

ATTACHMENT A
INSTRUMENT AND TLD MEASUREMENTS

Measurements were taken at 1 meter above ground using a pressurized ion chamber (PIC), and a portable survey meter utilizing a 2 x 2-inch sodium iodide crystal (SPA-3). A TLD was also placed at selected locations one meter above ground. The PIC readings below are in microroentgens per hour ($\mu\text{R/hr}$); the SPA-3 readings are in counts per minute (cpm), and the TLD readings are in units of microroentgens per hour ($\mu\text{R/hr}$) and includes the integrated dose from background radiation over the exposure period. The first SPA-3 measurement (second column) corresponds to the PIC measurement, and the SPA-3A readings corresponds to measurements taken at the TLD locations upon removal of the TLDs. This table contains raw data only. See Attachment B for a summary of data corrected for various background radiation influences.

<u>NO.</u>	<u>LOCATION</u>	<u>PIC</u> ($\mu\text{R/hr}$)	<u>SPA-3</u> (cpm)	<u>TLD NO.</u>	<u>SPA-3A</u> (cpm)	<u>TLD</u> ($\mu\text{R/hr}$)
1.	Parking lot, start	10.8	600	N/A	600	
	Parking lot, stop	11.1	N/A*	N/A	N/A	
	¹³⁷ Cs check source surface	None	48K	N/A	50K	
2.	Secretary Office	11.2	N/A	19	N/A	20.25 \pm 2.26
3.	Telephone pole by RR	10.0	900	20	900	21.17 \pm 2.26
4.	Well No. 2	9.7	900	21	700	20.69 \pm 2.01
5.	Foster Drive and Route 892	11.2	1.1K	N/A	N/A	
6.	U.S. Post Office, 26181	9.6	1.0K	Ct1 3	N/A	28.21 \pm 2.43
7.	Power pole, Foster Drive	13.2	1.7K	22	1.2K	25.32 \pm 3.08
8.	Power pole, parking lot	9.5	800	23	700	21.48 \pm 2.13
9.	Barnsite, Foster Drive	9.0	800	N/A	N/A	
10.	Tree near gas well	7.2	550	Ct1 4	500	16.94 \pm 2.07

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<u>NO.</u>	<u>LOCATION</u>	<u>PIC</u> (μ R/hr)	<u>SPA-3</u> (cpm)	<u>TLD NO.</u>	<u>SPA-3A</u> (cpm)	<u>TLD</u> (μ R/hr)
11.	Bldg. at pond	8.5	750	24	700	18.77 \pm 2.44
12.	Dirt fill south of hay field	23.5	7K	25	4K	38.96 \pm 7.68
13.	Ravine bed, boundary	44.8	12K	26	5K	48.31 \pm 8.13
14.	Fill dirt, east of #12	8.2	800	42	600	21.48 \pm 2.22
15.	Fill dirt, west of #12	8.0	800	N/A	N/A	
16.	NE of Bldg. B, stream	6.8	1K	27	700	19.68 \pm 1.85
17.	Dry Stream, east of Bldg. B	9.2	1K	28	1K	21.54 \pm 2.61
18.	Southeast boundary	8.9	900	29	800	20.74 \pm 2.34
19.	Boundary, SE of Bldg. B	8.7	1K	30	1K	19.05 \pm 2.07
20.	Boundary, south of Bldg. B	7.9	750	31	600	19.02 \pm 2.30
21.	Boundary, east of ravine	9.6	1K	32	1K	20.14 \pm 2.36
22.	Area "N" at ravine	50.3	13K	N/A		
23.	Area "M" at ravine	63.0	17K	40	14K	108.89 \pm 15.02
24.	Area "O"	203	48K	N/A	N/A	
25.	Area "P"	74.0	22K	N/A	N/A	
26.	Area "J", south of Bldg. D	63.5	18K	N/A	N/A	
27.	Pit, Bldg. 13	298	70K	N/A	N/A	
28.	Bldg. D, 30 ft. from inner ofc	12.7	N/A	N/A	N/A	

NO.	LOCATION	PIC (μ R/hr)	SPA-3 (cpm)	TLD NO.	SPA-3A (cpm)	TLD (μ R/hr)
28A.	Steel beam, 6 ft. from pit	N/A	N/A	33	37K	254.57 ± 16.41
29.	Inner Ofc. Bldg. D	9.3	1.1K	34	800	19.59 ± 2.13
30.	Clock area, Bldg. C	7.0	500	35	450	16.81 ± 2.41
31.	Oil pump, Bldg. C	354	110K	36	2K	23.95 ± 3.17
32.	Northwest door, Bldg. C	69.0	15K	37	8K	52.05 ± 8.33
33.	50 ft. W of Bldg. C	354	115K	N/A	N/A	
34.	Bldg. F, West inside	10.1	1.2K	38	700	17.56 ± 1.75
35.	Trench, Bldg. F, SW corner	19.6	2.5K	39	1.7K	22.26 ± 1.89
36.	Bldg. F, 15 ft west	31.0	7K	N/A	N/A	
37.	Pond, S.E. corner	8.5	800	43	500	20.76 ± 3.57
38.	West Perimeter	8.2	800	44	600	20.56 ± 2.96
39.	"L" Bldg. site	354	110K	N/A	N/A	
40.	Loading hopper area	111	32K	N/A	N/A	
41.	East fence area (TLD at 100K reading)	354	200K	45	52K	571.50 ± 33.06
42.	25 ft. East of Tower	267	50K	N/A	N/A	
43.	North fence, 50 ft. N of office	216	50K	N/A	N/A	
43A.	Window ledge, Office Bldg.	17.9	2.5K	46	2.2K	29.76 ± 2.80
44.	North of tower	87.0	20K	N/A	N/A	
45.	Power pole, NE of office	13.8	1.8K	47	1.5K	26.09 ± 2.04

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NO.	LOCATION	PIC (μ R/hr)	SPA-3 (cpm)	TLD NO.	SPA-3A (cpm)	TLD (μ R/hr)
46.	Tree on Hill E of Rt. 892	N/A	N/A	48	1K	22.48 \pm 3.14
47.	Tree, end of ravine at hay field	26.5	3.8K	41	3.5K	36.28 \pm 2.63
48.	20' into hay field, from ravine	11.7	N/A	N/A	N/A	
49.	Tree, 2/3 down ravine from S boundary	N/A	7.5K	49	7K	55.86 \pm 8.33
50.	Tree, 1/3 down ravine from S boundary	N/A	7.0K	50	6K	49.69 \pm 8.14
51.	Sheriff Bechtold's Office	N/A	N/A	Ctl 5	N/A	21.25 \pm 2.49

*N/A - Not Available or Not Applicable

** - The maximum digital readout capability on the PIC instrument is
354 μ R/hr.

*** - Ctl represents a "Control" TLD number.

ATTACHMENT A
PIC AND TLD LOCATIONS

