 4. E 01	FE-59	L.T. 3. E 01
CO-60	L.T. 9. E 00	CO-60	L.T. 1. E 01	CO-60	L.T. 1. E 01
ZN-65	L.T. 2. E 01	ZN-65	L.T. 3. E 01	ZN-65	L.T. 3. E 01
ZR-95	L.T. 9. E 00	ZR-95	L.T. 1. E 01	ZR-95	L.T. 1. E 01
RU-103	L.T. 1. E 01	RU-103	L.T. 2. E 01	RU-103	L.T. 1. E 01
RU-106	L.T. 8. E 01	RU-106	L.T. 1. E 02	RU-106	L.T. 1. E 02
I-131	L.T. 2. E 01	I-131	L.T. 4. E 01	I-131	L.T. 2. E 01
CS-134	L.T. 1. E 01	CS-134	L.T. 1. E 01	CS-134	L.T. 1. E 01
CS-137	L.T. 1. E 01	CS-137	L.T. 1. E 01	CS-137	L.T. 1. E 01
BA-140	L.T. 1. E 01	BA-140	L.T. 2. E 01	BA-140	L.T. 2. E 01
CE-141	L.T. 1. E 01	CE-141	L.T. 2. E 01	CE-141	L.T. 2. E 01
CE-144	L.T. 5. E 01	CE-144	L.T. 7. E 01	CE-144	L.T. 6. E 01
RA-226	L.T. 2. E 02	RA-226	L.T. 2. E 02	RA-226	L.T. 2. E 02
TH-228	L.T. 2. E 01	TH-228	L.T. 2. E 01	TH-228	L.T. 2. E 01

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Ingestion  
Food/Garden Crops  
(pCi/KG WET)  
STATION NUMBER S-4 (Duplications)  
Gamma Spectrum Analysis

**0726**                      **CABBAGE DUP**

BE-7	1.10+-0.11E 03
K-40	5.82+-0.58E 03
MN-54	L.T. 1. E 01
CO-58	L.T. 1. E 01
FE-59	L.T. 3. E 01
CO-60	L.T. 1. E 01
ZN-65	L.T. 3. E 01
ZR-95	L.T. 1. E 01
RU-103	L.T. 1. E 01
RU-106	L.T. 1. E 02
I-131	L.T. 2. E 01
CS-134	L.T. 1. E 01
CS-137	L.T. 1. E 01
BA-140	L.T. 2. E 01
CE-141	L.T. 2. E 01
CE-144	L.T. 6. E 01
RA-226	L.T. 2. E 02
TH-228	L.T. 2. E 01



**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Ingestion**  
**Feed and Forage**  
**(pCi/KG WET)**  
**STATION NUMBER NR-D1**  
**Gamma Spectrum Analysis**

<u>SOYBEANS (NON-IRRIG)</u>	<u>1004</u>
BE-7	L.T. 729
K-40	18,012+-818
MN-54	L.T. 22.9
CO-58	L.T. 50.0
FE-59	L.T. 390
CO-60	L.T. 27.1
ZN-65	L.T. 45.0
ZR-95	L.T. 153
I-131	L.T. 9.2 (a)
CS-134	L.T. 17.8
CS-137	L.T. 18.5

(a) The I-131 results are concentration at the time of counting. Samples were received later than 12 half-lives after collection.

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Ingestion**  
**Feed and Forage**  
**(pCi/KG WET)**  
**STATION NUMBER NR-D2**  
**Gamma Spectrum Analysis**

<b><u>SOYBEANS (IRRIGATE)</u></b>	<b><u>1004</u></b>
BE-7	L.T. 763
K-40	17,678+-906
MN-54	L.T. 24.6
CO-58	L.T. 68.2
FE-59	L.T. 424
CO-60	L.T. 27.1
ZN-65	L.T. 71.2
ZR-95	L.T. 158
I-131	L.T. 9.1 (a)
CS-134	L.T. 25.8
CS-137	L.T. 17.6

(a) The I-131 results are concentration at the time of counting. Samples were received later than 12 half-lives after collection.

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Ingestion**  
**Feed and Forage**  
**(pCi/KG WET)**  
**STATION NUMBER NR-U1**  
**Gamma Spectrum Analysis**

<u>CORN (IRRIGATED)</u>	<u>0927</u>	<u>SOYBEANS (IRRIG) DUP</u>	<u>0927</u>	<u>SOYBEANS (IRRIGATE</u>	<u>0927</u>
BE-7	L.T. 804	BE-7	L.T. 682	BE-7	L.T. 646
K-40	3,967+-540	K-40	16,230+-911	K-40	16,853+-946
MN-54	L.T. 18.6	MN-54	L.T. 18.1	MN-54	L.T. 24.8
CO-58	L.T. 68.2	CO-58	L.T. 37.7	CO-58	L.T. 80.1
FE-59	L.T. 326	FE-59	L.T. 408	FE-59	L.T. 316
CO-60	L.T. 16.0	CO-60	L.T. 18.7	CO-60	L.T. 24.6
ZN-65	L.T. 60.9	ZN-65	L.T. 95.2	ZN-65	L.T. 72.0
ZR-95	L.T. 102	ZR-95	L.T. 179	ZR-95	L.T. 118
I-131	L.T. 15.7 (a)	I-131	L.T. 10.7 (a)	I-131	L.T. 14.7 (a)
CS-134	L.T. 28.9	CS-134	L.T. 27.1	CS-134	L.T. 23.7
CS-137	L.T. 12.7	CS-137	L.T. 19.6	CS-137	L.T. 21.8

(a) The I-131 results are concentration at the time of counting. Samples were received later than 12 halfives after collection.

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Aquatic  
Sediment/Silt  
(pCi/KG DRY)  
STATION NUMBER DC  
Gamma Spectrum Analysis

<u>0418</u>	<u>BOTTOM SEDIMENT</u>	<u>1114</u>	<u>BOTTOM SEDIMENT</u>
BE-7	L.T. 6. E 02	K-40	14662+-865
K-40	1.11+-0.11E 04	MN-54	L.T. 28.4
MN-54	L.T. 5. E 01	CO-58	L.T. 13.9
CO-58	L.T. 6. E 01	FE-59	L.T. 62.7
FE-59	L.T. 2. E 02	CO-60	606+-47
CO-60	5.49+-0.62E 02	ZN-65	L.T. 56.0
ZN-65	L.T. 1. E 02	CS-134	98.4+-34.7
ZR-95	L.T. 8. E 01	CS-137	351+-50
RU-103	L.T. 8. E 01		
RU-106	L.T. 4. E 02		
I-131	L.T. 2. E 03		
CS-134	L.T. 6. E 01		
CS-137	3.05+-0.50E 02		
BA-140	L.T. 5. E 02		
CE-141	L.T. 2. E 02		
CE-144	L.T. 3. E 02		
RA-226	2.57+-0.72E 03		
TH-228	1.29+-0.13E 03		

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Aquatic**  
 Sediment/Silt  
 (pCi/KG DRY)  
 STATION NUMBER JRR  
 Gamma Spectrum Analysis

<u>0425</u>	<u>BOTTOM SEDIMENT</u>	<u>1114</u>	<u>BOTTOM SEDIMENT</u>
BE-7	1.04+-0.35E 03	K-40	13210+-751
K-40	1.50+-0.15E 04	MN-54	L.T. 30.8
MN-54	L.T. 4. E 01	CO-58	L.T. 26.9
CO-58	L.T. 4. E 01	FE-59	L.T. 53.9
FE-59	L.T. 1. E 02	CO-60	L.T. 18.5
CO-60	L.T. 3. E 01	ZN-65	L.T. 51.1
ZN-65	L.T. 9. E 01	CS-134	L.T. 26.4
ZR-95	L.T. 5. E 01	CS-137	94.7+-29.8
RU-103	L.T. 6. E 01		
RU-106	L.T. 3. E 02		
I-131	L.T. 7. E 02		
CS-134	L.T. 4. E 01		
CS-137	1.61+-0.26E 02		
BA-140	L.T. 2. E 02		
CE-141	L.T. 9. E 01		
CE-144	L.T. 2. E 02		
RA-226	1.70+-0.50E 03		
TH-228	1.24+-0.12E 03		

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Aquatic**  
 Vegetation - Aquatic  
 (pCi/KG WET)  
 STATION NUMBER DC  
 Gamma Spectrum Analysis

<u>0418</u>	<u>ALGAE</u>
BE-7	1.11+-0.14E 03
K-40	5.19+-0.52E 03
MN-54	L.T. 2. E 01
CO-58	1.97+-1.12E 01
FE-59	L.T. 4. E 01
CO-60	1.54+-0.17E 02
ZN-65	L.T. 4. E 01
ZR-95	L.T. 2. E 01
RU-103	L.T. 2. E 01
RU-106	L.T. 1. E 02
I-131	L.T. 5. E 01
CS-134	4.44+-1.51E 01
CS-137	9.45+-1.44E 01
BA-140	L.T. 4. E 01
CE-141	L.T. 3. E 01
CE-144	L.T. 1. E 02
RA-226	1.56+-0.26E 03
TH-228	6.55+-0.66E 02

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Aquatic**  
 Vegetation - Aquatic  
 (pCi/KG WET)  
**STATION NUMBER DCAL**  
**Gamma Spectrum Analysis**

<u>0913</u>	<u>AM LOTUS</u>	<u>0913</u>	<u>PONDWEED</u>
BE-7	L.T. 217	BE-7	L.T. 230
K-40	1744+-84	K-40	1952+-87
MN-54	L.T. 5.2	MN-54	L.T. 5.4
CO-58	L.T. 11.5	CO-58	L.T. 13.6
FE-59	L.T. 60.5	FE-59	L.T. 70.8
CO-60	6.2+-3.1	CO-60	L.T. 4.8
ZN-65	L.T. 10.4	ZN-65	L.T. 13.3
ZR-95	L.T. 43.7	ZR-95	L.T. 37.6
I-131	L.T. 3.8 (a)	I-131	L.T. 4.0 (a)
CS-134	L.T. 5.0	CS-134	L.T. 4.6
CS-137	6.0+-3.2	CS-137	L.T. 3.4

(a) The I-131 results are concentration at the time of counting. Samples were received later than 12 halfives after collection.

**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Aquatic**  
 Vegetation - Aquatic  
 (pCi/KG WET)  
 STATION NUMBER EEA  
 Gamma Spectrum Analysis

**0614**                      **WATER PRIMROSE**

BE-7	4.56+-0.46E 02
K-40	4.77+-0.48E 03
MN-54	L.T. 5. E 00
CO-58	L.T. 5. E 00
FE-59	L.T. 1. E 01
CO-60	L.T. 4. E 00
ZN-65	L.T. 1. E 01
ZR-95	L.T. 6. E 00
RU-103	L.T. 6. E 00
RU-106	L.T. 4. E 01
I-131	L.T. 2. E 01
CS-134	L.T. 6. E 00
CS-137	6.91+-0.69E 01
BA-140	L.T. 1. E 01
CE-141	L.T. 1. E 01
CE-144	L.T. 3. E 01
RA-226	5.41+-0.78E 02
TH-228	3.14+-0.31E 02



**Wolf Creek Nuclear Operating Corporation**  
**Exposure Pathway - Aquatic**  
 Vegetation - Aquatic  
 (pCi/KG WET)  
**STATION NUMBER MUDS**  
 Gamma Spectrum Analysis

<u>0612</u>	<u>ALGAE</u>
BE-7	4.78+-0.48E 02
K-40	5.25+-0.53E 03
MN-54	L.T. 5. E 00
CO-58	L.T. 5. E 00
FE-59	L.T. 2. E 01
CO-60	1.14+-0.38E 01
ZN-65	L.T. 1. E 01
ZR-95	L.T. 6. E 00
RU-103	L.T. 7. E 00
RU-106	L.T. 5. E 01
I-131	L.T. 2. E 01
CS-134	L.T. 7. E 00
CS-137	1.09+-0.43E 01
BA-140	L.T. 1. E 01
CE-141	L.T. 1. E 01
CE-144	L.T. 4. E 01
RA-226	4.53+-0.81E 02
TH-228	2.63+-0.26E 02

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Terrestrial  
Vegetation - Terrestrial  
(pCi/KG WET)  
STATION NUMBER EEA  
Gamma Spectrum Analysis

<u>0612</u>	<u>PASTURAGE</u>
BE-7	3.57+-1.08E 02
K-40	4.27+-0.43E 03
MN-54	L.T. 1. E 01
CO-58	L.T. 1. E 01
FE-59	L.T. 4. E 01
CO-60	L.T. 1. E 01
ZN-65	L.T. 3. E 01
ZR-95	L.T. 2. E 01
RU-103	L.T. 2. E 01
RU-106	L.T. 1. E 02
I-131	L.T. 4. E 01
CS-134	L.T. 1. E 01
CS-137	L.T. 1. E 01
BA-140	L.T. 2. E 01
CE-141	L.T. 3. E 01
CE-144	L.T. 9. E 01
RA-226	L.T. 3. E 02
TH-228	L.T. 2. E 01

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Terrestrial  
Vegetation - Terrestrial  
(pCi/KG WET)  
STATION NUMBER MUDS  
Gamma Spectrum Analysis

<u>0612</u>	<u>PASTURAGE</u>
BE-7	1.40+-0.14E 03
K-40	4.29+-0.43E 03
MN-54	L.T. 8. E 00
CO-58	L.T. 9. E 00
FE-59	L.T. 2. E 01
CO-60	L.T. 9. E 00
ZN-65	L.T. 2. E 01
ZR-95	L.T. 9. E 00
RU-103	L.T. 1. E 01
RU-106	L.T. 8. E 01
I-131	L.T. 2. E 01
CS-134	L.T. 9. E 00
CS-137	L.T. 8. E 00
BA-140	L.T. 2. E 01
CE-141	L.T. 1. E 01
CE-144	L.T. 5. E 01
RA-226	L.T. 1. E 02
TH-228	L.T. 1. E 01

**Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Terrestrial**

Soil

(pCi/KG DRY)  
STATION NUMBER EEA  
Gamma Spectrum Analysis

<u>0612</u>	<u>SOIL</u>
BE-7	L.T. 3. E 02
K-40	1.21+-0.12E 04
MN-54	L.T. 3. E 01
CO-58	L.T. 3. E 01
FE-59	L.T. 8. E 01
CO-60	L.T. 3. E 01
ZN-65	L.T. 6. E 01
ZR-95	L.T. 4. E 01
RU-103	L.T. 4. E 01
RU-106	L.T. 3. E 02
I-131	L.T. 1. E 02
CS-134	L.T. 4. E 01
CS-137	1.68+-0.24E 02
BA-140	L.T. 7. E 01
CE-141	L.T. 6. E 01
CE-144	L.T. 2. E 02
RA-226	2.65+-0.50E 03
TH-228	1.17+-0.12E 03

Wolf Creek Nuclear Operating Corporation  
Exposure Pathway - Terrestrial

Soil

(pCi/KG DRY)

STATION NUMBER MUDS

Gamma Spectrum Analysis

<u>0612</u>	<u>SOIL</u>
BE-7	L.T. 5. E 02
K-40	9.72+-0.97E 03
MN-54	L.T. 4. E 01
CO-58	L.T. 5. E 01
FE-59	L.T. 1. E 02
CO-60	L.T. 4. E 01
ZN-65	L.T. 9. E 01
ZR-95	L.T. 7. E 01
RU-103	L.T. 6. E 01
RU-106	L.T. 4. E 02
I-131	L.T. 4. E 02
CS-134	L.T. 5. E 01
CS-137	L.T. 5. E 01
BA-140	L.T. 2. E 02
CE-141	L.T. 1. E 02
CE-144	L.T. 3. E 02
RA-226	2.88+-0.67E 03
TH-228	1.58+-0.16E 03

## Appendix D

Evaluation of Teledyne Brown Engineering  
Interlaboratory Comparison Results  
and  
Comparisons of Similar Sample Analysis Results  
(Kansas Department of Health and Environment  
Compared to  
Wolf Creek Generating Station)

The purpose of Appendix D is to document an evaluation of the Teledyne Brown Engineering, Inc. interlaboratory comparison results. The evaluation consisted of reviewing the information contained in Table 21 and Table 22 and applying those results to the Wolf Creek REMP. Analysis results of similar samples that were either split with the KDHE or collocated with the KDHE, were also compared to the Wolf Creek Generating Station (WCGS) results obtained from Teledyne Brown Engineering, Inc.

Performance evaluation samples analyzed by Teledyne Brown Engineering, Inc. in participation with the ERA Proficiency Testing Program (Table 21) reflected some results that were "not acceptable" or "check for error". This is a discussion to capture these results and to apply them to the analysis that is required for the WCGS REMP.

Nuclides in water samples that had either a "not acceptable" or "check for error" result included: U-Nat, Ra-228, Gr-A, Gr-B, Cs-137, Zn-65 and I-131. A short discussion of these nuclides follows:

- U-Nat and Ra-228: Naturally occurring nuclides are not crucial to the REMP and are not required by the WCGS Offsite Dose Calculation Manual (ODCM). The purpose of the REMP is to ensure the impact of the plant to the public and the environment is minimal and to demonstrate that the Radioactive Effluent Controls Program is effective. Fission products, corrosion products and activation products are significant to the REMP. Ra-228 activity was not detected in 2000 water samples which is consistent when compared to the past five years. (Ra-228 activity was not detected in water samples obtained 1995 through 1999.)
- Gr-A: Gross alpha analysis is not ODCM required for WCGS REMP water samples.
- Gr-B: Gross beta analysis is required by the WCGS ODCM on drinking water samples. In 2000 the gross beta range on drinking water samples from the indicator and control locations was 2.4 to 8.5 pCi/l which is very similar to the range of the previous five years. (The range for 1999 was 3.1 to 20.0 pCi/l, the range for 1998 was 2.7 to 13.0 pCi/l, the range for 1997 was 3.5 to 7.3 pCi/l, the range for 1996 was 5.1 to 9.9 pCi/l and the range for 1995 was 4.5 to 11 pCi/l.). In 2000 the control location annual gross beta mean on drinking water samples was 5.8 pCi/l which is very similar to the previous five year's data. (The annual gross beta mean of the drinking water control location in 1999 was 6.2 pCi/l, 1998 was 6.0 pCi/l, 1997 was 5.7 pCi/l, 1996 was 7.5 pCi/l and 1995 was 7.4 pCi/l.)
- Cs-137: Cs-137 is a fission product and is required by the WCGS ODCM. Cs-137 activity was not detected in water (surface, ground or drinking) samples obtained in 2000. This is consistent with results obtained over the past five years. The results for 1995 through 1999 were reviewed and Cs-137 activity was not detected in those samples as well.
- Zn-65: Zn-65 is a corrosion and activation product and is required by the WCGS ODCM. Zn-65 activity was not detected in water (surface, ground or drinking) samples obtained in 2000. This is consistent with results obtained over the past five years. The results for 1995 through 1999 were reviewed and Zn-65 activity was not detected in those samples as well.
- I-131: I-131 is a fission product and is required by the WCGS ODCM. I-131 activity was not detected in water (surface, ground or drinking) samples obtained in 2000. This is consistent with results obtained over the past five years. The results for 1995 through 1999 were reviewed and I-131 activity was not detected in those samples as well.

The results of the Teledyne Brown Engineering, Inc./Analytics (Table 22) cross check comparison program also reflected some inconsistencies. The following is a discussion regarding how those inconsistencies relate to the Wolf Creek Generating Station Radiological Environmental Monitoring Program:

- Teledyne Brown Engineering, Inc. results for two milk samples had strontium results that were outside of the Analytics result range. In 2000, milk samples were not collected by WCGS since no milking animals were identified during the Land Use Census.
- Teledyne Brown Engineering, Inc. results for I-131 on a radioiodine cartridge were outside the Analytics result range. I-131 is ODCM required for radioiodine cartridges. The ratio of Teledyne Brown Engineering, Inc. to Analytics was 1.20 and reflects the Teledyne Brown Engineering, Inc. result was higher than Analytic's. Since the Teledyne Brown Engineering, Inc. result was higher, this would reflect a more conservative result for I-131 in radioiodine cartridges. During 2000, I-131 activity was not detected on WCGS radioiodine cartridges. This is consistent with the results on samples taken during the last five years (1995-1999). I-131 activity was also not detected on those samples.
- Six Teledyne Brown Engineering, Inc. nuclide results on an air filter sample were higher than the Analytics result range. These results are more conservative and the nuclides identified were: Cr-51, Cs-137, Co-58, Mn-54, Fe-59 and Zn-65. These nuclides were not identified in 2000 air filter samples which is consistent with the results from the 1995 through 1999 sample years. Those years were reviewed, and these nuclides were also not identified during that time. Cs-137 is required by the WCGS ODCM for air filter samples.



Kansas Department of Health and Environment sample results were also reviewed from similar samples that were either split with WCNOC or obtained from collocated sample sites. The purpose of the review was to compare KDHE results to the results derived from Teledyne Brown Engineering, Inc. The analysis results compared were from samples obtained during 2000. The lab results were correlated and tested for significance ( $p \leq 0.05$ ). The results of the comparisons follow and are listed by sample type.

#### Air Particulate

Gross beta analysis results obtained from collocated sample locations (Sharpe [2], New Strawn [32] and Hartford [40]) were evaluated. (The KDHE usually collects their samples on Thursday of each week, while WCGS usually collects samples on Wednesday.) Chart 1 contains the analysis results for the KDHE and WCGS. Linear regression analysis was performed to compare the results from both programs. There was a high degree of agreement ( $r=0.93$ ) between WCNOC and KDHE air particulate gross beta that was significant ( $p \leq 0.05$ ) at the Sharpe location. KDHE results were consistently higher, however the results varied together, i.e., when the KDHE results were higher, so were WCNOC's. Similar results were evident at locations New Strawn and Hartford. At the New Strawn location, the results had a high degree of agreement ( $r=0.89$ ,  $p \leq 0.05$ ) and at the Hartford location, the results also had a high degree of agreement ( $r=0.87$ ,  $p \leq 0.05$ ).

#### Surface Water

Surface water analysis results were reviewed for the first six months of 2000. The KDHE and WCNOC split the surface water samples monthly. Indicator location results reviewed were Wolf Creek Lake spillway (SP) and Wolf Creek Lake discharge cove (DC). The control location (MUSH) results were also reviewed. Chart 2 contains the tritium analysis results for the KDHE and WCNOC. Both programs showed no gamma emitters detected above LLDs. Tritium results at the control location for both programs were below detected LLDs. To evaluate the two indicator locations, the tritium results were combined and a regression data analysis was performed. The statistics show agreement ( $r=0.87$ ,  $p \leq 0.05$ ) between both program results. The KDHE results are consistently higher with the data from both labs showing a direct relationship for measured change.

#### Ground Water

Ground water analysis results were compared for the first two quarters of 2000. Ground water samples were split with the KDHE during this time. Ground water tritium analysis results are listed in Chart 3. For both programs, tritium activity was not detected above LLDs.

#### Drinking Water

Drinking water gross beta analysis results were compared from the indicator sample location (LeRoy). Chart 4 lists the gross beta results for both programs for the first six samples obtained in 2000. The sample dates are not identical as the samples are obtained from two different water samplers. The WCNOC analysis results are typically higher than the KDHE's, however, the analysis results are very similar. With the exception of the sample obtained by the KDHE on 06-29-00, the analysis results overlapped. It should be noted that the exception was just out of range ( $<4$  vs.  $5.2 \pm 1.1$  pCi/liter).

## Fish

Fish tritium analysis results were compared for the fish samples obtained in April, 2000. Chart 5 lists the tritium results for both programs. In the samples obtained from the control location (JRR), neither program had detected tritium activity that was above the LLDs. The KDHE tritium results in fish were typically higher. Three tritium analysis results overlapped (Wiper, White Bass and Largemouth Bass) for indicator location fish. The Smallmouth Buffalo and Channel Catfish tritium results did not overlap. The KDHE detected tritium result for the Smallmouth Buffalo appears to be high (11,003 pCi/kg, wet) when compared to the other KDHE tritium fish results and WCNOG tritium fish results. The fish collected on April 18, 2000, were all obtained from the cooling lake. The Channel Catfish tritium result was just out of the analysis results range. A linear regression analysis was performed and statistically, the tritium results on fish do not agree ( $r=0.23$ ) between labs.

## Bottom Sediments

KDHE and WCNOG bottom sediments samples were compared. The samples were obtained at the same time from the same locations. Chart 6 lists the bottom sediment analysis results for both programs. All nuclides were paired and compared. Less than numbers were assumed valid. Results from a linear regression analysis reflect that the agreement between labs was good ( $r=0.95$ ) and significant ( $p \geq 0.05$ ).

## Soil

Two soil sample analysis results were compared. The samples were obtained at the same time from the same locations. Chart 7 lists the soil analysis results for both programs. All nuclides were combined for the comparison. Results from a linear regression analysis reflect that the relationship is good ( $r=0.97$ ) and is significant ( $p \geq 0.05$ ).

## Conclusion

The conclusion from the comparison of results from both programs is that generally there was a good degree of agreement, which confirms consistency and adequacy of the REMP lab analysis results.

Chart 1: Air Particulate Gross Beta Results (pCi/m<sup>3</sup>)

Date Collected	KDHE Sharpe	KDHE New Strawn	KDHE Hartford	Date Collected	WCNOC Sharpe	WCNOC New Strawn	WCNOC Hartford
01/06/00	0.056	0.048	0.051	01/05/00	0.039	0.040	0.038
01/13/00	0.035	0.031	0.032	01/13/00	0.020	0.020	0.022
01/20/00	0.064	0.047	0.060	01/19/00	0.043	0.043	0.047
01/27/00	0.046	0.038	0.042	01/26/00	0.028	0.034	0.030
02/03/00	0.050	0.049	0.065	02/02/00	0.027	0.033	0.033
02/10/00	0.072	0.064	0.071	02/09/00	0.038	0.039	0.041
02/17/00	0.060	0.055	0.055	02/16/00	0.040	0.040	0.043
02/24/00	0.030	0.028	0.029	02/23/00	0.026	0.024	0.024
03/02/00	0.027	0.026	UNK	03/01/00	0.020	0.020	0.020
03/09/00	0.021	UNK	0.020	03/08/00	0.016	0.023	0.020
03/16/00	0.023	0.026	0.025	03/15/00	0.022	0.020	0.019
03/23/00	0.024	0.017	0.021	03/22/00	0.018	0.022	0.018
03/30/00	0.027	0.022	0.026	03/30/00	0.021	0.018	0.018
04/06/00	0.032	0.027	0.034	04/05/00	0.024	0.024	0.020
04/13/00	0.039	0.030	0.040	04/12/00	0.023	0.022	0.022
04/20/00	0.022	0.019	0.022	04/19/00	0.020	0.017	0.020
04/27/00	0.033	0.029	0.037	04/26/00	0.021	0.020	0.020
05/04/00	0.035	0.033	0.040	05/03/00	0.024	0.022	0.024
05/11/00	0.024	0.017	0.026	05/10/00	0.019	0.019	0.020
05/18/00	0.028	0.023	0.029	05/17/00	0.019	0.025	0.025
05/25/00	0.036	0.033	0.035	05/24/00	0.021	0.019	0.019
06/01/00	0.030	0.025	0.028	05/31/00	0.024	0.019	0.020
06/08/00	0.020	0.021	0.023	06/08/00	0.017	0.014	0.014
06/15/00	0.020	0.017	0.023	06/15/00	0.017	0.017	0.016
06/22/00	0.017	0.017	0.023	06/21/00	0.012	0.016	0.012
06/29/00	0.030	0.020	0.036	06/28/00	0.018	0.017	0.017

Chart 2: Surface Water Tritium Results (pCi/liter)

Date	KDHE SP	+/-	WCNOC SP	+/-	KDHE DC	+/-	WCNOC DC	+/-	KDHE MUSH	WCNOC MUSH
01/20/00	11418	329	11000	1000	12540	341	11000	1000	<350	<200
02/17/00	12396	347	12000	1000	12853	351	11000	1000	<350	<200
03/23/00	12058	244	11000	1000	11875	343	12000	1000	<350	<200
04/20/00	15624	379	14000	1000	15318	375	13000	1000	<350	<200
05/18/00	16231	387	14000	1000	16108	386	13000	1000	<350	<200
06/15/00	16678	391	13000	1000	15754	381	13000	1000	<350	<200
NOTE: Both programs showed no gamma emitters detected above LLD.										

Chart 3: Ground Water Tritium Results (pCi/liter)

Date	KDHE (D65)	WCNOC (D65)	KDHE (C49)	WCNOC (C49)	KDHE (C10)	WCNOC (C10)	KDHE (B12)	WCNOC (B12)
02/17/00	<350	<200	<350	<200	<350	<200	<350	<200
05/18/00	<350	<200	<350	<200	<350	<200	<350	<200

Chart 4: Drinking Water gross beta (pCi/liter)

Date Sampled	KDHE (LeRoy)	+/-	Stop Date	WCNOC (LeRoy)	+/-
01/27/00	5	3	02/02/00	6.6	1.2
02/24/00	3	2	03/01/00	5.7	1.2
03/23/00	3	3	04/06/00	5.2	1.2
04/27/00	4	2	05/03/00	5.2	1.2
05/25/00	3	2	06/09/00	4.6	1.1
06/29/00	<4		07/05/00	5.2	1.1

Chart 5: Fish (pCi/kg, wet)

Date	Species	Location	KDHE H-3	+/-	WCNOC H-3	+/-
04/25/00	W Crappie	JRR	<1200		<200	
	Common Carp	JRR	<1200		<200	
	LM Bass	JRR	<1200		<200	
	Channel Catfish	JRR	<1200		<200	
04/18/00	Wiper	WCL	7696	1244	7700	300
	SM Buffalo	WCL	11003	1277	7100	300
	Channel Catfish	WCL	8865	1256	7000	300
	White Bass	WCL	7668	1241	6300	300
	LM Bass	WCL	7778	1243	6400	300

Chart 6: Bottom Sediment (pCi/kg, dry)

Date	Nuclide	KDHE (JRR)	+/-	WCNOC (JRR)	+/-	KDHE (DC)	+/-	WCNOC (DC)	+/-
04/25/00	Be-7	817	128	1040	350				
	Cs-137	186	20	161	26				
	K-40	19683	2959	15000	1500				
	Ra-226	3089	668	1700	500				
	Th-228	3853	48172	1240	120				
04/18/00	Be-7					<346		<600	
	Co-60					687	38	549	62
	Cs-137					377	36	305	50
	K-40					15309	1238	11100	1100
	Ra-226					3762	765	2570	720
	Th-228					3326	41584	1290	130
11/14/00	Cs-137	79	13	94.7	29.8				
	K-40	13705	1010	13210	751				
11/14/00	Co-60					465	26	606	47
	Cs-134					<44		98.4	34.7
	Cs-137					299	26	351	50
	K-40					12410	931	14662	865

Chart 7: Soil (pCi/kg, dry)

Date	Nuclide	KDHE (MUDS)	+/-	WCNOC (MUDS)	+/-	KDHE (EEA)	+/-	WCNOC (EEA)	+/-
06/13/00	Be-7	386	75	<500					
	Cs-137	43	7	<50					
	K-40	12258	957	9720	970				
	Ra-226	5353	928	2880	670				
	Th-228	3995	49444	1580	160				
06/12/00	Be-7					<346		<300	
	Cs-137					143	14	168	24
	K-40					11797	918	12100	1200
	Ra-226					3128	559	2650	500
	Th-228					2482	31031	1170	120