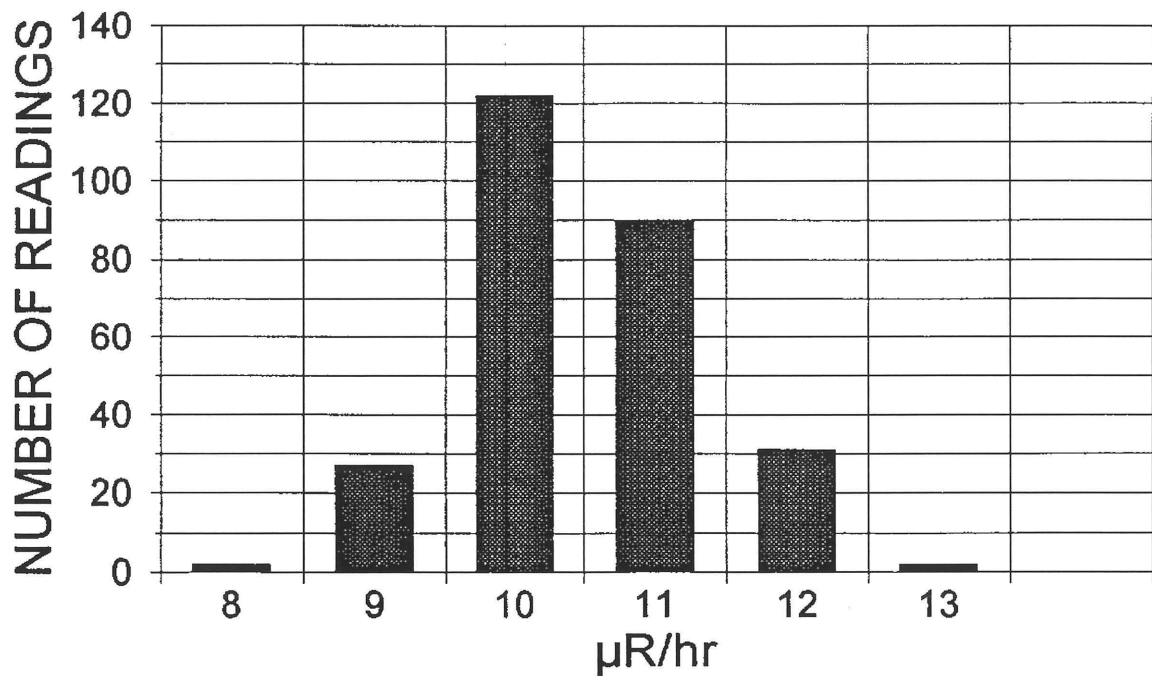


PHASE III - AREA "O" WASTE POND # 1- AFFECTED  
LUDLUM 19 MICRO-R METER READINGS  
@ 1 METER ABOVE SURFACE  
SITE BACKGROUND OF 9  $\mu$ R/hr NOT SUBTRACTED  
RESULTS IN  $\mu$ R/hr  
DECEMBER, 1998

## MICRO "R" READINGS @ ONE METER FREQUENCY DISTRIBUTION



NUMBER OF READINGS	272
AVERAGE READING	10
MINIMUM READING	8
MAXIMUM READING	13
STANDARD DEVIATION	0.9

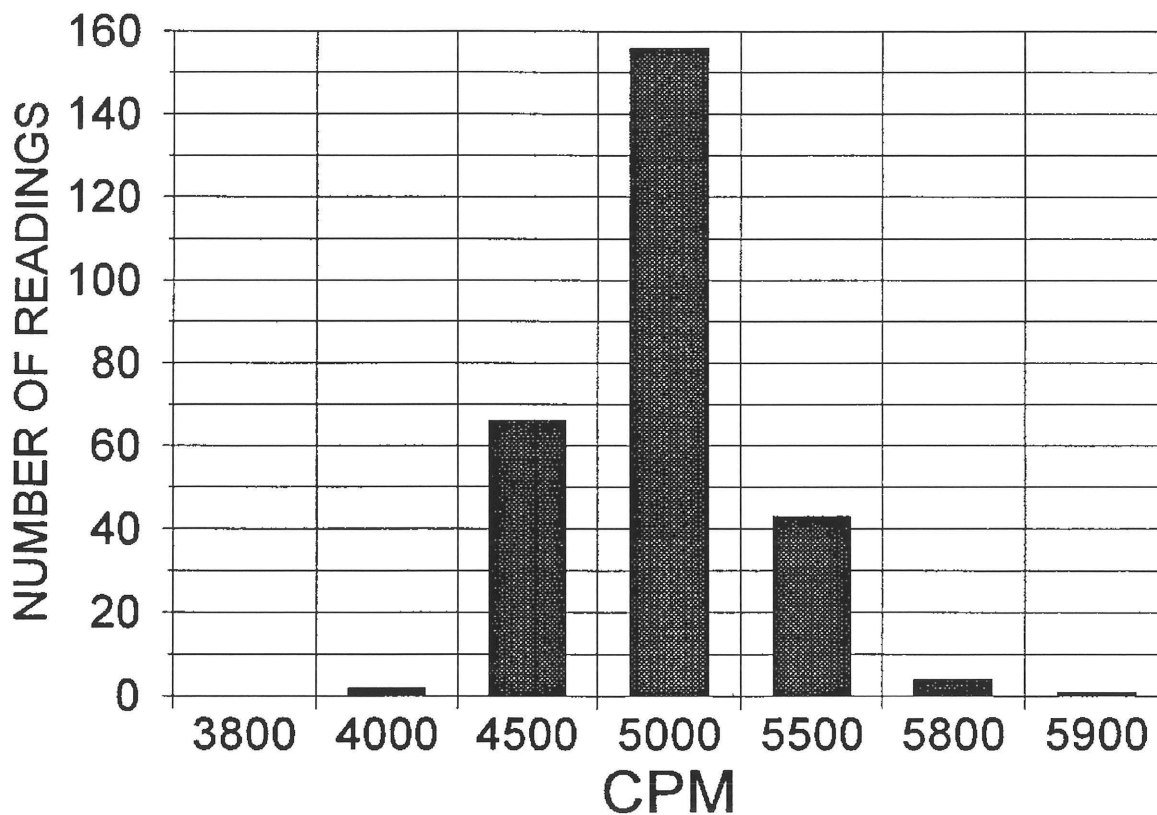
01/28

PHASE III - AREA "O" WASTE POND # 1 AFFECTED  
3" NaI DETECTOR  
GROSS GAMMA READINGS IN CPM  
LUDLUM MODEL 2220 S/N 48395 (SHIELDED)  
BACKGROUND AVERAGE: 4150 CPM

DECEMBER, 1998

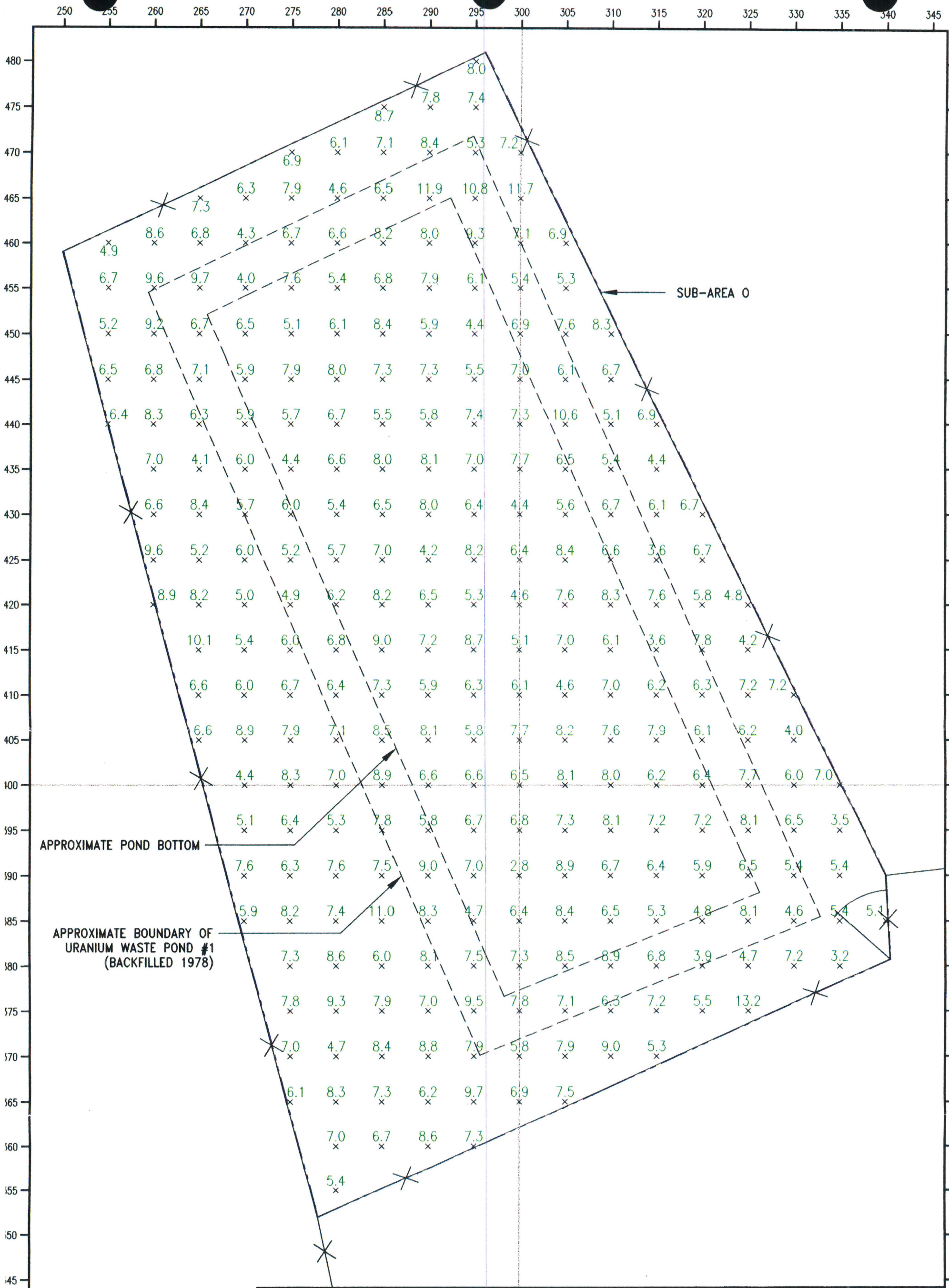
## 3" NaI DETECTOR READINGS

FREQUENCY DISTRIBUTION




NUMBER OF READINGS	272
AVERAGE READING	4723
MINIMUM READING	3820
MAXIMUM READING	5830
STANDARD DEVIATION	328



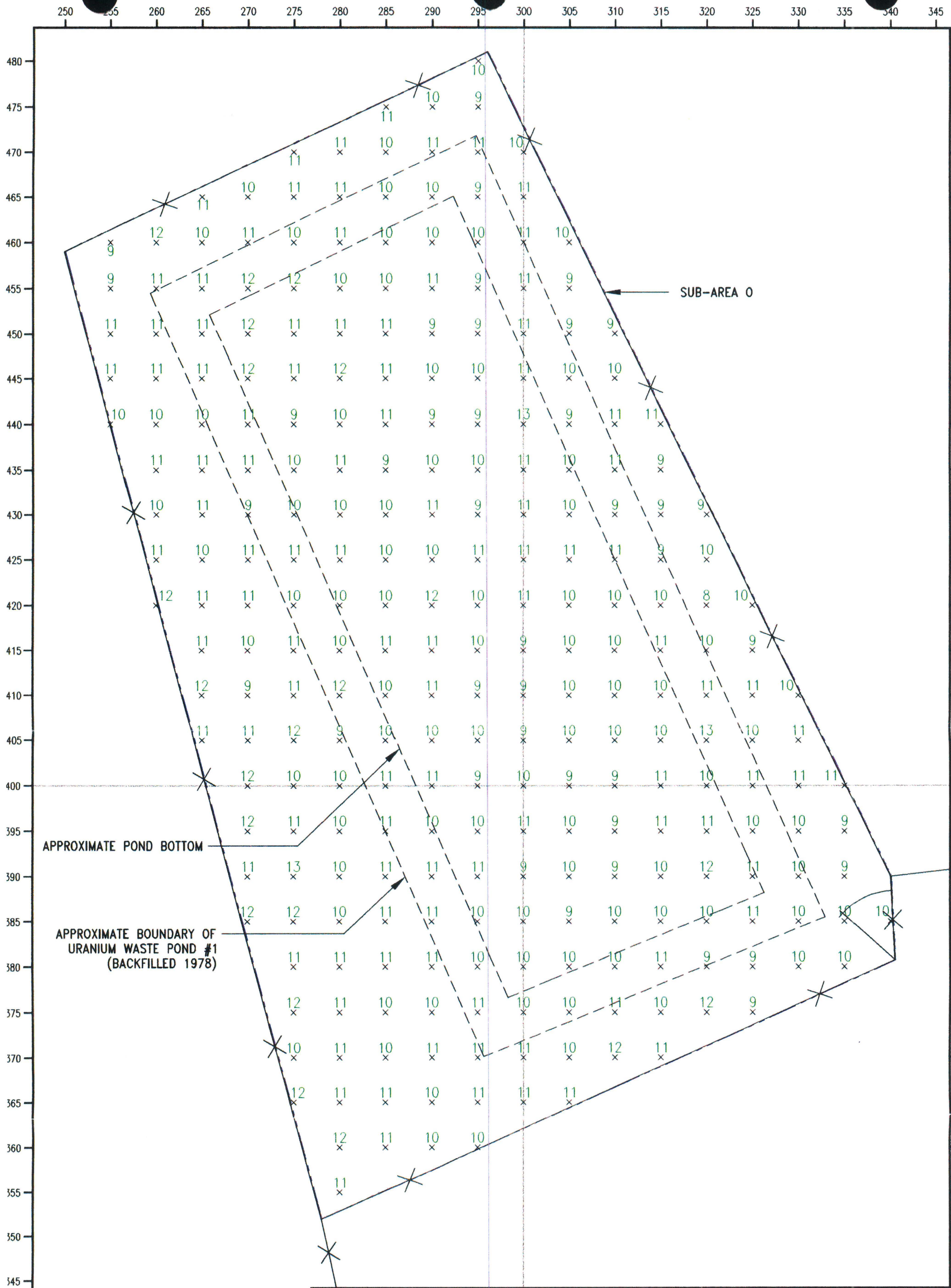



NOTES  
URANIUM (pCi/g U).  
CIMARRON GAMMA SPEC SOIL COUNTER.  
SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U,  
NOT SUBTRACTED.

LEGEND  
6 URANIUM  
1 - 30 pCi/g U  
90 URANIUM  
31 - 90 pCi/g U  
8 HIT ROCK-  
NO SAMPLE

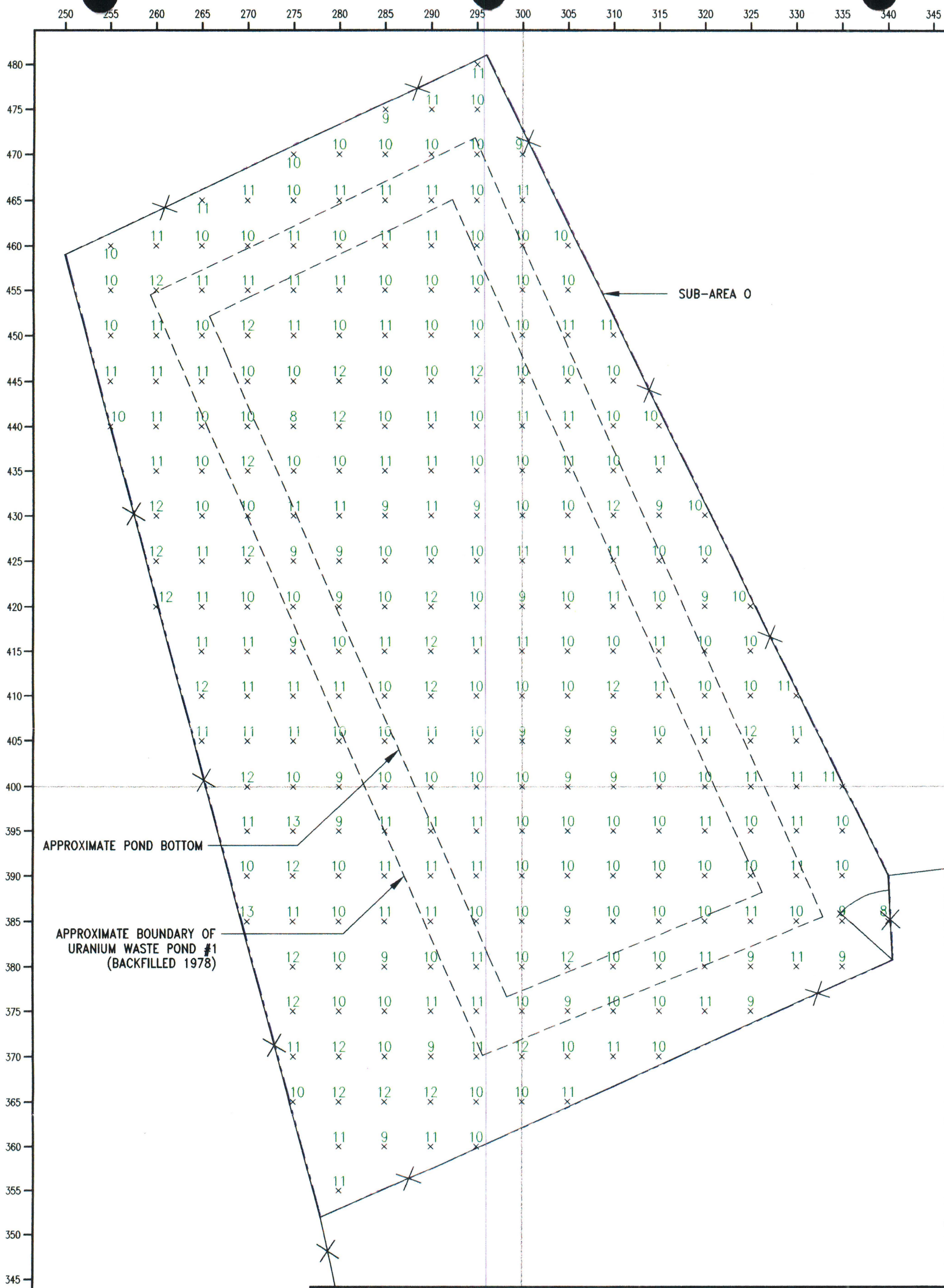
				<b>CIMARRON CORPORATION</b>			
CIMARRON FACILITY PHASE III - SUB-AREA 0 (Surface) URANIUM WASTE POND #1 FINAL STATUS SURVEY RESULTS - SOIL SOIL SAMPLE ALIQUOT: 0 - 6"							
DRWN. BY	JE	DATE	1/21/99		SCALE:	AS SHOWN	
JOB NO.	DRAWING NO.		98POP1SS-0		REV.	0	






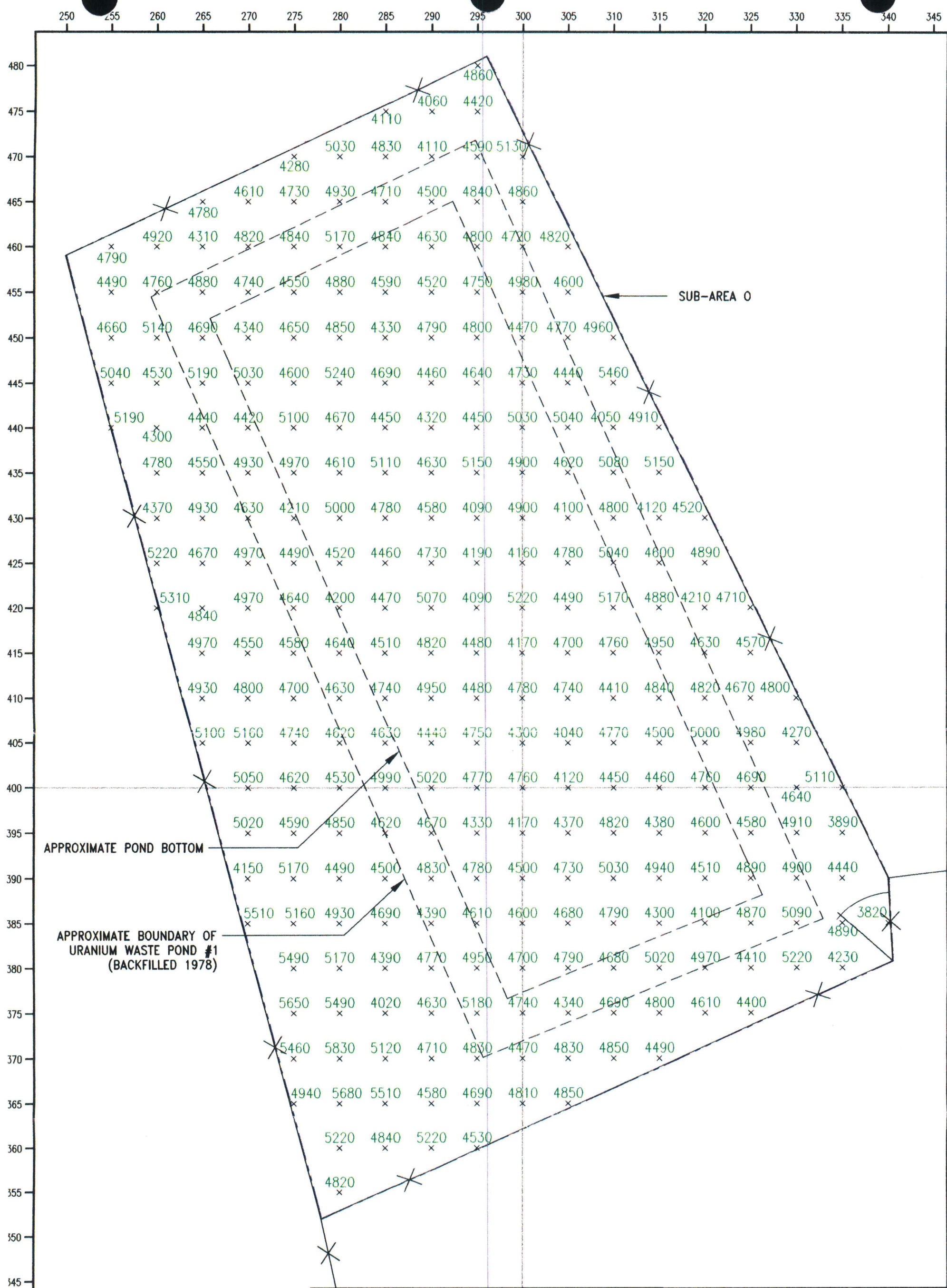
<b>NOTES</b> READINGS ARE IN MICRO-R/HR ( $\mu\text{R}/\text{Hr}$ ) INSTRUMENT: LUDLUM MICRO-R METER SERIAL NO: 111299 MODEL NO: 19 BACKGROUND: 9 $\mu\text{R}/\text{Hr}$ .				<b>LEGEND</b> 9+ $\leq 19 \mu\text{R}/\text{Hr}$ 20+ $> 19 \mu\text{R}/\text{Hr}$		 <b>CIMARRON CORPORATION</b>				
						<b>CIMARRON FACILITY PHASE III - SUB-AREA 0 (Surface) URANIUM WASTE POND #1 FINAL STATUS MICRO-R SURVEY RESULTS AT LAND SURFACE</b>				
REV.		DESCRIPTION		DRWN BY:	CK'D BY:	APP'D BY:	DATE	DRWN. BY: JE	DATE: 1/22/99	SCALE: AS SHOWN
0		DRAWING ISSUED.		JE	WR	JL	2/3/99	JOB NO.	DRAWING NO. 98POP1UR-0	REV. 0






<b>NOTES</b> READINGS ARE IN MICRO-R/HR ( $\mu$ R/Hr) INSTRUMENT: LUDLUM MICRO-R METER SERIAL NO: 111299 MODEL NO: 19 BACKGROUND: 9 $\mu$ R/Hr.				<b>LEGEND</b> 9+ $\leq$ 19 $\mu$ R/Hr 20+ $>$ 19 $\mu$ R/Hr		 <b>CIMARRON CORPORATION</b>	
<b>CIMARRON FACILITY</b> <b>PHASE III - SUB-AREA 0 (Surface)</b> <b>URANIUM WASTE POND #1</b> <b>FINAL STATUS MICRO-R SURVEY RESULTS</b> <b>AT ONE METER ABOVE SURFACE</b>						<b>DRWN. BY:</b> JE <b>DATE:</b> 1/22/99 <b>SCALE:</b> AS SHOWN	
<b>REV.</b>		<b>DESCRIPTION</b>		<b>DRWN BY:</b> CK'D BY: APP'D BY: DATE		<b>JOB NO.</b>	
0		DRAWING ISSUED.		JE WR JL 2/3/99		DRAWING NO. 98POP1UR-1	
						REV. 0	





<b>NOTES:</b> INSTRUMENT: LUDLUM 2220, S/N 48395, LEAD-SHIELDED 3" X 1/2" NoI DETECTOR. BACKGROUND: 4150 CPM				<b>LEGEND</b> 3560 + < 8300 CPM 8500 + > 8300 CPM		 <b>CIMARRON CORPORATION</b>	
<b>CIMARRON FACILITY PHASE III - SUB-AREA 0 (Surface) URANIUM WASTE POND #1 FINAL STATUS GAMMA SURVEY RESULTS READINGS IN CPM (3" DET.) AT SURFACE</b>						DRWN. BY: JE DATE: 1/21/99 SCALE: AS SHOWN	
REV. 0		DESCRIPTION: DRAWING ISSUED.		DRWN. BY: JE	CK'D BY: WR	APP'D BY: JL	DATE: 2/3/99

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER M/N 19		138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION				3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g	pCi/g	
								0" - 6' Total-U	Th (Nat)	
1	490	E	-	430	N	3770	11	11	6.1	1.1
2	495	E	-	430	N	4170	12	12	5.9	1.2
3	495	E	-	435	N	4450	13	13	6.5	1.2
4	495	E	-	440	N	4710	12	12	4.1	1.3
5	495	E	-	445	N	4300	12	12	6.2	1.3
6	495	E	-	450	N	4230	11	11	6.8	1.4
7	495	E	-	455	N	3770	13	12	6.7	1.2
8	495	E	-	460	N	4340	12	11	6.5	1.3
9	500	E	-	430	N	3970	12	12	7.0	1.2
10	500	E	-	435	N	4580	10	12	5.2	1.3
11	500	E	-	440	N	4170	11	10	4.8	1.1
12	500	E	-	445	N	3770	10	10	4.3	0.8
13	500	E	-	450	N	3550	10	10	5.4	1.3
14	500	E	-	455	N	4330	10	10	5.6	1.2
15	500	E	-	460	N	4120	11	10	6.5	1.2
16	500	E	-	465	N	4310	10	11	3.5	1.5
17	500	E	-	470	N	3740	10	10	6.4	1.3
18	500	E	-	475	N	3940	10	11	6.9	1.2
19	500	E	-	480	N	3890	12	12	6.5	1.2
20	500	E	-	485	N	3720	11	11	6.1	1.3
21	500	E	-	490	N	4210	11	11	6.3	1.1
22	500	E	-	495	N	3990	10	11	4.7	1.1
23	500	E	-	500	N	4090	10	11	5.0	1.2
24	500	E	-	505	N	4100	10	10	3.5	1.3
25	500	E	-	510	N	3930	10	10	4.8	1.3
26	500	E	-	515	N	3910	12	11	6.2	1.0
27	500	E	-	520	N	3450	12	11	6.1	1.1
28	500	E	-	525	N	3670	10	10	5.0	1.0
29	500	E	-	530	N	3920	10	10	5.5	1.0
30	500	E	-	535	N	3860	11	11	5.4	1.1
31	500	E	-	540	N	4200	11	10	7.2	1.1
32	500	E	-	545	N	4180	11	11	4.6	1.2
33	500	E	-	550	N	4160	11	11	6.6	1.1
34	500	E	-	555	N	3640	10	11	5.4	1.0
35	500	E	-	560	N	2970	10	9	4.1	0.8



**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:	S/N	RESULTS IN BACKGROUND		MDA
LUDLUM MICRO R METER M/N 19	138420	$\mu$ R/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR	48395	CPM	3000	N/A
CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR		pCi/g	Total U 4.0	5
		pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*DATE: *1-14-99***BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
36	500	E	-	565	N	3260	9	10	4.8	0.8
37	500	E	-	570	N	2830	9	10	4.6	0.9
38	500	E	-	575	N	3110	10	10	4.7	1.3
39	500	E	-	580	N	3520	10	10	4.8	1.0
40	505	E	-	430	N	3790	11	11	6.4	1.3
41	505	E	-	435	N	3790	11	10	4.1	1.3
42	505	E	-	440	N	2920	9	9	2.9	0.7
43	505	E	-	445	N	3440	10	10	4.3	0.8
44	505	E	-	450	N	4190	12	11	6.8	1.0
45	505	E	-	455	N	3990	12	10	5.2	1.0
46	505	E	-	460	N	4050	11	12	5.5	0.8
47	505	E	-	465	N	3910	11	11	4.8	0.9
48	505	E	-	470	N	4130	12	12	4.9	1.2
49	505	E	-	475	N	3880	12	12	6.1	1.2
50	505	E	-	480	N	4080	12	12	6.0	1.1
51	505	E	-	485	N	3610	12	11	5.4	1.1
52	505	E	-	490	N	4070	11	11	3.5	1.4
53	505	E	-	495	N	3780	10	10	5.7	1.4
54	505	E	-	500	N	4350	12	12	5.3	1.4
55	505	E	-	505	N	4490	12	11	6.9	1.2
56	505	E	-	510	N	3780	11	11	6.4	1.1
57	505	E	-	515	N	4010	12	12	6.1	1.2
58	505	E	-	520	N	4100	11	11	3.2	1.7
59	505	E	-	525	N	4040	12	12	6.9	1.2
60	505	E	-	530	N	3850	12	11	7.1	1.2
61	505	E	-	535	N	3840	10	9	5.0	1.4
62	505	E	-	540	N	3860	10	10	6.9	1.1
63	505	E	-	545	N	3660	10	11	5.9	1.1
64	505	E	-	550	N	3820	12	11	2.8	1.2
65	505	E	-	555	N	4100	11	11	6.8	1.2
66	505	E	-	560	N	3950	12	11	3.9	1.2
67	505	E	-	565	N	3200	10	10	3.9	1.0
68	505	E	-	570	N	2850	9	9	4.8	0.6
69	505	E	-	575	N	2940	10	10	6.2	0.6
70	505	E	-	580	N	3060	11	10	6.4	0.8
71	510	E	-	430	N	3630	10	10	4.8	1.1
72	510	E	-	435	N	4150	12	12	3.9	1.3
73	510	E	-	440	N	5370	13	12	5.8	1.6
74	510	E	-	445	N	4670	10	12	6.1	1.1
75	510	E	-	450	N	4120	12	11	6.8	1.1

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER	M/N 19	138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
76	510	E	-	455	N	3920	11	11	6.5	0.9
77	510	E	-	460	N	4260	12	12	6.8	1.1
78	510	E	-	465	N	3880	10	11	5.5	0.9
79	510	E	-	470	N	3610	11	11	5.2	1.0
80	510	E	-	475	N	3980	12	12	6.1	1.2
81	510	E	-	480	N	3920	11	12	4.9	1.1
82	510	E	-	485	N	4330	12	12	5.8	1.2
83	510	E	-	490	N	3670	12	11	5.9	1.0
84	510	E	-	495	N	3980	12	12	7.1	0.9
85	510	E	-	500	N	3860	12	12	5.9	1.0
86	510	E	-	505	N	4230	11	10	3.4	1.2
87	510	E	-	510	N	3680	10	10	6.2	1.2
88	510	E	-	515	N	3760	11	11	5.5	0.8
89	510	E	-	520	N	3090	10	10	5.3	0.9
90	510	E	-	525	N	2940	11	11	4.9	0.9
91	510	E	-	530	N	3250	10	10	4.0	0.6
92	510	E	-	535	N	3440	10	10	1.8	1.0
93	510	E	-	540	N	3350	10	9	4.2	1.0
94	510	E	-	545	N	3630	11	10	7.4	0.7
95	510	E	-	550	N	3450	10	10	3.9	1.0
96	510	E	-	555	N	3930	11	11	4.8	1.0
97	510	E	-	560	N	2890	10	9	4.7	0.9
98	510	E	-	565	N	2880	10	10	6.3	1.1
99	510	E	-	570	N	3740	10	11	3.7	1.1
100	510	E	-	575	N	3520	11	11	4.2	1.2
101	510	E	-	580	N	3080	9	10	3.4	1.1
102	515	E	-	430	N	3330	12	11	9.3	1.0
103	515	E	-	435	N	4390	13	13	4.1	1.5
104	515	E	-	440	N	4470	13	13	3.7	1.7
105	515	E	-	445	N	4530	12	13	6.2	1.1
106	515	E	-	450	N	3820	11	11	6.8	1.0
107	515	E	-	455	N	4670	13	13	3.7	1.3
108	515	E	-	460	N	4190	11	11	5.6	1.1
109	515	E	-	465	N	4110	11	10	6.2	1.3
110	515	E	-	470	N	4060	11	11	3.4	1.6
111	515	E	-	475	N	4080	12	12	6.0	1.2
112	515	E	-	480	N	3900	11	11	5.8	1.4
113	515	E	-	485	N	4420	10	11	2.8	1.4
114	515	E	-	490	N	3940	12	12	5.6	1.3
115	515	E	-	495	N	3920	10	11	4.7	1.1

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:	S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER M/N 19	138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR	48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR		pCi/g	Total U 4.0	5
		pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
116	515	E	-	500	N	4330	12	11	5.3	1.1
117	515	E	-	505	N	3560	11	12	4.1	1.1
118	515	E	-	510	N	4420	12	11	5.6	1.1
119	515	E	-	515	N	3990	11	11	4.5	1.2
120	515	E	-	520	N	3910	12	11	6.1	1.2
121	515	E	-	525	N	4250	11	11	6.5	1.0
122	515	E	-	530	N	3870	12	12	5.1	1.5
123	515	E	-	535	N	4200	12	12	7.7	1.2
124	515	E	-	540	N	3970	12	12	4.3	1.2
125	515	E	-	545	N	4270	11	11	5.5	1.3
126	515	E	-	550	N	3810	10	11	4.8	1.2
127	515	E	-	555	N	4140	12	12	3.6	1.3
128	515	E	-	560	N	4590	12	13	3.8	1.2
129	515	E	-	565	N	4080	11	12	5.1	1.2
130	515	E	-	570	N	4540	12	12	5.3	1.2
131	515	E	-	575	N	3850	10	11	3.3	1.1
132	515	E	-	580	N	3480	11	10	4.0	1.0
133	520	E	-	430	N	3680	12	10	5.4	1.3
134	520	E	-	435	N	3920	11	11	5.2	1.4
135	520	E	-	440	N	5020	12	12	10.7	1.4
136	520	E	-	445	N	3920	12	12	8.3	1.3
137	520	E	-	450	N	4380	13	12	6.9	1.4
138	520	E	-	455	N	4190	12	12	7.1	1.2
139	520	E	-	460	N	4260	11	12	5.5	1.4
140	520	E	-	465	N	4540	12	12	6.1	1.3
141	520	E	-	470	N	4650	13	12	4.9	1.2
142	520	E	-	475	N	4120	13	13	7.2	1.1
143	520	E	-	480	N	4150	12	12	2.6	1.2
144	520	E	-	485	N	4540	11	12	4.5	1.3
145	520	E	-	490	N	4500	12	11	6.1	1.4
146	520	E	-	495	N	4160	11	12	5.3	1.2
147	520	E	-	500	N	4180	12	12	4.4	1.3
148	520	E	-	505	N	4200	10	11	7.3	1.0
149	520	E	-	510	N	4720	13	13	6.7	1.0
150	520	E	-	515	N	4210	11	11	6.6	1.1
151	520	E	-	520	N	4070	12	11	4.1	1.2
152	520	E	-	525	N	3960	11	11	3.7	1.2
153	520	E	-	530	N	4190	11	11	5.5	1.3
154	520	E	-	535	N	4410	12	11	4.6	1.0
155	520	E	-	540	N	4130	12	12	5.0	1.2



**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER	M/N 19	138420	μR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Ayers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
156	520	E	-	545	N	4350	12	11	7.7	1.2
157	520	E	-	550	N	4490	12	10	7.0	1.3
158	520	E	-	555	N	3960	11	11	4.4	1.3
159	520	E	-	560	N	3910	12	11	6.1	1.2
160	520	E	-	565	N	4040	13	13	4.1	1.3
161	520	E	-	570	N	4630	13	11	5.2	1.3
162	520	E	-	575	N	3690	12	11	4.1	1.0
163	520	E	-	580	N	3090	10	10	6.6	1.2
164	525	E	-	430	N	3530	12	12	5.9	1.1
165	525	E	-	435	N	3880	12	11	7.9	1.1
166	525	E	-	440	N	4610	12	12	5.0	1.3
167	525	E	-	445	N	4090	12	12	6.0	1.4
168	525	E	-	450	N	4140	12	11	6.9	1.0
169	525	E	-	455	N	4500	10	11	3.4	1.3
170	525	E	-	460	N	4040	12	12	6.2	1.1
171	525	E	-	465	N	3980	11	11	4.2	1.1
172	525	E	-	470	N	4610	11	12	5.2	1.1
173	525	E	-	475	N	4700	12	11	6.7	1.2
174	525	E	-	480	N	4270	12	12	5.9	1.3
175	525	E	-	485	N	3980	12	13	6.7	1.3
176	525	E	-	490	N	4100	12	12	8.4	1.0
177	525	E	-	495	N	3390	10	10	6.1	1.1
178	525	E	-	500	N	4090	12	12	6.0	1.2
179	525	E	-	505	N	3990	11	12	7.2	1.2
180	525	E	-	510	N	4280	11	12	4.4	1.3
181	525	E	-	515	N	4120	11	12	5.1	1.1
182	525	E	-	520	N	4430	12	12	6.2	1.1
183	525	E	-	525	N	4350	11	11	7.6	0.9
184	525	E	-	530	N	3910	12	11	5.0	1.1
185	525	E	-	535	N	4060	12	11	6.0	1.1
186	525	E	-	540	N	4160	11	11	4.6	1.3
187	525	E	-	545	N	4350	13	12	2.2	1.3
188	525	E	-	550	N	4110	13	13	6.8	1.1
189	525	E	-	555	N	4220	12	12	5.7	1.3
190	525	E	-	560	N	4010	13	11	6.5	1.2
191	525	E	-	565	N	4410	12	11	5.9	1.2
192	525	E	-	570	N	4520	12	12	5.3	1.3
193	525	E	-	575	N	4140	13	12	4.6	1.1
194	525	E	-	580	N	2940	11	9	3.6	1.2
195	530	E	-	430	N	4110	12	11	5.2	1.5

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER M/N 19		138420	μR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W. A. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
196	530	E	-	435	N	4210	10	10	5.3	1.5
197	530	E	-	440	N	3740	10	10	4.4	1.1
198	530	E	-	445	N	4200	11	11	6.4	1.3
199	530	E	-	450	N	4030	13	12	5.8	1.4
200	530	E	-	455	N	4080	12	12	5.4	1.3
201	530	E	-	460	N	4080	12	12	5.0	1.3
202	530	E	-	465	N	4110	12	13	3.6	1.4
203	530	E	-	470	N	4110	13	12	3.7	1.1
204	530	E	-	475	N	4650	13	13	4.7	1.3
205	530	E	-	480	N	4140	12	11	5.6	1.3
206	530	E	-	485	N	4250	11	11	7.1	1.2
207	530	E	-	490	N	4650	12	12	5.1	1.4
208	530	E	-	495	N	5010	13	13	6.9	1.1
209	530	E	-	500	N	4440	11	10	5.6	1.3
210	530	E	-	505	N	4130	11	11	5.6	1.1
211	530	E	-	510	N	4460	12	12	6.4	1.2
212	530	E	-	515	N	4230	13	12	6.0	1.1
213	530	E	-	520	N	4540	11	10	4.6	1.4
214	530	E	-	525	N	4040	11	11	5.7	1.1
215	530	E	-	530	N	4040	11	11	5.3	1.4
216	530	E	-	535	N	3920	13	12	5.9	1.4
217	530	E	-	540	N	4420	10	10	5.1	1.3
218	530	E	-	545	N	4440	12	11	5.8	1.4
219	530	E	-	550	N	4220	13	11	5.0	1.1
220	530	E	-	555	N	4130	11	11	5.4	1.1
221	530	E	-	560	N	4150	12	12	6.2	1.3
222	530	E	-	565	N	4130	11	11	5.3	1.5
223	530	E	-	570	N	4390	10	10	5.1	1.2
224	530	E	-	575	N	3720	11	11	6.3	1.2
225	530	E	-	580	N	3300	10	10	4.7	1.0
226	535	E	-	430	N	3530	10	10	3.8	1.1
227	535	E	-	435	N	3750	12	10	3.7	1.2
228	535	E	-	440	N	3610	12	11	6.0	1.3
229	535	E	-	445	N	4000	12	11	8.0	1.2
230	535	E	-	450	N	4700	12	12	6.3	1.3
231	535	E	-	455	N	4220	13	13	4.7	1.5
232	535	E	-	460	N	4130	12	12	7.9	1.0
233	535	E	-	465	N	4190	12	12	5.4	1.2
234	535	E	-	470	N	4770	13	12	5.1	1.2
235	535	E	-	475	N	4590	12	13	4.9	1.1

Thursday, January 14, 1999

CIMARRON CORPORATION CIMARRON FACILITY SUB AREA "O" SURFACE WASTE POND #2										
INSTRUMENTS:										
							S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER M/N 19							138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR							48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR								pCi/g	Total U 4.0	5
								pCi/g	Th (Nat) 1.5	1
REVIEWED BY: <i>W.A. Rogers</i> DATE: <i>1-14-99</i>										
BACKGROUND NOT SUBTRACTED										
LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
236	535	E	-	480	N	4690	12	11	3.3	1.3
237	535	E	-	485	N	4220	13	12	6.9	1.1
238	535	E	-	490	N	4500	13	13	3.9	1.3
239	535	E	-	495	N	4570	12	11	4.4	1.4
240	535	E	-	500	N	4400	12	12	5.7	1.0
241	535	E	-	505	N	4390	12	11	5.0	1.3
242	535	E	-	510	N	4330	12	12	4.5	1.2
243	535	E	-	515	N	3990	11	11	5.2	1.3
244	535	E	-	520	N	3930	11	11	6.7	1.1
245	535	E	-	525	N	4120	11	11	6.5	1.3
246	535	E	-	530	N	4120	11	12	4.9	1.3
247	535	E	-	535	N	3660	12	12	4.4	1.3
248	535	E	-	540	N	4380	12	12	8.2	1.1
249	535	E	-	545	N	4320	12	13	3.9	1.4
250	535	E	-	550	N	4170	12	13	3.8	1.2
251	535	E	-	555	N	4340	13	12	6.1	1.2
252	535	E	-	560	N	4270	12	12	4.9	1.4
253	535	E	-	565	N	4580	12	11	3.5	1.0
254	535	E	-	570	N	4250	12	11	3.8	1.2
255	535	E	-	575	N	3590	11	11	4.0	1.1
256	535	E	-	580	N	3820	10	10	5.5	1.2
257	540	E	-	430	N	4030	10	9	5.1	1.2
258	540	E	-	435	N	3300	10	10	6.7	1.1
259	540	E	-	440	N	3410	11	11	3.8	1.3
260	540	E	-	445	N	4470	13	12	5.6	1.3
261	540	E	-	450	N	4380	12	12	5.1	1.2
262	540	E	-	455	N	4330	12	12	7.6	1.3
263	540	E	-	460	N	4050	11	11	7.3	1.3
264	540	E	-	465	N	4040	12	12	6.5	1.1
265	540	E	-	470	N	4180	12	11	5.4	0.9
266	540	E	-	475	N	4420	12	12	5.2	1.2
267	540	E	-	480	N	4440	13	12	6.1	1.3
268	540	E	-	485	N	4390	12	12	4.8	1.2
269	540	E	-	490	N	4080	11	11	5.9	1.1
270	540	E	-	495	N	4190	13	12	4.9	1.3
271	540	E	-	500	N	3950	12	12	5.2	1.4
272	540	E	-	505	N	4310	12	12	6.7	1.3
273	540	E	-	510	N	4220	11	12	5.4	1.0
274	540	E	-	515	N	4460	13	12	6.6	1.3
275	540	E	-	520	N	4740	12	11	4.6	1.5

Thursday, January 14, 1999

CIMARRON CORPORATION										
CIMARRON FACILITY										
SUB AREA "O" SURFACE WASTE POND #2										
INSTRUMENTS:						S/N		RESULTS IN BACKGROUND		MDA
LUDLUM MICRO R METER M/N 19						138420		µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR						48395		CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR								pCi/g	Total U 4.0	5
								pCi/g	Th (Nat) 1.5	1
REVIEWED BY: <i>W. A. Rogers</i> DATE: <i>1-14-99</i>										
BACKGROUND NOT SUBTRACTED										
LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
276	540	E	-	525	N	4200	11	12	6.3	1.3
277	540	E	-	530	N	4570	12	11	4.3	1.1
278	540	E	-	535	N	4230	11	12	6.1	1.3
279	540	E	-	540	N	4330	13	13	4.4	1.4
280	540	E	-	545	N	3980	13	12	7.0	1.1
281	540	E	-	550	N	4470	13	12	6.5	1.2
282	540	E	-	555	N	4250	12	11	5.0	1.4
283	540	E	-	560	N	4210	12	11	4.6	1.2
284	540	E	-	565	N	4410	12	13	5.3	1.4
285	540	E	-	570	N	4610	12	12	6.6	1.2
286	540	E	-	575	N	3640	11	11	5.8	1.0
287	540	E	-	580	N	3710	10	11	5.2	1.1
288	545	E	-	430	N	3610	10	10	3.4	1.1
289	545	E	-	435	N	3560	10	11	3.8	1.2
290	545	E	-	440	N	3860	11	11	5.2	1.3
291	545	E	-	445	N	4440	11	11	5.0	1.3
292	545	E	-	450	N	4760	12	12	6.5	1.2
293	545	E	-	455	N	3740	12	11	6.7	0.8
294	545	E	-	460	N	3950	11	11	3.4	1.1
295	545	E	-	465	N	4170	12	12	6.8	1.1
296	545	E	-	470	N	4260	13	13	6.1	1.4
297	545	E	-	475	N	4630	12	11	5.9	1.2
298	545	E	-	480	N	4590	12	13	6.9	1.1
299	545	E	-	485	N	3930	12	12	5.6	1.3
300	545	E	-	490	N	4340	12	12	4.6	1.3
301	545	E	-	495	N	4390	12	12	7.5	1.1
302	545	E	-	500	N	4070	12	11	7.9	1.2
303	545	E	-	505	N	4190	12	12	5.7	1.2
304	545	E	-	510	N	4160	11	12	5.6	1.5
305	545	E	-	515	N	4310	12	12	5.5	1.5
306	545	E	-	520	N	4700	13	13	5.5	1.5
307	545	E	-	525	N	4320	11	11	7.3	1.4
308	545	E	-	530	N	4290	12	12	5.6	1.4
309	545	E	-	535	N	4120	12	12	5.9	1.2
310	545	E	-	540	N	4240	13	12	5.7	1.3
311	545	E	-	545	N	4420	12	12	5.5	1.4
312	545	E	-	550	N	4550	12	11	7.6	1.2
313	545	E	-	555	N	4460	12	12	6.0	1.5
314	545	E	-	560	N	4690	13	12	7.3	1.2
315	545	E	-	565	N	4200	12	11	4.5	1.3

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:	S/N	RESULTS IN BACKGROUND		MDA
LUDLUM MICRO R METER M/N 19	138420	$\mu$ R/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR	48395	CPM	3000	N/A
CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR		pCi/g	Total U 4.0	5
		pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
316	545	E	-	570	N	4210	12	12	5.0	1.2
317	545	E	-	575	N	3820	11	10	5.3	1.3
318	545	E	-	580	N	3760	11	11	7.6	1.1
319	550	E	-	430	N	3660	10	10	5.6	1.2
320	550	E	-	435	N	3820	11	10	4.7	1.3
321	550	E	-	440	N	3910	12	11	4.5	1.3
322	550	E	-	445	N	4410	12	12	4.2	1.1
323	550	E	-	450	N	4380	12	11	6.3	1.3
324	550	E	-	455	N	4150	11	11	3.1	1.1
325	550	E	-	460	N	4230	12	11	6.3	1.2
326	550	E	-	465	N	3880	11	10	6.1	1.2
327	550	E	-	470	N	3890	11	11	3.0	1.2
328	550	E	-	475	N	4070	13	12	4.9	1.4
329	550	E	-	480	N	4000	12	12	4.6	1.2
330	550	E	-	485	N	3620	12	12	6.7	0.9
331	550	E	-	490	N	3750	12	11	3.7	1.1
332	550	E	-	495	N	4170	12	12	7.2	1.1
333	550	E	-	500	N	3690	11	12	5.6	1.2
334	550	E	-	505	N	3980	12	10	6.3	1.2
335	550	E	-	510	N	4150	11	11	4.1	1.1
336	550	E	-	515	N	4030	12	11	5.2	1.2
337	550	E	-	520	N	4090	11	12	5.8	1.1
338	550	E	-	525	N	4100	11	11	7.1	1.1
339	550	E	-	530	N	3780	10	11	5.1	1.0
340	550	E	-	535	N	4170	10	11	6.2	1.0
341	550	E	-	540	N	4020	11	12	4.1	0.9
342	550	E	-	545	N	4230	11	11	6.3	1.2
343	550	E	-	550	N	4350	12	11	7.0	1.1
344	550	E	-	555	N	3860	12	12	3.5	0.9
345	550	E	-	560	N	4180	11	11	5.1	1.1
346	550	E	-	565	N	4390	12	12	3.7	1.3
347	550	E	-	570	N	4470	11	12	5.6	1.3
348	550	E	-	575	N	3570	12	11	5.4	0.8
349	550	E	-	580	N	3640	11	11	7.0	1.1
350	555	E	-	430	N	3510	12	10	5.0	1.2
351	555	E	-	435	N	3890	10	10	5.4	1.3
352	555	E	-	440	N	4060	10	12	2.8	1.1
353	555	E	-	445	N	4220	12	11	3.9	1.1
354	555	E	-	450	N	4240	12	12	5.1	1.3
355	555	E	-	455	N	4070	11	11	7.7	1.1



Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER	M/N 19	138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*

DATE: 1-14-98

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g	
									0" - 6'	
									Total-U	Th (Nat)
356	555	E	-	460	N	4450	11	11	7.4	1.2
357	555	E	-	465	N	3970	12	11	4.3	1.3
358	555	E	-	470	N	4310	12	12	7.2	0.9
359	555	E	-	475	N	4140	11	12	7.0	1.1
360	555	E	-	480	N	3940	11	11	6.2	1.0
361	555	E	-	485	N	4310	12	11	6.1	1.0
362	555	E	-	490	N	3970	10	10	5.7	1.0
363	555	E	-	495	N	3940	10	11	5.2	1.0
364	555	E	-	500	N	3830	10	11	4.1	1.3
365	555	E	-	505	N	3910	11	10	5.7	1.0
366	555	E	-	510	N	3780	11	11	5.4	1.3
367	555	E	-	515	N	3740	11	11	4.9	1.2
368	555	E	-	520	N	3590	11	10	5.4	1.1
369	555	E	-	525	N	3620	12	11	6.0	1.0
370	555	E	-	530	N	3260	10	10	7.5	1.1
371	555	E	-	535	N	3790	11	10	6.0	0.9
372	555	E	-	540	N	3700	11	12	7.1	1.3
373	555	E	-	545	N	4110	11	10	3.4	1.2
374	555	E	-	550	N	3390	11	11	4.5	1.0
375	555	E	-	555	N	3830	11	10	4.2	1.3
376	555	E	-	560	N	3740	11	11	4.7	1.3
377	555	E	-	565	N	4440	11	10	5.7	1.4
378	555	E	-	570	N	4180	12	11	7.7	0.9
379	555	E	-	575	N	3490	10	9	5.1	1.1
380	555	E	-	580	N	4370	12	11	6.8	1.4
381	560	E	-	430	N	2860	10	9	3.2	1.3
382	560	E	-	435	N	3530	11	10	4.3	1.1
383	560	E	-	440	N	4020	11	11	2.8	1.3
384	560	E	-	445	N	3940	12	11	4.9	1.4
385	560	E	-	450	N	4700	12	12	5.8	1.3
386	560	E	-	455	N	4130	12	11	4.8	1.2
387	560	E	-	460	N	4070	12	12	5.9	1.1
388	560	E	-	465	N	4030	10	11	5.9	1.1
389	560	E	-	470	N	4120	12	11	4.4	1.3
390	560	E	-	475	N	4020	12	12	4.1	1.4
391	560	E	-	480	N	3880	10	11	6.1	1.2
392	560	E	-	485	N	4160	12	11	4.1	1.2
393	560	E	-	490	N	4080	12	11	5.0	1.1
394	560	E	-	495	N	3790	11	11	4.2	1.1
395	560	E	-	500	N	4550	12	12	6.7	1.1

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER	M/N 19	138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*

DATE: *1-14-99*

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
396	560	E	-	505	N	4180	11	11	7.5	1.0
397	560	E	-	510	N	4070	13	13	4.5	1.4
398	560	E	-	515	N	4200	11	11	6.5	1.2
399	560	E	-	520	N	3950	12	10	5.2	1.1
400	560	E	-	525	N	4030	12	11	5.3	1.1
401	560	E	-	530	N	3710	11	11	4.7	1.2
402	560	E	-	535	N	3930	11	11	5.3	0.9
403	560	E	-	540	N	3910	10	10	4.8	1.0
404	560	E	-	545	N	3890	12	11	5.1	1.0
405	560	E	-	550	N	4100	11	11	5.4	1.2
406	560	E	-	555	N	4130	12	11	4.4	1.1
407	560	E	-	560	N	4520	12	10	6.9	1.2
408	560	E	-	565	N	4290	12	12	6.4	1.3
409	560	E	-	570	N	3570	10	10	4.1	1.0
410	560	E	-	575	N	3690	11	10	5.9	1.1
411	560	E	-	580	N	3980	12	12	6.1	1.3
412	565	E	-	430	N	3190	10	10	5.3	1.0
413	565	E	-	435	N	3270	10	10	5.0	1.2
414	565	E	-	440	N	3660	12	10	3.7	1.2
415	565	E	-	445	N	4210	12	11	4.5	1.3
416	565	E	-	450	N	3910	11	11	5.2	1.3
417	565	E	-	455	N	3930	12	12	6.0	1.3
418	565	E	-	460	N	3960	12	12	7.7	1.1
419	565	E	-	465	N	4020	10	11	7.5	1.1
420	565	E	-	470	N	4070	12	11	5.4	1.0
421	565	E	-	475	N	4540	13	11	5.9	1.2
422	565	E	-	480	N	4300	12	11	4.5	1.1
423	565	E	-	485	N	4040	11	11	5.0	1.0
424	565	E	-	490	N	3860	12	12	5.2	1.0
425	565	E	-	495	N	4370	11	11	6.4	1.1
426	565	E	-	500	N	3980	11	11	8.0	1.0
427	565	E	-	505	N	3970	10	11	7.1	1.1
428	565	E	-	510	N	4140	13	11	4.5	1.0
429	565	E	-	515	N	3510	11	11	5.1	1.4
430	565	E	-	520	N	4370	12	11	6.0	1.1
431	565	E	-	525	N	3750	11	11	6.8	1.2
432	565	E	-	530	N	3560	11	12	4.7	0.9
433	565	E	-	535	N	3680	12	12	4.9	1.1
434	565	E	-	540	N	3890	12	11	5.3	1.2
435	565	E	-	545	N	4370	13	12	5.6	1.0

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER	M/N 19	138420	μR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Royce*

DATE: *1-14-99*

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6"	
									Total-U	Th (Nat)
436	565	E	-	550	N	4050	11	10	4.8	1.1
437	565	E	-	555	N	4080	12	12	6.9	1.0
438	565	E	-	560	N	3520	10	10	3.4	0.9
439	565	E	-	565	N	3990	10	11	4.5	1.0
440	565	E	-	570	N	3610	11	11	4.2	1.2
441	565	E	-	575	N	3550	12	12	3.6	1.3
442	565	E	-	580	N	4030	11	11	7.3	1.3
443	570	E	-	430	N	3840	12	11	5.5	1.1
444	570	E	-	435	N	3730	12	11	4.9	1.4
445	570	E	-	440	N	4050	11	11	5.6	0.9
446	570	E	-	445	N	4050	12	11	4.6	1.1
447	570	E	-	450	N	4170	11	11	4.5	1.3
448	570	E	-	455	N	3720	11	11	4.7	1.1
449	570	E	-	460	N	4270	10	11	5.6	1.1
450	570	E	-	465	N	4630	12	12	4.9	1.2
451	570	E	-	470	N	4190	11	11	5.0	1.0
452	570	E	-	475	N	4010	12	12	3.1	1.1
453	570	E	-	480	N	4230	12	12	3.1	1.2
454	570	E	-	485	N	3980	11	12	3.3	1.3
455	570	E	-	490	N	3820	11	11	7.9	1.2
456	570	E	-	495	N	4080	13	12	5.5	1.2
457	570	E	-	500	N	3830	11	11	3.3	1.1
458	570	E	-	505	N	3820	11	11	2.3	1.2
459	570	E	-	510	N	3760	12	11	5.1	1.1
460	570	E	-	515	N	3740	10	11	6.2	1.0
461	570	E	-	520	N	4040	11	11	4.8	1.0
462	570	E	-	525	N	4080	11	10	6.6	1.1
463	570	E	-	530	N	3710	12	11	5.0	1.1
464	570	E	-	535	N	3580	12	11	2.3	1.3
465	570	E	-	540	N	3680	12	11	4.6	1.1
466	570	E	-	545	N	4080	11	12	4.9	1.0
467	570	E	-	550	N	3890	10	10	5.3	1.0
468	570	E	-	555	N	3710	12	12	4.6	1.2
469	570	E	-	560	N	3840	10	11	5.0	0.9
470	570	E	-	565	N	4480	10	11	4.5	1.3
471	570	E	-	570	N	3270	9	10	3.3	0.9
472	570	E	-	575	N	4000	11	11	6.3	1.0
473	570	E	-	580	N	4200	11	11	6.2	1.5
474	575	E	-	430	N	3760	12	11	5.1	1.2
475	575	E	-	435	N	3020	10	10	5.9	0.9



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CIMARRON CORPORATION CIMARRON FACILITY SUB AREA "O" SURFACE WASTE POND #2										
INSTRUMENTS:						S/N	RESULTS	BACKGROUND	MDA	
LUDLUM MICRO R METER M/N 19						138420	µR/hr	9	2	
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR						48395	CPM	3000	N/A	
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR							pCi/g	Total U 4.0	5	
							pCi/g	Th (Nat) 1.5	1	
REVIEWED BY: <i>W.A. Rogers</i>						DATE: <i>1-14-99</i>				
BACKGROUND NOT SUBTRACTED										
LN #	GRID LOCATION				3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'		
								Total-U	Th (Nat)	
476	575	E	-	440	N	3240	10	10	3.5	1.0
477	575	E	-	445	N	3980	10	11	6.9	1.0
478	575	E	-	450	N	3690	12	11	4.8	1.0
479	575	E	-	455	N	4040	12	11	4.1	1.1
480	575	E	-	460	N	3550	10	11	5.0	1.3
481	575	E	-	465	N	4010	11	11	2.0	1.4
482	575	E	-	470	N	4020	11	11	3.4	1.2
483	575	E	-	475	N	3640	11	10	4.7	1.1
484	575	E	-	480	N	4380	10	11	5.4	0.9
485	575	E	-	485	N	4000	11	11	5.6	1.1
486	575	E	-	490	N	4010	12	11	5.8	1.3
487	575	E	-	495	N	3820	12	12	4.2	1.2
488	575	E	-	500	N	3680	11	11	3.8	1.1
489	575	E	-	505	N	3490	12	11	4.8	1.0
490	575	E	-	510	N	4150	11	11	5.3	1.2
491	575	E	-	515	N	4180	12	12	4.7	1.2
492	575	E	-	520	N	4210	13	12	5.2	1.2
493	575	E	-	525	N	3990	11	11	6.0	1.2
494	575	E	-	530	N	4360	11	11	2.6	1.2
495	575	E	-	535	N	4020	12	12	3.6	1.3
496	575	E	-	540	N	4040	12	11	7.3	1.1
497	575	E	-	545	N	4120	11	11	6.5	1.1
498	575	E	-	550	N	3690	11	10	6.6	0.9
499	575	E	-	555	N	3450	11	11	5.0	1.1
500	575	E	-	560	N	3640	10	11	5.0	1.1
501	575	E	-	565	N	4300	10	11	6.3	1.1
502	575	E	-	570	N	3980	11	11	6.0	1.1
503	575	E	-	575	N	3970	12	12	6.1	1.2
504	575	E	-	580	N	3900	10	11	5.4	1.0
505	580	E	-	430	N	3290	10	10	6.0	1.1
506	580	E	-	435	N	3180	9	10	5.7	0.9
507	580	E	-	440	N	3460	11	10	3.9	0.9
508	580	E	-	445	N	3800	11	10	4.5	1.1
509	580	E	-	450	N	3760	11	11	3.8	1.4
510	580	E	-	455	N	3970	11	11	2.3	1.3
511	580	E	-	460	N	4100	12	11	5.0	1.0
512	580	E	-	465	N	3800	12	12	6.0	1.1
513	580	E	-	470	N	4350	13	12	5.8	1.2
514	580	E	-	475	N	4400	12	12	7.4	1.2
515	580	E	-	480	N	4380	13	11	4.3	1.4

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:	S/N	RESULTS IN BACKGROUND		MDA
LUDLUM MICRO R METER M/N 19	138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR	48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR		pCi/g	Total U 4.0	5
		pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W.A. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
516	580	E	-	485	N	3890	10	11	5.9	1.0
517	580	E	-	490	N	4080	11	10	6.7	1.3
518	580	E	-	495	N	3990	12	11	6.5	1.1
519	580	E	-	500	N	4340	11	12	9.1	1.2
520	580	E	-	505	N	3940	11	11	7.8	1.2
521	580	E	-	510	N	4130	12	12	5.1	1.2
522	580	E	-	515	N	4070	11	11	2.7	1.2
523	580	E	-	520	N	4210	12	11	6.3	1.2
524	580	E	-	525	N	3890	10	11	6.9	1.1
525	580	E	-	530	N	3950	11	10	4.7	1.2
526	580	E	-	535	N	3560	11	11	5.6	1.2
527	580	E	-	540	N	3870	12	10	7.0	1.2
528	580	E	-	545	N	3740	12	11	6.6	1.2
529	580	E	-	550	N	4080	11	11	5.2	1.3
530	580	E	-	555	N	3410	11	10	6.2	0.9
531	580	E	-	560	N	4010	11	11	8.3	1.1
532	580	E	-	565	N	4090	11	11	5.6	1.2
533	580	E	-	570	N	4450	11	11	5.1	1.2
534	580	E	-	575	N	3610	10	10	6.6	1.1
535	580	E	-	580	N	3670	13	12	5.8	1.1
536	585	E	-	430	N	3630	11	11	3.1	1.4
537	585	E	-	435	N	3320	10	9	3.1	1.1
538	585	E	-	440	N	3670	11	10	6.1	1.2
539	585	E	-	445	N	3920	11	11	4.7	1.1
540	585	E	-	450	N	3650	10	10	3.5	1.2
541	585	E	-	455	N	3800	10	10	2.5	0.9
542	585	E	-	460	N	3540	10	11	6.1	1.1
543	585	E	-	465	N	3950	11	11	5.9	1.2
544	585	E	-	470	N	3780	10	10	4.8	1.1
545	585	E	-	475	N	3570	11	11	3.7	1.1
546	585	E	-	480	N	3830	12	11	4.9	1.1
547	585	E	-	485	N	3600	11	11	4.3	1.2
548	585	E	-	490	N	3650	12	12	3.1	1.2
549	585	E	-	495	N	3450	12	12	5.3	1.2
550	585	E	-	500	N	3880	13	13	5.8	1.1
551	585	E	-	505	N	4260	12	11	5.7	1.0
552	585	E	-	510	N	4010	12	11	7.4	1.3
553	585	E	-	515	N	4020	12	11	7.2	1.1
554	585	E	-	520	N	3620	11	11	6.6	1.1
555	585	E	-	525	N	3540	11	10	2.5	1.3

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:	S/N	RESULTS IN BACKGROUND		MDA
LUDLUM MICRO R METER M/N 19	138420	$\mu$ R/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR	48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR		pCi/g	Total U 4.0	5
		pCi/g	Th (Nat) 1.5	1

REVIEWED BY:

*W. Q. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
556	585	E	-	530	N	4120	12	12	6.8	1.1
557	585	E	-	535	N	3920	11	10	6.5	1.2
558	585	E	-	540	N	3590	12	10	4.2	1.2
559	585	E	-	545	N	3880	10	10	4.7	1.2
560	585	E	-	550	N	3740	10	11	4.3	1.4
561	585	E	-	555	N	3560	11	11	2.5	1.1
562	585	E	-	560	N	4250	11	11	7.5	1.3
563	585	E	-	565	N	3970	11	12	8.1	1.1
564	585	E	-	570	N	3110	10	10	3.1	1.0
565	585	E	-	575	N	3640	11	12	5.4	0.8
566	585	E	-	580	N	3540	12	10	5.1	1.2
567	590	E	-	430	N	3330	9	9	5.3	1.1
568	590	E	-	435	N	2850	9	9	5.7	0.8
569	590	E	-	440	N	3680	11	10	5.4	1.1
570	590	E	-	445	N	3280	10	10	5.4	1.3
571	590	E	-	450	N	3630	10	10	6.0	1.0
572	590	E	-	455	N	3660	10	10	4.6	1.1
573	590	E	-	460	N	3650	11	10	2.2	1.1
574	590	E	-	465	N	3860	10	10	7.2	1.0
575	590	E	-	470	N	3720	10	10	2.8	1.2
576	590	E	-	475	N	3510	10	10	6.2	1.1
577	590	E	-	480	N	3430	11	9	6.4	0.8
578	590	E	-	485	N	3840	11	10	3.0	1.3
579	590	E	-	490	N	3520	11	11	6.8	0.8
580	590	E	-	495	N	3620	10	9	5.1	1.4
581	590	E	-	500	N	4010	12	11	4.0	1.3
582	590	E	-	505	N	3990	11	10	6.0	1.0
583	590	E	-	510	N	3760	11	11	6.1	0.8
584	590	E	-	515	N	3920	11	11	4.5	1.0
585	590	E	-	520	N	3710	11	10	7.1	1.0
586	590	E	-	525	N	3320	11	11	5.0	0.9
587	590	E	-	530	N	3570	10	10	3.1	0.9
588	590	E	-	535	N	3700	10	10	5.1	1.0
589	590	E	-	540	N	3570	10	10	5.3	1.1
590	590	E	-	545	N	3740	10	10	5.4	1.1
591	590	E	-	550	N	3710	11	10	5.4	1.0
592	590	E	-	555	N	3730	11	10	6.3	1.3
593	590	E	-	560	N	3720	11	11	3.5	1.2
594	590	E	-	565	N	2960	10	10	5.6	1.0
595	590	E	-	570	N	3160	10	10	3.1	1.1

Thursday, January 14, 1999

CIMARRON CORPORATION CIMARRON FACILITY SUB AREA "O" SURFACE WASTE POND #2										
INSTRUMENTS:						S/N    RESULTS IN BACKGROUND    MDA				
LUDLUM MICRO R METER    M/N 19						138420	µR/hr	9	2	
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR						48395	CPM	3000	N/A	
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR							pCi/g	Total U    4.0	5	
							pCi/g	Th (Nat)    1.5	1	
REVIEWED BY: <i>W. a. Rogers</i> DATE: <i>1-14-99</i>										
BACKGROUND NOT SUBTRACTED										
LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
596	590	E	-	575	N	3500	10	10	7.0	1.1
597	590	E	-	580	N	3660	11	11	6.1	1.5
598	595	E	-	430	N	3750	11	10	6.6	1.2
599	595	E	-	435	N	3450	9	9	6.7	0.8
600	595	E	-	440	N	4250	11	11	6.0	1.4
601	595	E	-	445	N	3330	11	10	7.1	0.7
602	595	E	-	450	N	3370	10	9	4.9	1.0
603	595	E	-	455	N	3530	10	11	4.6	1.1
604	595	E	-	460	N	3800	10	10	4.7	1.0
605	595	E	-	465	N	3390	10	11	3.6	1.0
606	595	E	-	470	N	3540	10	9	3.0	0.8
607	595	E	-	475	N	3910	11	11	5.0	0.9
608	595	E	-	480	N	3620	10	10	5.1	0.8
609	595	E	-	485	N	3700	11	10	3.3	1.1
610	595	E	-	490	N	3620	11	10	3.4	1.1
611	595	E	-	495	N	3310	10	10	1.0	0.9
612	595	E	-	500	N	3960	12	12	6.2	1.0
613	595	E	-	505	N	3590	11	12	6.5	0.9
614	595	E	-	510	N	4190	10	11	6.7	0.9
615	595	E	-	515	N	3880	11	12	4.3	0.9
616	595	E	-	520	N	3730	11	11	5.6	1.0
617	595	E	-	525	N	4120	11	10	3.7	0.9
618	595	E	-	530	N	3460	10	10	4.4	1.0
619	595	E	-	535	N	4100	10	11	3.5	0.9
620	595	E	-	540	N	4270	10	11	4.8	1.2
621	595	E	-	545	N	3520	10	10	3.2	1.2
622	595	E	-	550	N	3920	11	11	3.3	1.1
623	595	E	-	555	N	3390	11	11	1.6	1.0
624	595	E	-	560	N	3470	10	11	3.1	1.1
625	595	E	-	565	N	2950	10	10	5.2	0.7
626	595	E	-	570	N	2720	9	9	2.0	0.9
627	595	E	-	575	N	2980	10	9	3.2	1.0
628	595	E	-	580	N	3890	11	11	2.3	1.3
629	600	E	-	430	N	3010	10	11	5.2	1.2
630	600	E	-	435	N	3400	10	10	6.7	1.1
631	600	E	-	440	N	3000	10	9	6.5	0.8
632	600	E	-	445	N	3560	9	9	4.3	0.7
633	600	E	-	450	N	3260	11	11	4.6	0.9
634	600	E	-	455	N	3850	11	11	7.2	0.9
635	600	E	-	460	N	4310	12	11	5.0	1.1

Thursday, January 14, 1999

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:		S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER	M/N 19	138420	µR/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR		48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR			pCi/g	Total U 4.0	5
			pCi/g	Th (Nat) 1.5	1

REVIEWED BY:

*W. a. Rogers*

DATE:

*1-14-99*

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
636	600	E	-	465	N	3610	11	11	4.6	1.2
637	600	E	-	470	N	3540	10	10	5.4	0.9
638	600	E	-	475	N	3830	11	11	4.7	0.9
639	600	E	-	480	N	3450	11	10	6.5	0.9
640	600	E	-	485	N	3500	10	10	6.1	1.0
641	600	E	-	490	N	3230	10	10	4.7	0.8
642	600	E	-	495	N	3340	10	10	2.2	1.0
643	600	E	-	500	N	3680	12	11	6.3	0.8
644	600	E	-	505	N	3060	11	11	2.6	0.6
645	600	E	-	510	N	3810	12	11	6.0	1.1
646	600	E	-	515	N	4280	12	12	5.1	1.3
647	600	E	-	520	N	4070	11	10	4.4	1.1
648	600	E	-	525	N	4180	11	11	3.1	1.3
649	600	E	-	530	N	3400	11	11	6.4	1.0
650	600	E	-	535	N	4360	11	10	2.8	1.1
651	600	E	-	540	N	3460	9	10	6.3	1.0
652	600	E	-	545	N	3620	10	10	4.2	0.7
653	600	E	-	550	N	3050	10	10	1.7	0.9
654	600	E	-	555	N	2710	9	9	2.1	1.0
655	600	E	-	560	N	3470	10	10	5.9	0.9
656	600	E	-	565	N	2460	9	8	4.2	0.7
657	600	E	-	570	N	2790	9	9	5.2	0.8
658	600	E	-	575	N	3580	10	11	3.0	1.2
659	600	E	-	580	N	4280	11	11	6.7	1.2
660	605	E	-	430	N	3660	10	10	4.8	1.3
661	605	E	-	435	N	3710	11	10	5.6	1.1
662	605	E	-	440	N	3410	10	10	4.1	1.3
663	605	E	-	445	N	3890	10	9	3.6	1.3
664	605	E	-	450	N	3200	10	10	5.7	1.0
665	605	E	-	455	N	3140	10	9	5.2	1.1
666	605	E	-	460	N	3500	11	10	4.2	1.1
667	605	E	-	465	N	3730	12	11	4.2	1.1
668	605	E	-	470	N	3430	12	11	5.9	1.1
669	605	E	-	475	N	3710	11	11	3.6	1.3
670	605	E	-	480	N	3760	11	11	5.3	1.2
671	605	E	-	485	N	3850	11	11	4.9	1.3
672	605	E	-	490	N	3590	11	10	5.7	1.4
673	605	E	-	495	N	3800	11	10	4.3	1.6
674	605	E	-	500	N	4030	12	11	6.3	1.1
675	605	E	-	505	N	3600	12	12	5.2	1.2



Thursday, January 14, 1999

CIMARRON CORPORATION CIMARRON FACILITY SUB AREA "O" SURFACE WASTE POND #2										
INSTRUMENTS:										
						S/N	RESULTS IN	BACKGROUND	MDA	
LUDLUM MICRO R METER M/N 19						138420	µR/hr	9	2	
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR						48395	CPM	3000	N/A	
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR							pCi/g	Total U	4.0	5
							pCi/g	Th (Nat)	1.5	1
REVIEWED BY: <i>W.a. Rogers</i> DATE: <i>1-14-99</i>										
BACKGROUND NOT SUBTRACTED										
LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
676	605	E	-	510	N	3840	11	11	3.4	1.1
677	605	E	-	515	N	3850	11	10	4.4	1.1
678	605	E	-	520	N	4100	12	12	6.0	1.2
679	605	E	-	525	N	3360	10	10	4.4	0.9
680	605	E	-	530	N	3850	12	11	5.3	1.0
681	605	E	-	535	N	3780	11	11	5.4	1.2
682	605	E	-	540	N	3590	11	11	7.1	0.9
683	605	E	-	545	N	3810	10	10	6.1	1.0
684	605	E	-	550	N	4140	11	10	6.0	1.2
685	605	E	-	555	N	4460	12	11	5.9	1.2
686	605	E	-	560	N	4070	12	10	5.4	1.3
687	605	E	-	565	N	4380	11	11	5.8	1.2
688	605	E	-	570	N	4410	12	12	3.9	1.3
689	605	E	-	575	N	3890	10	11	4.2	1.2
690	605	E	-	580	N	4440	12	12	4.1	1.4
691	610	E	-	430	N	4420	11	11	4.6	1.4
692	610	E	-	435	N	3830	11	10	6.6	1.1
693	610	E	-	440	N	3910	10	10	4.0	1.2
694	610	E	-	445	N	3640	10	10	3.8	1.1
695	610	E	-	450	N	3110	10	11	4.2	0.8
696	610	E	-	455	N	3440	9	10	5.0	1.1
697	610	E	-	460	N	3860	10	11	6.0	1.3
698	610	E	-	465	N	3870	10	10	6.3	1.2
699	610	E	-	470	N	3420	10	10	5.3	1.1
700	610	E	-	475	N	3880	11	11	4.1	1.2
701	610	E	-	480	N	3960	12	11	6.7	1.3
702	610	E	-	485	N	3940	11	10	4.9	1.2
703	610	E	-	490	N	4160	12	12	6.4	1.3
704	610	E	-	495	N	4410	13	13	6.4	1.3
705	610	E	-	500	N	4180	12	12	5.3	1.3
706	610	E	-	505	N	4280	12	12	6.6	1.3
707	610	E	-	510	N	4000	11	12	6.9	1.1
708	610	E	-	515	N	4000	11	11	5.8	1.3
709	610	E	-	520	N	3540	11	10	3.8	1.0
710	610	E	-	525	N	3990	12	11	6.9	1.0
711	610	E	-	530	N	4240	12	12	4.7	1.4
712	610	E	-	535	N	3680	12	11	3.6	1.4
713	610	E	-	540	N	4140	11	11	4.2	1.6
714	610	E	-	545	N	4050	10	10	6.7	1.2
715	610	E	-	550	N	4060	12	12	4.0	1.2

**CIMARRON CORPORATION  
CIMARRON FACILITY  
SUB AREA "O" SURFACE WASTE POND #2**

INSTRUMENTS:	S/N	RESULTS IN	BACKGROUND	MDA
LUDLUM MICRO R METER M/N 19	138420	$\mu$ R/hr	9	2
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR	48395	CPM	3000	N/A
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR		pCi/g	Total U 4.0	5
		pCi/g	Th (Nat) 1.5	1

REVIEWED BY: *W. A. Rogers*

DATE: 1-14-99

**BACKGROUND NOT SUBTRACTED**

LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6"	
									Total-U	Th (Nat)
716	610	E	-	555	N	3760	11	11	5.8	1.1
717	610	E	-	560	N	4080	11	11	3.2	1.0
718	610	E	-	565	N	3850	11	11	5.0	1.4
719	610	E	-	570	N	4050	12	11	4.9	1.3
720	610	E	-	575	N	3720	11	11	6.8	1.2
721	610	E	-	580	N	3760	10	10	5.9	1.3
722	615	E	-	430	N	4010	12	12	3.9	1.0
723	615	E	-	435	N	4060	11	11	5.0	1.2
724	615	E	-	440	N	4020	13	12	5.2	1.1
725	615	E	-	445	N	3820	12	11	5.2	1.1
726	615	E	-	450	N	4070	12	12	4.5	1.1
727	615	E	-	455	N	3740	12	11	4.3	0.8
728	615	E	-	460	N	4350	11	12	2.6	1.4
729	615	E	-	465	N	4280	13	12	6.0	1.3
730	615	E	-	470	N	4750	13	13	4.7	1.2
731	615	E	-	475	N	4660	13	12	6.8	1.3
732	615	E	-	480	N	4800	13	13	4.4	1.2
733	615	E	-	485	N	4890	12	12	6.9	1.3
734	615	E	-	490	N	4490	13	12	5.2	1.3
735	615	E	-	495	N	4320	12	12	5.8	1.2
736	615	E	-	500	N	4640	12	13	5.4	1.2
737	615	E	-	505	N	4860	12	12	4.0	1.3
738	615	E	-	510	N	4050	11	11	4.9	1.3
739	615	E	-	515	N	4190	11	11	6.4	1.3
740	615	E	-	520	N	4490	11	11	5.6	1.3
741	615	E	-	525	N	4070	12	12	5.2	1.1
742	615	E	-	530	N	3850	11	11	3.3	1.6
743	615	E	-	535	N	3830	13	12	5.8	1.1
744	615	E	-	540	N	4050	12	11	4.8	1.0
745	615	E	-	545	N	4270	10	10	4.3	0.7
746	615	E	-	550	N	3670	11	10	4.0	0.6
747	615	E	-	555	N	4000	11	11	1.3	1.0
748	615	E	-	560	N	4110	12	11	6.6	0.8
749	615	E	-	565	N	3910	12	12	3.9	1.1
750	615	E	-	570	N	4120	11	11	3.9	1.0
751	615	E	-	575	N	3560	11	11	6.9	1.2
752	615	E	-	580	N	3850	11	11	4.5	0.9
753	620	E	-	430	N	3610	12	12	2.8	1.3
754	620	E	-	435	N	4190	11	11	3.8	1.1
755	620	E	-	440	N	4050	12	11	4.9	1.3

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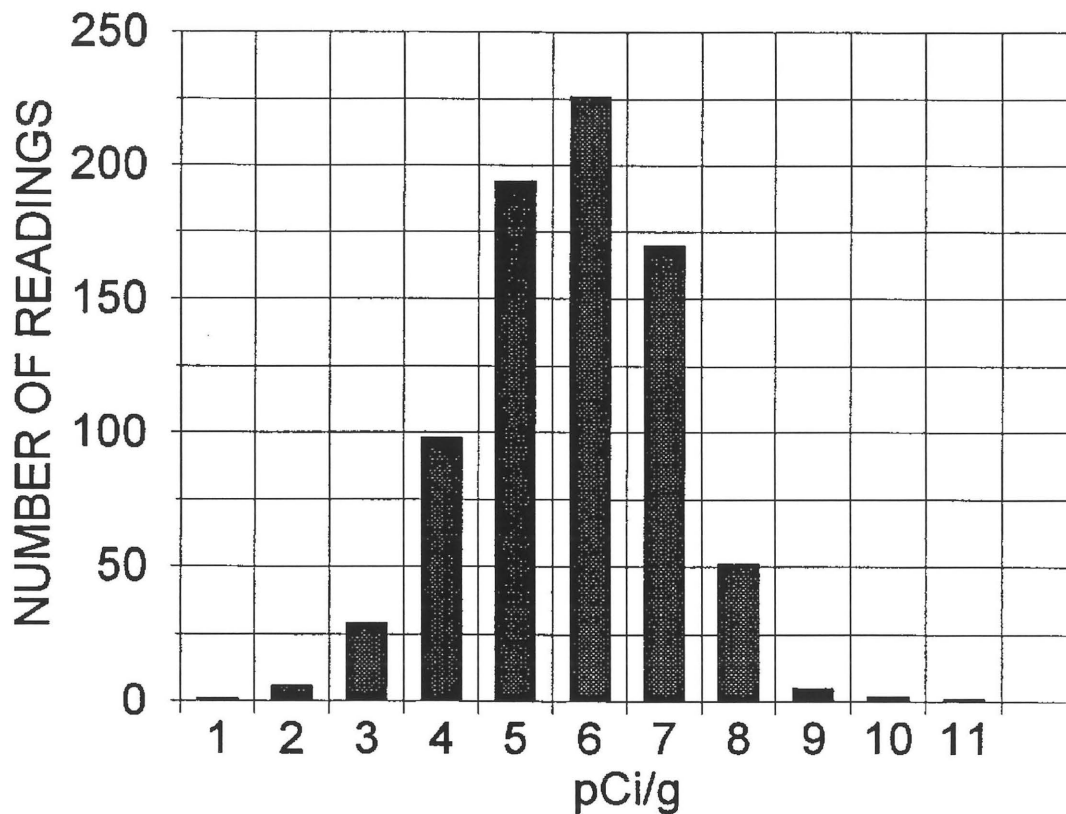
CIMARRON CORPORATION CIMARRON FACILITY SUB AREA "O" SURFACE WASTE POND #2										
INSTRUMENTS:										
						S/N	RESULTS IN	BACKGROUND	MDA	
LUDLUM MICRO R METER M/N 19						138420	µR/hr	9	2	
LUDLUM 2220, LEAD SHIELDED 3" X 1/2" NaI DETECTOR						48395	CPM	3000	N/A	
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR							pCi/g	Total U 4.0	5	
							pCi/g	Th (Nat) 1.5	1	
REVIEWED BY: <i>W.A. Rogers</i> DATE: <i>1-14-99</i>										
BACKGROUND NOT SUBTRACTED										
LN #	GRID LOCATION					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g 0" - 6'	
									Total-U	Th (Nat)
756	620	E	-	445	N	3900	10	10	3.9	1.2
757	620	E	-	450	N	4210	11	10	4.9	1.1
758	620	E	-	455	N	4690	12	12	6.1	1.5
759	620	E	-	460	N	4380	13	12	5.4	1.6
760	620	E	-	465	N	3770	13	11	6.6	1.1
761	620	E	-	470	N	4270	12	12	4.3	1.4
762	620	E	-	475	N	4650	12	12	2.3	1.6
763	620	E	-	480	N	4410	12	12	7.1	1.3
764	620	E	-	485	N	4260	12	11	6.0	1.3
765	620	E	-	490	N	4910	12	11	5.8	1.3
766	620	E	-	495	N	4650	13	13	6.3	1.4
767	620	E	-	500	N	4540	11	11	6.6	1.2
768	620	E	-	505	N	4500	12	12	6.5	1.5
769	620	E	-	510	N	4590	13	12	6.0	1.4
770	620	E	-	515	N	4360	13	12	5.3	1.2
771	620	E	-	520	N	4180	12	12	6.5	1.3
772	620	E	-	525	N	4280	11	11	6.0	1.5
773	620	E	-	530	N	4080	12	11	6.9	1.1
774	620	E	-	535	N	4000	12	12	6.7	1.4
775	620	E	-	540	N	3920	12	11	6.1	1.1
776	620	E	-	545	N	3980	12	12	7.4	1.1
777	620	E	-	550	N	3620	11	10	4.7	1.3
778	620	E	-	555	N	4340	12	11	5.4	1.3
779	620	E	-	560	N	4330	12	12	3.8	1.6
780	620	E	-	565	N	4010	10	10	5.8	1.3
781	620	E	-	570	N	3520	12	11	5.6	1.3
782	620	E	-	575	N	3940	11	11	4.6	1.3
783	620	E	-	580	N	4470	12	11	4.6	1.4



Thursday, January 14, 1999

PHASE III - AREA "O" WASTE POND # 2- AFFECTED  
CIMARRON SOIL COUNTER SURFACE SAMPLES  
TOTAL URANIUM SOIL SAMPLE RESULTS  
SITE BACKGROUND OF 4 pCi/g NOT SUBTRACTED  
OCTOBER 1998

## URANIUM SAMPLE DATA FREQUENCY DISTRIBUTION



NUMBER OF SAMPLES	783
AVERAGE SAMPLE	5.3
MINIMUM SAMPLE	1.0
MAXIMUM SAMPLE	10.7
STANDARD DEVIATION	1.3

CIMARRON CORPORATION - CIMARRON FACILITY AREA "O" WASTE POND # 2 (AFFECTED)  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE

$n = \text{pCi/g TOTAL U}$

Number	n	(n-N)	(n-N) <sup>2</sup>
1	6.1	0.8	0.7
2	5.9	0.6	0.4
3	6.5	1.2	1.5
4	4.1	-1.2	1.4
5	6.2	0.9	0.8
6	6.8	1.5	2.3
7	6.7	1.4	2.0
8	6.5	1.2	1.5
9	7.0	1.7	3.0
10	5.2	-0.1	0.0
11	4.8	-0.5	0.2
12	4.3	-1.0	1.0
13	5.4	0.1	0.0
14	5.6	0.3	0.1
15	6.5	1.2	1.5
16	3.5	-1.8	3.2
17	6.4	1.1	1.3
18	6.9	1.6	2.6
19	6.5	1.2	1.5
20	6.1	0.8	0.7
21	6.3	1.0	1.0
22	4.7	-0.6	0.3
23	5.0	-0.3	0.1
24	3.5	-1.8	3.2
25	4.8	-0.5	0.2
26	6.2	0.9	0.8
27	6.1	0.8	0.7
28	5.0	-0.3	0.1
29	5.5	0.2	0.0
30	5.4	0.1	0.0
31	7.2	1.9	3.7
32	4.6	-0.7	0.5
33	6.6	1.3	1.7
34	5.4	0.1	0.0
35	4.1	-1.2	1.4
36	4.8	-0.5	0.2
37	4.6	-0.7	0.5
38	4.7	-0.6	0.3
39	4.8	-0.5	0.2
40	6.4	1.1	1.3
41	4.1	-1.2	1.4
42	2.9	-2.4	5.7
43	4.3	-1.0	1.0
44	6.8	1.5	2.3
45	5.2	-0.1	0.0
46	5.5	0.2	0.0
47	4.8	-0.5	0.2
48	4.9	-0.4	0.1
49	6.1	0.8	0.7
50	6.0	0.7	0.5
	266.5		81.4
	272.7		129.2
	277.8		81.9
	268.8		65.6
	273.3		68.8
	280.0		78.0
	269.4		80.2
	269.4		66.3
	241.0		97.4
	269.1		106.6
	267.6		108.3
	225.7		143.9
	245.2		71.9
	254.4		78.8
	179.2		52.1
	0.0		0.0
total	4133.4		1344.3
	Sum(n)		Sum(n-N) <sup>2</sup>

No. of Samples (x): 783

COUNT TIME: 15 MINUTES

Sample Mean (N) =  $\text{Sum}(n) \div (x)$   
Sample Mean (N): 5.28

Standard Deviation (Sd) =  $\text{SQRT} [(n-N)^2 \div (x - 1)]$

Standard Deviation: 1.31

2 Std Deviations: 2.62

Degree of Freedom (df) =  $(x) - 1$  Data listed on Table B-1  
(df) = 1.645

Area's Average Level (A<sub>u</sub>) =  $(N) \div (df) \times [(Sd) \times \text{SQRT}(x)]$

(A<sub>u</sub>) = 5.36 pCi/gU TOTAL U  
GUIDELINE VALUE: 30 pCi/gU TOTAL U  
Acceptable Level: 34.0 pCi/gU TOTAL U

TABLE B - 1

Factors for Comparison of Survey Data with Guidelines					
(df)	95%	97.5%	(df)	95%	97.5%
1	6.314	12.706	19	1.729	2.093
2	2.92	4.303	20	1.725	2.086
3	2.353	3.182	21	1.721	2.08
4	2.132	2.776	22	1.717	2.074
5	2.015	2.571	23	1.714	2.069
6	1.943	2.447	24	1.711	2.064
7	1.895	2.365	25	1.708	2.06
8	1.86	2.306	26	1.706	2.056
9	1.833	2.262	27	1.703	2.052
10	1.812	2.228	28	1.701	2.048
11	1.796	2.201	29	1.699	2.045
12	1.782	2.179	30	1.697	2.042
13	1.771	2.16	40	1.684	2.021
14	1.761	2.145	60	1.671	2
15	1.753	2.131	120	1.658	1.98
16	1.746	2.12	400	1.649	1.966
17	1.74	2.11	Infinite	1.645	1.96
18	1.734	2.101			

For values of Degrees of Freedom not listed:

Interpolate between the listed values.

(df) high value(Z)	Is (B)		95%
(df) low value(Y)	Is (A)		95%

Desired value(df) (X) 782 is calculated as follow:

$$\text{EXP}[(\text{Ln}(B) - \text{Ln}(A)) \div (Z - Y) \times (X - Y) + \text{Ln}(A)]$$

The (df) value for (X) 782 1.645 95%

PERFORMED BY: M. W. Hadd DATE: 1-14-99

REVIEWED BY: W. A. Rogers DATE: 1-14-99

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**  
**AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
51	5.4	0.12	0.01
52	3.5	-1.78	3.16
53	5.7	0.42	0.18
54	5.3	0.02	0.00
55	6.9	1.62	2.63
56	6.4	1.12	1.26
57	6.1	0.82	0.67
58	3.2	-2.08	4.32
59	6.9	1.62	2.63
60	7.1	1.82	3.32
61	5.0	-0.28	0.08
62	6.9	1.62	2.63
63	5.9	0.62	0.39
64	2.8	-2.48	6.15
65	6.8	1.52	2.31
66	3.9	-1.38	1.90
67	3.9	-1.38	1.90
68	4.8	-0.48	0.23
69	6.2	0.92	0.85
70	6.4	1.12	1.26
71	4.8	-0.48	0.23
72	3.9	-1.38	1.90
73	5.8	0.52	0.27
74	6.1	0.82	0.67
75	6.8	1.52	2.31
76	6.5	1.22	1.49
77	6.8	1.52	2.31
78	5.5	0.22	0.05
79	5.2	-0.08	0.01
80	6.1	0.82	0.67
81	4.9	-0.38	0.14
82	5.8	0.52	0.27
83	5.9	0.62	0.39
84	7.1	1.82	3.32
85	5.9	0.62	0.39
86	3.4	-1.88	3.53
87	6.2	0.92	0.85
88	5.5	0.22	0.05
89	5.3	0.02	0.00
90	4.9	-0.38	0.14
91	4.0	-1.28	1.64
92	1.8	-3.48	12.10
93	4.2	-1.08	1.16
94	7.4	2.12	4.50
95	3.9	-1.38	1.90
96	4.8	-0.48	0.23
97	4.7	-0.58	0.34
98	6.3	1.02	1.04
99	3.7	-1.58	2.49
100	4.2	-1.08	1.16
	266.5		81.4
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
101	3.4	-1.88	3.53
102	9.3	4.02	16.17
103	4.1	-1.18	1.39
104	3.7	-1.58	2.49
105	6.2	0.92	0.85
106	6.8	1.52	2.31
107	3.7	-1.58	2.49
108	5.6	0.32	0.10
109	6.2	0.92	0.85
110	3.4	-1.88	3.53
111	6.0	0.72	0.52
112	5.8	0.52	0.27
113	2.8	-2.48	6.15
114	5.6	0.32	0.10
115	4.7	-0.58	0.34
116	5.3	0.02	0.00
117	4.1	-1.18	1.39
118	5.6	0.32	0.10
119	4.5	-0.78	0.61
120	6.1	0.82	0.67
121	6.5	1.22	1.49
122	5.1	-0.18	0.03
123	7.7	2.42	5.86
124	4.3	-0.98	0.96
125	5.5	0.22	0.05
126	4.8	-0.48	0.23
127	3.6	-1.68	2.82
128	3.8	-1.48	2.19
129	5.1	-0.18	0.03
130	5.3	0.02	0.00
131	3.3	-1.98	3.92
132	4.0	-1.28	1.64
133	5.4	0.12	0.01
134	5.2	-0.08	0.01
135	10.7	5.42	29.39
136	8.3	3.02	9.13
137	6.9	1.62	2.63
138	7.1	1.82	3.32
139	5.5	0.22	0.05
140	6.1	0.82	0.67
141	4.9	-0.38	0.14
142	7.2	1.92	3.69
143	2.6	-2.68	7.18
144	4.5	-0.78	0.61
145	6.1	0.82	0.67
146	5.3	0.02	0.00
147	4.4	-0.88	0.77
148	7.3	2.02	4.08
149	6.7	1.42	2.02
150	6.6	1.32	1.75
	272.7		129.2
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
151	4.1	-1.18	1.39
152	3.7	-1.58	2.49
153	5.5	0.22	0.05
154	4.6	-0.68	0.46
155	5.0	-0.28	0.08
156	7.7	2.42	5.86
157	7.0	1.72	2.96
158	4.4	-0.88	0.77
159	6.1	0.82	0.67
160	4.1	-1.18	1.39
161	5.2	-0.08	0.01
162	4.1	-1.18	1.39
163	6.6	1.32	1.75
164	5.9	0.62	0.39
165	7.9	2.62	6.87
166	5.0	-0.28	0.08
167	6.0	0.72	0.52
168	6.9	1.62	2.63
169	3.4	-1.88	3.53
170	6.2	0.92	0.85
171	4.2	-1.08	1.16
172	5.2	-0.08	0.01
173	6.7	1.42	2.02
174	5.9	0.62	0.39
175	6.7	1.42	2.02
176	8.4	3.12	9.74
177	6.1	0.82	0.67
178	6.0	0.72	0.52
179	7.2	1.92	3.69
180	4.4	-0.88	0.77
181	5.1	-0.18	0.03
182	6.2	0.92	0.85
183	7.6	2.32	5.39
184	5.0	-0.28	0.08
185	6.0	0.72	0.52
186	4.6	-0.68	0.46
187	2.2	-3.08	9.48
188	6.8	1.52	2.31
189	5.7	0.42	0.18
190	6.5	1.22	1.49
191	5.9	0.62	0.39
192	5.3	0.02	0.00
193	4.6	-0.68	0.46
194	3.6	-1.68	2.82
195	5.2	-0.08	0.01
196	5.3	0.02	0.00
197	4.4	-0.88	0.77
198	6.4	1.12	1.26
199	5.8	0.52	0.27
200	5.4	0.12	0.01
	277.8		81.9
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
201	5.0	-0.28	0.08
202	3.6	-1.68	2.82
203	3.7	-1.58	2.49
204	4.7	-0.58	0.34
205	5.6	0.32	0.10
206	7.1	1.82	3.32
207	5.1	-0.18	0.03
208	6.9	1.62	2.63
209	5.6	0.32	0.10
210	5.6	0.32	0.10
211	6.4	1.12	1.26
212	6.0	0.72	0.52
213	4.6	-0.68	0.46
214	5.7	0.42	0.18
215	5.3	0.02	0.00
216	5.9	0.62	0.39
217	5.1	-0.18	0.03
218	5.8	0.52	0.27
219	5.0	-0.28	0.08
220	5.4	0.12	0.01
221	6.2	0.92	0.85
222	5.3	0.02	0.00
223	5.1	-0.18	0.03
224	6.3	1.02	1.04
225	4.7	-0.58	0.34
226	3.8	-1.48	2.19
227	3.7	-1.58	2.49
228	6.0	0.72	0.52
229	8.0	2.72	7.40
230	6.3	1.02	1.04
231	4.7	-0.58	0.34
232	7.9	2.62	6.87
233	5.4	0.12	0.01
234	5.1	-0.18	0.03
235	4.9	-0.38	0.14
236	3.3	-1.98	3.92
237	6.9	1.62	2.63
238	3.9	-1.38	1.90
239	4.4	-0.88	0.77
240	5.7	0.42	0.18
241	5.0	-0.28	0.08
242	4.5	-0.78	0.61
243	5.2	-0.08	0.01
244	6.7	1.42	2.02
245	6.5	1.22	1.49
246	4.9	-0.38	0.14
247	4.4	-0.88	0.77
248	8.2	2.92	8.53
249	3.9	-1.38	1.90
250	3.8	-1.48	2.19
	268.8		65.6
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

**n = pCi/g TOTAL U**

Number	n	(n-N)	(n-N) <sup>2</sup>
251	6.1	0.82	0.67
252	4.9	-0.38	0.14
253	3.5	-1.78	3.16
254	3.8	-1.48	2.19
255	4.0	-1.28	1.64
256	5.5	0.22	0.05
257	5.1	-0.18	0.03
258	6.7	1.42	2.02
259	3.8	-1.48	2.19
260	5.6	0.32	0.10
261	5.1	-0.18	0.03
262	7.6	2.32	5.39
263	7.3	2.02	4.08
264	6.5	1.22	1.49
265	5.4	0.12	0.01
266	5.2	-0.08	0.01
267	6.1	0.82	0.67
268	4.8	-0.48	0.23
269	5.9	0.62	0.39
270	4.9	-0.38	0.14
271	5.2	-0.08	0.01
272	6.7	1.42	2.02
273	5.4	0.12	0.01
274	6.6	1.32	1.75
275	4.6	-0.68	0.46
276	6.3	1.02	1.04
277	4.3	-0.98	0.96
278	6.1	0.82	0.67
279	4.4	-0.88	0.77
280	7.0	1.72	2.96
281	6.5	1.22	1.49
282	5.0	-0.28	0.08
283	4.6	-0.68	0.46
284	5.3	0.02	0.00
285	6.6	1.32	1.75
286	5.8	0.52	0.27
287	5.2	-0.08	0.01
288	3.4	-1.88	3.53
289	3.8	-1.48	2.19
290	5.2	-0.08	0.01
291	5.0	-0.28	0.08
292	6.5	1.22	1.49
293	6.7	1.42	2.02
294	3.4	-1.88	3.53
295	6.8	1.52	2.31
296	6.1	0.82	0.67
297	5.9	0.62	0.39
298	6.9	1.62	2.63
299	5.6	0.32	0.10
300	4.6	-0.68	0.46
	273.3		58.8
	Sum(n)		Sum(n-N) <sup>2</sup>

**n = pCi/g TOTAL U**

Number	n	(n-N)	(n-N) <sup>2</sup>
301	7.5	2.22	4.93
302	7.9	2.62	6.87
303	5.7	0.42	0.18
304	5.6	0.32	0.10
305	5.5	0.22	0.05
306	5.5	0.22	0.05
307	7.3	2.02	4.08
308	5.6	0.32	0.10
309	5.9	0.62	0.39
310	5.7	0.42	0.18
311	5.5	0.22	0.05
312	7.6	2.32	5.39
313	6.0	0.72	0.52
314	7.3	2.02	4.08
315	4.5	-0.78	0.61
316	5.0	-0.28	0.08
317	5.3	0.02	0.00
318	7.6	2.32	5.39
319	5.6	0.32	0.10
320	4.7	-0.58	0.34
321	4.5	-0.78	0.61
322	4.2	-1.08	1.16
323	6.3	1.02	1.04
324	3.1	-2.18	4.75
325	6.3	1.02	1.04
326	6.1	0.82	0.67
327	3.0	-2.28	5.19
328	4.9	-0.38	0.14
329	4.6	-0.68	0.46
330	6.7	1.42	2.02
331	3.7	-1.58	2.49
332	7.2	1.92	3.69
333	5.6	0.32	0.10
334	6.3	1.02	1.04
335	4.1	-1.18	1.39
336	5.2	-0.08	0.01
337	5.8	0.52	0.27
338	7.1	1.82	3.32
339	5.1	-0.18	0.03
340	6.2	0.92	0.85
341	4.1	-1.18	1.39
342	6.3	1.02	1.04
343	7.0	1.72	2.96
344	3.5	-1.78	3.16
345	5.1	-0.18	0.03
346	3.7	-1.58	2.49
347	5.6	0.32	0.10
348	5.4	0.12	0.01
349	7.0	1.72	2.96
350	5.0	-0.28	0.08
	280.0		78.0
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

**n = pCi/g TOTAL U**

Number	n	(n-N)	(n-N) <sup>2</sup>
351	5.4	0.12	0.01
352	2.8	-2.48	6.15
353	3.9	-1.38	1.90
354	5.1	-0.18	0.03
355	7.7	2.42	5.86
356	7.4	2.12	4.50
357	4.3	-0.98	0.96
358	7.2	1.92	3.69
359	7.0	1.72	2.96
360	6.2	0.92	0.85
361	6.1	0.82	0.67
362	5.7	0.42	0.18
363	5.2	-0.08	0.01
364	4.1	-1.18	1.39
365	5.7	0.42	0.18
366	5.4	0.12	0.01
367	4.9	-0.38	0.14
368	5.4	0.12	0.01
369	6.0	0.72	0.52
370	7.5	2.22	4.93
371	6.0	0.72	0.52
372	7.1	1.82	3.32
373	3.4	-1.88	3.53
374	4.5	-0.78	0.61
375	4.2	-1.08	1.16
376	4.7	-0.58	0.34
377	5.7	0.42	0.18
378	7.7	2.42	5.86
379	5.1	-0.18	0.03
380	6.8	1.52	2.31
381	3.2	-2.08	4.32
382	4.3	-0.98	0.96
383	2.8	-2.48	6.15
384	4.9	-0.38	0.14
385	5.8	0.52	0.27
386	4.8	-0.48	0.23
387	5.9	0.62	0.39
388	5.9	0.62	0.39
389	4.4	-0.88	0.77
390	4.1	-1.18	1.39
391	6.1	0.82	0.67
392	4.1	-1.18	1.39
393	5.0	-0.28	0.08
394	4.2	-1.08	1.16
395	6.7	1.42	2.02
396	7.5	2.22	4.93
397	4.5	-0.78	0.61
398	6.5	1.22	1.49
399	5.2	-0.08	0.01
400	5.3	0.02	0.00
	269.4		80.2
	Sum(n)		Sum(n-N) <sup>2</sup>

**n = pCi/g TOTAL U**

Number	n	(n-N)	(n-N) <sup>2</sup>
401	4.7	-0.58	0.34
402	5.3	0.02	0.00
403	4.6	-0.48	0.23
404	5.1	-0.18	0.03
405	5.4	0.12	0.01
406	4.4	-0.88	0.77
407	6.9	1.62	2.63
408	6.4	1.12	1.26
409	4.1	-1.18	1.39
410	5.9	0.62	0.39
411	6.1	0.82	0.67
412	5.3	0.02	0.00
413	5.0	-0.28	0.08
414	3.7	-1.58	2.49
415	4.5	-0.78	0.61
416	5.2	-0.08	0.01
417	6.0	0.72	0.52
418	7.7	2.42	5.86
419	7.5	2.22	4.93
420	5.4	0.12	0.01
421	5.9	0.62	0.39
422	4.5	-0.78	0.61
423	5.0	-0.28	0.08
424	5.2	-0.08	0.01
425	6.4	1.12	1.26
426	8.0	2.72	7.40
427	7.1	1.82	3.32
428	4.5	-0.78	0.61
429	5.1	-0.18	0.03
430	6.0	0.72	0.52
431	6.8	1.52	2.31
432	4.7	-0.58	0.34
433	4.9	-0.38	0.14
434	5.3	0.02	0.00
435	5.6	0.32	0.10
436	4.8	-0.48	0.23
437	6.9	1.62	2.63
438	3.4	-1.88	3.53
439	4.5	-0.78	0.61
440	4.2	-1.08	1.16
441	3.6	-1.68	2.82
442	7.3	2.02	4.08
443	5.5	0.22	0.05
444	4.9	-0.38	0.14
445	5.6	0.32	0.10
446	4.6	-0.68	0.46
447	4.5	-0.78	0.61
448	4.7	-0.58	0.34
449	5.6	0.32	0.10
450	4.9	-0.38	0.14
	269.4		56.3
	Sum(n)		Sum(n-N) <sup>2</sup>



**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**  
**AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
451	5.0	-0.28	0.08
452	3.1	-2.18	4.75
453	3.1	-2.18	4.75
454	3.3	-1.98	3.92
455	7.9	2.62	6.87
456	5.5	0.22	0.05
457	3.3	-1.98	3.92
458	2.3	-2.98	8.87
459	5.1	-0.18	0.03
460	6.2	0.92	0.85
461	4.8	-0.48	0.23
462	6.6	1.32	1.75
463	5.0	-0.28	0.08
464	2.3	-2.98	8.87
465	4.6	-0.68	0.46
466	4.9	-0.38	0.14
467	5.3	0.02	0.00
468	4.6	-0.68	0.46
469	5.0	-0.28	0.08
470	4.5	-0.78	0.61
471	3.3	-1.98	3.92
472	6.3	1.02	1.04
473	6.2	0.92	0.85
474	5.1	-0.18	0.03
475	5.9	0.62	0.39
476	3.5	-1.78	3.16
477	6.9	1.62	2.63
478	4.8	-0.48	0.23
479	4.1	-1.18	1.39
480	5.0	-0.28	0.08
481	2.0	-3.28	10.75
482	3.4	-1.88	3.53
483	4.7	-0.58	0.34
484	5.4	0.12	0.01
485	5.6	0.32	0.10
486	5.8	0.52	0.27
487	4.2	-1.08	1.16
488	3.8	-1.48	2.19
489	4.8	-0.48	0.23
490	5.3	0.02	0.00
491	4.7	-0.58	0.34
492	5.2	-0.08	0.01
493	6.0	0.72	0.52
494	2.6	-2.68	7.18
495	3.6	-1.68	2.82
496	7.3	2.02	4.08
497	6.5	1.22	1.49
498	6.6	1.32	1.75
499	5.0	-0.28	0.08
500	5.0	-0.28	0.08
	241.0		97.4
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
501	6.3	1.02	1.04
502	6.0	0.72	0.52
503	6.1	0.82	0.67
504	5.4	0.12	0.01
505	6.0	0.72	0.52
506	5.7	0.42	0.18
507	3.9	-1.38	1.90
508	4.5	-0.78	0.61
509	3.8	-1.48	2.19
510	2.3	-2.98	8.87
511	5.0	-0.28	0.08
512	6.0	0.72	0.52
513	5.8	0.52	0.27
514	7.4	2.12	4.50
515	4.3	-0.98	0.96
516	5.9	0.62	0.39
517	6.7	1.42	2.02
518	6.5	1.22	1.49
519	9.1	3.82	14.60
520	7.8	2.52	6.36
521	5.1	-0.18	0.03
522	2.7	-2.58	6.65
523	6.3	1.02	1.04
524	6.9	1.62	2.63
525	4.7	-0.58	0.34
526	5.6	0.32	0.10
527	7.0	1.72	2.96
528	6.6	1.32	1.75
529	5.2	-0.08	0.01
530	6.2	0.92	0.85
531	8.3	3.02	9.13
532	5.6	0.32	0.10
533	5.1	-0.18	0.03
534	6.6	1.32	1.75
535	5.8	0.52	0.27
536	3.1	-2.18	4.75
537	3.1	-2.18	4.75
538	6.1	0.82	0.67
539	4.7	-0.58	0.34
540	3.5	-1.78	3.16
541	2.5	-2.78	7.72
542	6.1	0.82	0.67
543	5.9	0.62	0.39
544	4.8	-0.48	0.23
545	3.7	-1.58	2.49
546	4.9	-0.38	0.14
547	4.3	-0.98	0.96
548	3.1	-2.18	4.75
549	5.3	0.02	0.00
550	5.8	0.52	0.27
	269.1		106.6
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
551	5.7	0.42	0.18
552	7.4	2.12	4.50
553	7.2	1.92	3.69
554	6.6	1.32	1.75
555	2.5	-2.78	7.72
556	6.8	1.52	2.31
557	6.5	1.22	1.49
558	4.2	-1.08	1.16
559	4.7	-0.58	0.34
560	4.3	-0.98	0.96
561	2.5	-2.78	7.72
562	7.5	2.22	4.93
563	8.1	2.82	7.96
564	3.1	-2.18	4.75
565	5.4	0.12	0.01
566	5.1	-0.18	0.03
567	5.3	0.02	0.00
568	5.7	0.42	0.18
569	5.4	0.12	0.01
570	5.4	0.12	0.01
571	6.0	0.72	0.52
572	4.6	-0.68	0.46
573	2.2	-3.08	9.48
574	7.2	1.92	3.69
575	2.8	-2.48	6.15
576	6.2	0.92	0.85
577	6.4	1.12	1.26
578	3.0	-2.28	5.19
579	6.8	1.52	2.31
580	5.1	-0.18	0.03
581	4.0	-1.28	1.64
582	6.0	0.72	0.52
583	6.1	0.82	0.67
584	4.5	-0.78	0.61
585	7.1	1.82	3.32
586	5.0	-0.28	0.08
587	3.1	-2.18	4.75
588	5.1	-0.18	0.03
589	5.3	0.02	0.00
590	5.4	0.12	0.01
591	5.4	0.12	0.01
592	6.3	1.02	1.04
593	3.5	-1.78	3.16
594	5.6	0.32	0.10
595	3.1	-2.18	4.75
596	7.0	1.72	2.96
597	6.1	0.82	0.67
598	6.6	1.32	1.75
599	6.7	1.42	2.02
600	6.0	0.72	0.52
	267.6		108.3
	Sum(n)		Sum(n-N)

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
601	7.1	1.82	3.32
602	4.9	-0.38	0.14
603	4.6	-0.68	0.46
604	4.7	-0.58	0.34
605	3.6	-1.68	2.82
606	3.0	-2.28	5.19
607	5.0	-0.28	0.08
608	5.1	-0.18	0.03
609	3.3	-1.98	3.92
610	3.4	-1.88	3.53
611	1.0	-4.28	18.31
612	6.2	0.92	0.85
613	6.5	1.22	1.49
614	6.7	1.42	2.02
615	4.3	-0.98	0.96
616	5.6	0.32	0.10
617	3.7	-1.58	2.49
618	4.4	-0.88	0.77
619	3.5	-1.78	3.16
620	4.8	-0.48	0.23
621	3.2	-2.08	4.32
622	3.3	-1.98	3.92
623	1.6	-3.68	13.53
624	3.1	-2.18	4.75
625	5.2	-0.08	0.01
626	2.0	-3.28	10.75
627	3.2	-2.08	4.32
628	2.3	-2.98	8.87
629	5.2	-0.08	0.01
630	6.7	1.42	2.02
631	6.5	1.22	1.49
632	4.3	-0.98	0.96
633	4.6	-0.68	0.46
634	7.2	1.92	3.69
635	5.0	-0.28	0.08
636	4.6	-0.68	0.46
637	5.4	0.12	0.01
638	4.7	-0.58	0.34
639	6.5	1.22	1.49
640	6.1	0.82	0.67
641	4.7	-0.58	0.34
642	2.2	-3.08	9.48
643	6.3	1.02	1.04
644	2.6	-2.68	7.18
645	6.0	0.72	0.52
646	5.1	-0.18	0.03
647	4.4	-0.88	0.77
648	3.1	-2.18	4.75
649	6.4	1.12	1.26
650	2.8	-2.48	6.15
	225.7		143.9
	Sum(n)		Sum(n-N)



**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**  
**AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
651	6.3	1.02	1.04
652	4.2	-1.08	1.16
653	1.7	-3.58	12.81
654	2.1	-3.18	10.11
655	5.9	0.62	0.39
656	4.2	-1.08	1.16
657	5.2	-0.08	0.01
658	3.0	-2.28	5.19
659	6.7	1.42	2.02
660	4.8	-0.48	0.23
661	5.6	0.32	0.10
662	4.1	-1.18	1.39
663	3.6	-1.68	2.82
664	5.7	0.42	0.18
665	5.2	-0.08	0.01
666	4.2	-1.08	1.16
667	4.2	-1.08	1.16
668	5.9	0.62	0.39
669	3.6	-1.68	2.82
670	5.3	0.02	0.00
671	4.9	-0.38	0.14
672	5.7	0.42	0.18
673	4.3	-0.98	0.96
674	6.3	1.02	1.04
675	5.2	-0.08	0.01
676	3.4	-1.88	3.53
677	4.4	-0.88	0.77
678	6.0	0.72	0.52
679	4.4	-0.88	0.77
680	5.3	0.02	0.00
681	5.4	0.12	0.01
682	7.1	1.82	3.32
683	6.1	0.82	0.67
684	6.0	0.72	0.52
685	5.9	0.62	0.39
686	5.4	0.12	0.01
687	5.8	0.52	0.27
688	3.9	-1.38	1.90
689	4.2	-1.08	1.16
690	4.1	-1.18	1.39
691	4.6	-0.68	0.46
692	6.6	1.32	1.75
693	4.0	-1.28	1.64
694	3.8	-1.48	2.19
695	4.2	-1.08	1.16
696	5.0	-0.28	0.08
697	6.0	0.72	0.52
698	6.3	1.02	1.04
699	5.3	0.02	0.00
700	4.1	-1.18	1.39
	245.2		71.9
	Sum(n)		Sum(n-N)

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
701	6.7	1.42	2.02
702	4.9	-0.38	0.14
703	6.4	1.12	1.26
704	6.4	1.12	1.26
705	5.3	0.02	0.00
706	6.6	1.32	1.75
707	6.9	1.62	2.63
708	5.8	0.52	0.27
709	3.8	-1.48	2.19
710	6.9	1.62	2.63
711	4.7	-0.58	0.34
712	3.6	-1.68	2.82
713	4.2	-1.08	1.16
714	6.7	1.42	2.02
715	4.0	-1.28	1.64
716	5.8	0.52	0.27
717	3.2	-2.08	4.32
718	5.0	-0.28	0.08
719	4.9	-0.38	0.14
720	6.8	1.52	2.31
721	5.9	0.62	0.39
722	3.9	-1.38	1.90
723	5.0	-0.28	0.08
724	5.2	-0.08	0.01
725	5.2	-0.08	0.01
726	4.5	-0.78	0.61
727	4.3	-0.98	0.96
728	2.6	-2.68	7.18
729	6.0	0.72	0.52
730	4.7	-0.58	0.34
731	6.8	1.52	2.31
732	4.4	-0.88	0.77
733	6.9	1.62	2.63
734	5.2	-0.08	0.01
735	5.8	0.52	0.27
736	5.4	0.12	0.01
737	4.0	-1.28	1.64
738	4.9	-0.38	0.14
739	6.4	1.12	1.26
740	5.6	0.32	0.10
741	5.2	-0.08	0.01
742	3.3	-1.98	3.92
743	5.8	0.52	0.27
744	4.8	-0.48	0.23
745	4.3	-0.98	0.96
746	4.0	-1.28	1.64
747	1.3	-3.98	15.83
748	6.6	1.32	1.75
749	3.9	-1.38	1.90
750	3.9	-1.38	1.90
	254.4		78.8
	Sum(n)		Sum(n-N)

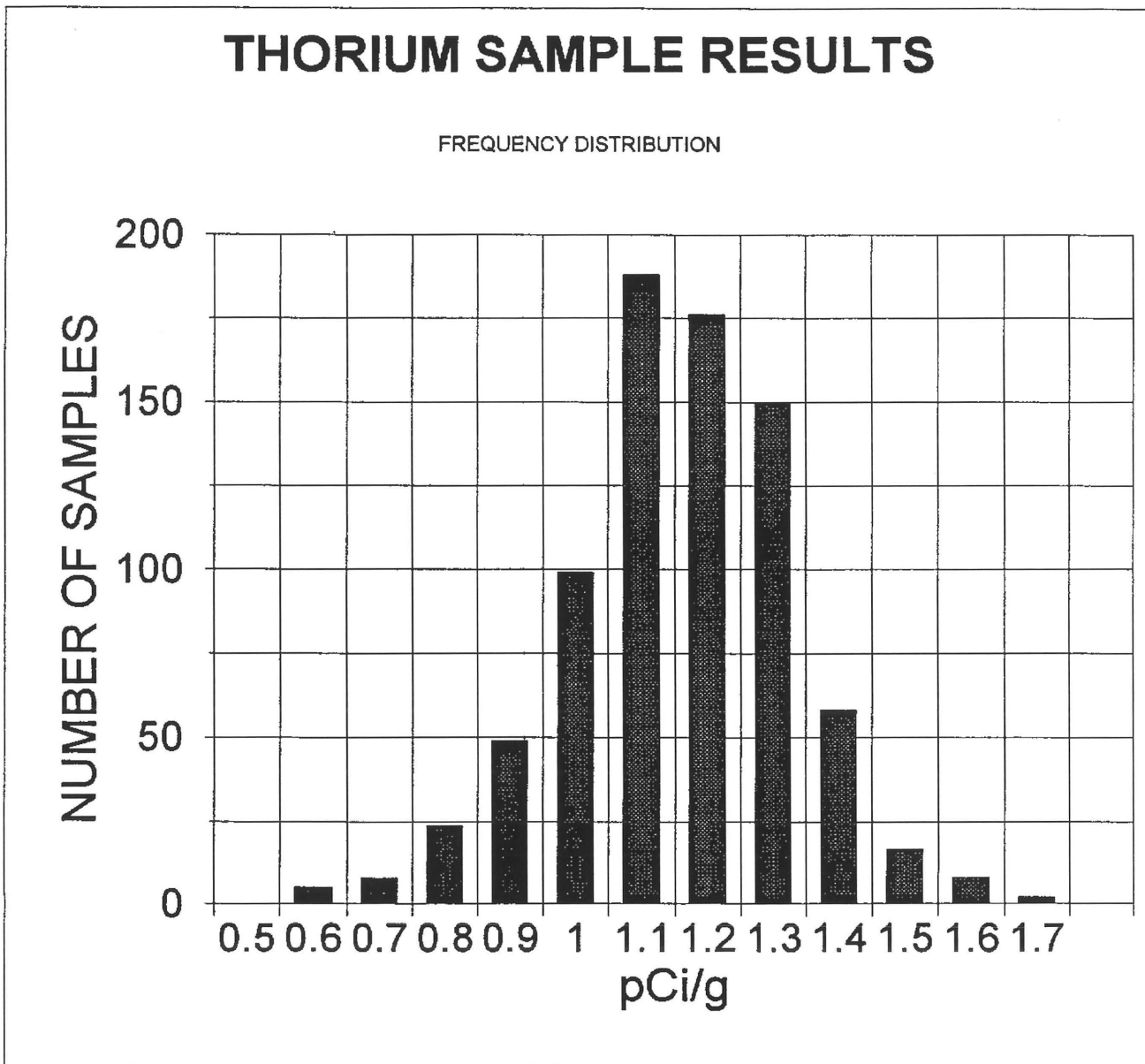
**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
751	6.9	1.62	2.63
752	4.5	-0.78	0.61
753	2.8	-2.48	6.15
754	3.8	-1.48	2.19
755	4.0	-1.28	1.64
756	3.9	-1.38	1.90
757	4.9	-0.38	0.14
758	6.1	0.82	0.67
759	5.4	0.12	0.01
760	6.6	1.32	1.75
761	4.3	-0.98	0.96
762	2.3	-2.98	8.87
763	7.1	1.82	3.32
764	6.0	0.72	0.52
765	5.8	0.52	0.27
766	6.3	1.02	1.04
767	6.6	1.32	1.75
768	6.5	1.22	1.49
769	6.0	0.72	0.52
770	5.3	0.02	0.00
771	6.5	1.22	1.49
772	6.0	0.72	0.52
773	6.9	1.62	2.63
774	6.7	1.42	2.02
775	6.1	0.82	0.67
776	7.4	2.12	4.50
777	4.7	-0.58	0.34
778	5.4	0.12	0.01
779	3.8	-1.48	2.19
780	5.8	0.52	0.27
781	5.6	0.32	0.10
782	4.6	-0.68	0.46
783	4.6	-0.68	0.46
784		0.00	0.00
785		0.00	0.00
786		0.00	0.00
787		0.00	0.00
788		0.00	0.00
789		0.00	0.00
790		0.00	0.00
791		0.00	0.00
792		0.00	0.00
793		0.00	0.00
794		0.00	0.00
795		0.00	0.00
796		0.00	0.00
797		0.00	0.00
798		0.00	0.00
799		0.00	0.00
800		0.00	0.00
	179.2		52.1
	Sum(n)		Sum(n-N)

n = pCi/g TOTAL U			
Number	n	(n-N)	(n-N) <sup>2</sup>
801		0.00	0.00
802		0.00	0.00
803		0.00	0.00
804		0.00	0.00
805		0.00	0.00
806		0.00	0.00
807		0.00	0.00
808		0.00	0.00
809		0.00	0.00
810		0.00	0.00
811		0.00	0.00
812		0.00	0.00
813		0.00	0.00
814		0.00	0.00
815		0.00	0.00
816		0.00	0.00
817		0.00	0.00
818		0.00	0.00
819		0.00	0.00
820		0.00	0.00
821		0.00	0.00
822		0.00	0.00
823		0.00	0.00
824		0.00	0.00
825		0.00	0.00
826		0.00	0.00
827		0.00	0.00
828		0.00	0.00
829		0.00	0.00
830		0.00	0.00
831		0.00	0.00
832		0.00	0.00
833		0.00	0.00
834		0.00	0.00
835		0.00	0.00
836		0.00	0.00
837		0.00	0.00
838		0.00	0.00
839		0.00	0.00
840		0.00	0.00
841		0.00	0.00
842		0.00	0.00
843		0.00	0.00
844		0.00	0.00
845		0.00	0.00
846		0.00	0.00
847		0.00	0.00
848		0.00	0.00
849		0.00	0.00
850		0.00	0.00
	0.0		0.0
	Sum(n)		Sum(n-N)

Thursday, January 14, 1999

PHASE III - AREA "O" WASTE POND # 2- AFFECTED  
CIMARRON SOIL COUNTER SURFACE SAMPLES  
Th (NAT) SOIL SAMPLE RESULTS  
SITE BACKGROUND OF 1.5 pCi/g NOT SUBTRACTED  
OCTOBER 1998



NUMBER OF SAMPLES	783
AVERAGE SAMPLE	1.2
MINIMUM SAMPLE	0.6
MAXIMUM SAMPLE	1.7
STANDARD DEVIATION	0.2

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**  
**AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
1	1.1	-0.06	0.00
2	1.2	0.04	0.00
3	1.2	0.04	0.00
4	1.3	0.14	0.02
5	1.3	0.14	0.02
6	1.4	0.24	0.06
7	1.2	0.04	0.00
8	1.3	0.14	0.02
9	1.2	0.04	0.00
10	1.3	0.14	0.02
11	1.1	-0.06	0.00
12	0.8	-0.36	0.13
13	1.3	0.14	0.02
14	1.2	0.04	0.00
15	1.2	0.04	0.00
16	1.5	0.34	0.12
17	1.3	0.14	0.02
18	1.2	0.04	0.00
19	1.2	0.04	0.00
20	1.3	0.14	0.02
21	1.1	-0.06	0.00
22	1.1	-0.06	0.00
23	1.2	0.04	0.00
24	1.3	0.14	0.02
25	1.3	0.14	0.02
26	1.0	-0.16	0.02
27	1.1	-0.06	0.00
28	1.0	-0.16	0.02
29	1.0	-0.16	0.02
30	1.1	-0.06	0.00
31	1.1	-0.06	0.00
32	1.2	0.04	0.00
33	1.1	-0.06	0.00
34	1.0	-0.16	0.02
35	0.8	-0.36	0.13
36	0.8	-0.36	0.13
37	0.9	-0.26	0.07
38	1.3	0.14	0.02
39	1.0	-0.16	0.02
40	1.3	0.14	0.02
41	1.3	0.14	0.02
42	0.7	-0.46	0.21
43	0.8	-0.36	0.13
44	1.0	-0.16	0.02
45	1.0	-0.16	0.02
46	0.8	-0.36	0.13
47	0.9	-0.26	0.07
48	1.2	0.04	0.00
49	1.2	0.04	0.00
50	1.1	-0.06	0.00
	54.2		2.791
	61.7		1.552
	60.2		0.912
	61.9		1.149
	60.5		1.088
	59.9		1.316
	58.2		0.998
	56.2		0.904
	56.2		0.944
	57.4		0.668
	55.2		1.637
	49.1		2.798
	56.6		1.659
	59.1		1.946
	42.9		1.559
	0.0		0.000
total	905.6		23.544
	Sum(n)		Sum(n-N) <sup>2</sup>

No. of Samples (x) : 783

COUNT TIME: 15 MINUTES

Sample Mean (N) = Sum(n) / (x)

Sample Mean (N) : 1.16

Standard Deviation (Sd) = SQRT [(n-N)<sup>2</sup> / (x - 1)]

Standard Deviation: 0.17

2 Std Deviations: 0.35

Degree of Freedom(df) = (x) - 1 Data listed on Table B-1

(df) = 1.645

Area's Average Level (Ap) = (N) + (df) x (Sd)/sqrt(x)

(Ap) = 1.17 pCi/gTh (NAT)

GUIDELINE VALUE: 10 pCi/gTh (NAT)

Acceptable Level: 4.0 pCi/gTh (NAT)

(25% OF GUIDELINE PLUS BACKGROUND)

TABLE B - 1 Factors for Comparison of Survey Data with Guidelines					
(df)	95%	97.5%	(df)	95%	97.5%
1	6.314	12.706	19	1.729	2.093
2	2.92	4.303	20	1.725	2.086
3	2.353	3.182	21	1.721	2.08
4	2.132	2.776	22	1.717	2.074
5	2.015	2.571	23	1.714	2.069
6	1.943	2.447	24	1.711	2.064
7	1.895	2.365	25	1.708	2.06
8	1.86	2.306	26	1.706	2.056
9	1.833	2.262	27	1.703	2.052
10	1.812	2.228	28	1.701	2.048
11	1.796	2.201	29	1.699	2.045
12	1.782	2.179	30	1.697	2.042
13	1.771	2.16	40	1.684	2.021
14	1.761	2.145	60	1.671	2
15	1.753	2.131	120	1.658	1.98
16	1.746	2.12	400	1.649	1.966
17	1.74	2.11	Infinite	1.645	1.96
18	1.734	2.101			

For values of Degrees of Freedom not listed:

Interpolate between the listed values.

(df) high value(Z)	INFINITE	is (B)	1.645	95%
(df) low value(Y)	400	is (A)	1.645	95%

Desired value(df) (X) 782 is calculated as follow:

$$\text{EXP}[(\text{Ln}(B) - \text{Ln}(A)) + (Z - Y) / (X - Y) + \text{Ln}(A)]$$

The (df) value for (X) 782 1.645 95%

PERFORMED BY: W. G. Rogers

DATE: 1-14-99

REVIEWED BY: W. G. Rogers

DATE: 1-14-99

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
51	1.1	-0.06	0.00
52	1.4	0.24	0.06
53	1.4	0.24	0.06
54	1.4	0.24	0.06
55	1.2	0.04	0.00
56	1.1	-0.06	0.00
57	1.2	0.04	0.00
58	1.7	0.54	0.30
59	1.2	0.04	0.00
60	1.2	0.04	0.00
61	1.4	0.24	0.06
62	1.1	-0.06	0.00
63	1.1	-0.06	0.00
64	1.2	0.04	0.00
65	1.2	0.04	0.00
66	1.2	0.04	0.00
67	1.0	-0.16	0.02
68	0.6	-0.56	0.31
69	0.6	-0.56	0.31
70	0.8	-0.36	0.13
71	1.1	-0.06	0.00
72	1.3	0.14	0.02
73	1.6	0.44	0.20
74	1.1	-0.06	0.00
75	1.1	-0.06	0.00
76	0.9	-0.26	0.07
77	1.1	-0.06	0.00
78	0.9	-0.26	0.07
79	1.0	-0.16	0.02
80	1.2	0.04	0.00
81	1.1	-0.06	0.00
82	1.2	0.04	0.00
83	1.0	-0.16	0.02
84	0.9	-0.26	0.07
85	1.0	-0.16	0.02
86	1.2	0.04	0.00
87	1.2	0.04	0.00
88	0.8	-0.36	0.13
89	0.9	-0.26	0.07
90	0.9	-0.26	0.07
91	0.6	-0.56	0.31
92	1.0	-0.16	0.02
93	1.0	-0.16	0.02
94	0.7	-0.46	0.21
95	1.0	-0.16	0.02
96	1.0	-0.16	0.02
97	0.9	-0.26	0.07
98	1.1	-0.06	0.00
99	1.1	-0.06	0.00
100	1.2	0.04	0.00
	54.2		2.791
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
101	1.1	-0.06	0.00
102	1.0	-0.16	0.02
103	1.5	0.34	0.12
104	1.7	0.54	0.30
105	1.1	-0.06	0.00
106	1.0	-0.16	0.02
107	1.3	0.14	0.02
108	1.1	-0.06	0.00
109	1.3	0.14	0.02
110	1.6	0.44	0.20
111	1.2	0.04	0.00
112	1.4	0.24	0.06
113	1.4	0.24	0.06
114	1.3	0.14	0.02
115	1.1	-0.06	0.00
116	1.1	-0.06	0.00
117	1.1	-0.06	0.00
118	1.1	-0.06	0.00
119	1.2	0.04	0.00
120	1.2	0.04	0.00
121	1.0	-0.16	0.02
122	1.5	0.34	0.12
123	1.2	0.04	0.00
124	1.2	0.04	0.00
125	1.3	0.14	0.02
126	1.2	0.04	0.00
127	1.3	0.14	0.02
128	1.2	0.04	0.00
129	1.2	0.04	0.00
130	1.2	0.04	0.00
131	1.1	-0.06	0.00
132	1.0	-0.16	0.02
133	1.3	0.14	0.02
134	1.4	0.24	0.06
135	1.4	0.24	0.06
136	1.3	0.14	0.02
137	1.4	0.24	0.06
138	1.2	0.04	0.00
139	1.4	0.24	0.06
140	1.3	0.14	0.02
141	1.2	0.04	0.00
142	1.1	-0.06	0.00
143	1.2	0.04	0.00
144	1.3	0.14	0.02
145	1.4	0.24	0.06
146	1.2	0.04	0.00
147	1.3	0.14	0.02
148	1.0	-0.16	0.02
149	1.0	-0.16	0.02
150	1.1	-0.06	0.00
	61.7		1.552
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
151	1.2	0.04	0.00
152	1.2	0.04	0.00
153	1.3	0.14	0.02
154	1.0	-0.16	0.02
155	1.2	0.04	0.00
156	1.2	0.04	0.00
157	1.3	0.14	0.02
158	1.3	0.14	0.02
159	1.2	0.04	0.00
160	1.3	0.14	0.02
161	1.3	0.14	0.02
162	1.0	-0.16	0.02
163	1.2	0.04	0.00
164	1.1	-0.06	0.00
165	1.1	-0.06	0.00
166	1.3	0.14	0.02
167	1.4	0.24	0.06
168	1.0	-0.16	0.02
169	1.3	0.14	0.02
170	1.1	-0.06	0.00
171	1.1	-0.06	0.00
172	1.1	-0.06	0.00
173	1.2	0.04	0.00
174	1.3	0.14	0.02
175	1.3	0.14	0.02
176	1.0	-0.16	0.02
177	1.1	-0.06	0.00
178	1.2	0.04	0.00
179	1.2	0.04	0.00
180	1.3	0.14	0.02
181	1.1	-0.06	0.00
182	1.1	-0.06	0.00
183	0.9	-0.26	0.07
184	1.1	-0.06	0.00
185	1.1	-0.06	0.00
186	1.3	0.14	0.02
187	1.3	0.14	0.02
188	1.1	-0.06	0.00
189	1.3	0.14	0.02
190	1.2	0.04	0.00
191	1.2	0.04	0.00
192	1.3	0.14	0.02
193	1.1	-0.06	0.00
194	1.2	0.04	0.00
195	1.5	0.34	0.12
196	1.5	0.34	0.12
197	1.1	-0.06	0.00
198	1.3	0.14	0.02
199	1.4	0.24	0.06
200	1.3	0.14	0.02
	60.2		0.912
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
201	1.3	0.14	0.02
202	1.4	0.24	0.06
203	1.1	-0.06	0.00
204	1.3	0.14	0.02
205	1.3	0.14	0.02
206	1.2	0.04	0.00
207	1.4	0.24	0.06
208	1.1	-0.06	0.00
209	1.3	0.14	0.02
210	1.1	-0.06	0.00
211	1.2	0.04	0.00
212	1.1	-0.06	0.00
213	1.4	0.24	0.06
214	1.1	-0.06	0.00
215	1.4	0.24	0.06
216	1.4	0.24	0.06
217	1.3	0.14	0.02
218	1.4	0.24	0.06
219	1.1	-0.06	0.00
220	1.1	-0.06	0.00
221	1.3	0.14	0.02
222	1.5	0.34	0.12
223	1.2	0.04	0.00
224	1.2	0.04	0.00
225	1.0	-0.16	0.02
226	1.1	-0.06	0.00
227	1.2	0.04	0.00
228	1.3	0.14	0.02
229	1.2	0.04	0.00
230	1.3	0.14	0.02
231	1.5	0.34	0.12
232	1.0	-0.16	0.02
233	1.2	0.04	0.00
234	1.2	0.04	0.00
235	1.1	-0.06	0.00
236	1.3	0.14	0.02
237	1.1	-0.06	0.00
238	1.3	0.14	0.02
239	1.4	0.24	0.06
240	1.0	-0.16	0.02
241	1.3	0.14	0.02
242	1.2	0.04	0.00
243	1.3	0.14	0.02
244	1.1	-0.06	0.00
245	1.3	0.14	0.02
246	1.3	0.14	0.02
247	1.3	0.14	0.02
248	1.1	-0.06	0.00
249	1.4	0.24	0.06
250	1.2	0.04	0.00
	61.9		1.149
	Sum(n)		Sum(n-N) <sup>2</sup>



**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
251	1.2	0.04	0.00
252	1.4	0.24	0.06
253	1.0	-0.16	0.02
254	1.2	0.04	0.00
255	1.1	-0.06	0.00
256	1.2	0.04	0.00
257	1.2	0.04	0.00
258	1.1	-0.06	0.00
259	1.3	0.14	0.02
260	1.3	0.14	0.02
261	1.2	0.04	0.00
262	1.3	0.14	0.02
263	1.3	0.14	0.02
264	1.1	-0.06	0.00
265	0.9	-0.26	0.07
266	1.2	0.04	0.00
267	1.3	0.14	0.02
268	1.2	0.04	0.00
269	1.1	-0.06	0.00
270	1.3	0.14	0.02
271	1.4	0.24	0.06
272	1.3	0.14	0.02
273	1.0	-0.16	0.02
274	1.3	0.14	0.02
275	1.5	0.34	0.12
276	1.3	0.14	0.02
277	1.1	-0.06	0.00
278	1.3	0.14	0.02
279	1.4	0.24	0.06
280	1.1	-0.06	0.00
281	1.2	0.04	0.00
282	1.4	0.24	0.06
283	1.2	0.04	0.00
284	1.4	0.24	0.06
285	1.2	0.04	0.00
286	1.0	-0.16	0.02
287	1.1	-0.06	0.00
288	1.1	-0.06	0.00
289	1.2	0.04	0.00
290	1.3	0.14	0.02
291	1.3	0.14	0.02
292	1.2	0.04	0.00
293	0.8	-0.36	0.13
294	1.1	-0.06	0.00
295	1.1	-0.06	0.00
296	1.4	0.24	0.06
297	1.2	0.04	0.00
298	1.1	-0.06	0.00
299	1.3	0.14	0.02
300	1.3	0.14	0.02
	60.5		1.088
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
301	1.1	-0.06	0.00
302	1.2	0.04	0.00
303	1.2	0.04	0.00
304	1.5	0.34	0.12
305	1.5	0.34	0.12
306	1.5	0.34	0.12
307	1.4	0.24	0.06
308	1.4	0.24	0.06
309	1.2	0.04	0.00
310	1.3	0.14	0.02
311	1.4	0.24	0.06
312	1.2	0.04	0.00
313	1.5	0.34	0.12
314	1.2	0.04	0.00
315	1.3	0.14	0.02
316	1.2	0.04	0.00
317	1.3	0.14	0.02
318	1.1	-0.06	0.00
319	1.2	0.04	0.00
320	1.3	0.14	0.02
321	1.3	0.14	0.02
322	1.1	-0.06	0.00
323	1.3	0.14	0.02
324	1.1	-0.06	0.00
325	1.2	0.04	0.00
326	1.2	0.04	0.00
327	1.2	0.04	0.00
328	1.4	0.24	0.06
329	1.2	0.04	0.00
330	0.9	-0.26	0.07
331	1.1	-0.06	0.00
332	1.1	-0.06	0.00
333	1.2	0.04	0.00
334	1.2	0.04	0.00
335	1.1	-0.06	0.00
336	1.2	0.04	0.00
337	1.1	-0.06	0.00
338	1.1	-0.06	0.00
339	1.0	-0.16	0.02
340	1.0	-0.16	0.02
341	0.9	-0.26	0.07
342	1.2	0.04	0.00
343	1.1	-0.06	0.00
344	0.9	-0.26	0.07
345	1.1	-0.06	0.00
346	1.3	0.14	0.02
347	1.3	0.14	0.02
348	0.8	-0.36	0.13
349	1.1	-0.06	0.00
350	1.2	0.04	0.00
	59.9		1.316
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)				n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>	Number	n	(n-N)	(n-N) <sup>2</sup>
351	1.3	0.14	0.02	401	1.2	0.04	0.00
352	1.1	-0.06	0.00	402	0.9	-0.26	0.07
353	1.1	-0.06	0.00	403	1.0	-0.16	0.02
354	1.3	0.14	0.02	404	1.0	-0.16	0.02
355	1.1	-0.06	0.00	405	1.2	0.04	0.00
356	1.2	0.04	0.00	406	1.1	-0.06	0.00
357	1.3	0.14	0.02	407	1.2	0.04	0.00
358	0.9	-0.26	0.07	408	1.3	0.14	0.02
359	1.1	-0.06	0.00	409	1.0	-0.16	0.02
360	1.0	-0.16	0.02	410	1.1	-0.06	0.00
361	1.0	-0.16	0.02	411	1.3	0.14	0.02
362	1.0	-0.16	0.02	412	1.0	-0.16	0.02
363	1.0	-0.16	0.02	413	1.2	0.04	0.00
364	1.3	0.14	0.02	414	1.2	0.04	0.00
365	1.0	-0.16	0.02	415	1.3	0.14	0.02
366	1.3	0.14	0.02	416	1.3	0.14	0.02
367	1.2	0.04	0.00	417	1.3	0.14	0.02
368	1.1	-0.06	0.00	418	1.1	-0.06	0.00
369	1.0	-0.16	0.02	419	1.1	-0.06	0.00
370	1.1	-0.06	0.00	420	1.0	-0.16	0.02
371	0.9	-0.26	0.07	421	1.2	0.04	0.00
372	1.3	0.14	0.02	422	1.1	-0.06	0.00
373	1.2	0.04	0.00	423	1.0	-0.16	0.02
374	1.0	-0.16	0.02	424	1.0	-0.16	0.02
375	1.3	0.14	0.02	425	1.1	-0.06	0.00
376	1.3	0.14	0.02	426	1.0	-0.16	0.02
377	1.4	0.24	0.06	427	1.1	-0.06	0.00
378	0.9	-0.26	0.07	428	1.0	-0.16	0.02
379	1.1	-0.06	0.00	429	1.4	0.24	0.06
380	1.4	0.24	0.06	430	1.1	-0.06	0.00
381	1.3	0.14	0.02	431	1.2	0.04	0.00
382	1.1	-0.06	0.00	432	0.9	-0.26	0.07
383	1.3	0.14	0.02	433	1.1	-0.06	0.00
384	1.4	0.24	0.06	434	1.2	0.04	0.00
385	1.3	0.14	0.02	435	1.0	-0.16	0.02
386	1.2	0.04	0.00	436	1.1	-0.06	0.00
387	1.1	-0.06	0.00	437	1.0	-0.16	0.02
388	1.1	-0.06	0.00	438	0.9	-0.26	0.07
389	1.3	0.14	0.02	439	1.0	-0.16	0.02
390	1.4	0.24	0.06	440	1.2	0.04	0.00
391	1.2	0.04	0.00	441	1.3	0.14	0.02
392	1.2	0.04	0.00	442	1.3	0.14	0.02
393	1.1	-0.06	0.00	443	1.1	-0.06	0.00
394	1.1	-0.06	0.00	444	1.4	0.24	0.06
395	1.1	-0.06	0.00	445	0.9	-0.26	0.07
396	1.0	-0.16	0.02	446	1.1	-0.06	0.00
397	1.4	0.24	0.06	447	1.3	0.14	0.02
398	1.2	0.04	0.00	448	1.1	-0.06	0.00
399	1.1	-0.06	0.00	449	1.1	-0.06	0.00
400	1.1	-0.06	0.00	450	1.2	0.04	0.00
	58.2		0.998		56.2		0.904
	Sum(n)		Sum(n-N) <sup>2</sup>		Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
451	1.0	-0.16	0.02
452	1.1	-0.06	0.00
453	1.2	0.04	0.00
454	1.3	0.14	0.02
455	1.2	0.04	0.00
456	1.2	0.04	0.00
457	1.1	-0.06	0.00
458	1.2	0.04	0.00
459	1.1	-0.06	0.00
460	1.0	-0.16	0.02
461	1.0	-0.16	0.02
462	1.1	-0.06	0.00
463	1.1	-0.06	0.00
464	1.3	0.14	0.02
465	1.1	-0.06	0.00
466	1.0	-0.16	0.02
467	1.0	-0.16	0.02
468	1.2	0.04	0.00
469	0.9	-0.26	0.07
470	1.3	0.14	0.02
471	0.9	-0.26	0.07
472	1.0	-0.16	0.02
473	1.5	0.34	0.12
474	1.2	0.04	0.00
475	0.9	-0.26	0.07
476	1.0	-0.16	0.02
477	1.0	-0.16	0.02
478	1.0	-0.16	0.02
479	1.1	-0.06	0.00
480	1.3	0.14	0.02
481	1.4	0.24	0.06
482	1.2	0.04	0.00
483	1.1	-0.06	0.00
484	0.9	-0.26	0.07
485	1.1	-0.06	0.00
486	1.3	0.14	0.02
487	1.2	0.04	0.00
488	1.1	-0.06	0.00
489	1.0	-0.16	0.02
490	1.2	0.04	0.00
491	1.2	0.04	0.00
492	1.2	0.04	0.00
493	1.2	0.04	0.00
494	1.2	0.04	0.00
495	1.3	0.14	0.02
496	1.1	-0.06	0.00
497	1.1	-0.06	0.00
498	0.9	-0.26	0.07
499	1.1	-0.06	0.00
500	1.1	-0.06	0.00
	56.2		0.944
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
501	1.1	-0.06	0.00
502	1.1	-0.06	0.00
503	1.2	0.04	0.00
504	1.0	-0.16	0.02
505	1.1	-0.06	0.00
506	0.9	-0.26	0.07
507	0.9	-0.26	0.07
508	1.1	-0.06	0.00
509	1.4	0.24	0.06
510	1.3	0.14	0.02
511	1.0	-0.16	0.02
512	1.1	-0.06	0.00
513	1.2	0.04	0.00
514	1.2	0.04	0.00
515	1.4	0.24	0.06
516	1.0	-0.16	0.02
517	1.3	0.14	0.02
518	1.1	-0.06	0.00
519	1.2	0.04	0.00
520	1.2	0.04	0.00
521	1.2	0.04	0.00
522	1.2	0.04	0.00
523	1.2	0.04	0.00
524	1.1	-0.06	0.00
525	1.2	0.04	0.00
526	1.2	0.04	0.00
527	1.2	0.04	0.00
528	1.2	0.04	0.00
529	1.3	0.14	0.02
530	0.9	-0.26	0.07
531	1.1	-0.06	0.00
532	1.2	0.04	0.00
533	1.2	0.04	0.00
534	1.1	-0.06	0.00
535	1.1	-0.06	0.00
536	1.4	0.24	0.06
537	1.1	-0.06	0.00
538	1.2	0.04	0.00
539	1.1	-0.06	0.00
540	1.2	0.04	0.00
541	0.9	-0.26	0.07
542	1.1	-0.06	0.00
543	1.2	0.04	0.00
544	1.1	-0.06	0.00
545	1.1	-0.06	0.00
546	1.1	-0.06	0.00
547	1.2	0.04	0.00
548	1.2	0.04	0.00
549	1.2	0.04	0.00
550	1.1	-0.06	0.00
	57.4		0.668
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
551	1.0	-0.16	0.02
552	1.3	0.14	0.02
553	1.1	-0.06	0.00
554	1.1	-0.06	0.00
555	1.3	0.14	0.02
556	1.1	-0.06	0.00
557	1.2	0.04	0.00
558	1.2	0.04	0.00
559	1.2	0.04	0.00
560	1.4	0.24	0.06
561	1.1	-0.06	0.00
562	1.3	0.14	0.02
563	1.1	-0.06	0.00
564	1.0	-0.16	0.02
565	0.8	-0.36	0.13
566	1.2	0.04	0.00
567	1.1	-0.06	0.00
568	0.8	-0.36	0.13
569	1.1	-0.06	0.00
570	1.3	0.14	0.02
571	1.0	-0.16	0.02
572	1.1	-0.06	0.00
573	1.1	-0.06	0.00
574	1.0	-0.16	0.02
575	1.2	0.04	0.00
576	1.1	-0.06	0.00
577	0.8	-0.36	0.13
578	1.3	0.14	0.02
579	0.8	-0.36	0.13
580	1.4	0.24	0.06
581	1.3	0.14	0.02
582	1.0	-0.16	0.02
583	0.8	-0.36	0.13
584	1.0	-0.16	0.02
585	1.0	-0.16	0.02
586	0.9	-0.26	0.07
587	0.9	-0.26	0.07
588	1.0	-0.16	0.02
589	1.1	-0.06	0.00
590	1.1	-0.06	0.00
591	1.0	-0.16	0.02
592	1.3	0.14	0.02
593	1.2	0.04	0.00
594	1.0	-0.16	0.02
595	1.1	-0.06	0.00
596	1.1	-0.06	0.00
597	1.5	0.34	0.12
598	1.2	0.04	0.00
599	0.8	-0.36	0.13
600	1.4	0.24	0.06
	55.2		1.637
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
601	0.7	-0.46	0.21
602	1.0	-0.16	0.02
603	1.1	-0.06	0.00
604	1.0	-0.16	0.02
605	1.0	-0.16	0.02
606	0.8	-0.36	0.13
607	0.9	-0.26	0.07
608	0.8	-0.36	0.13
609	1.1	-0.06	0.00
610	1.1	-0.06	0.00
611	0.9	-0.26	0.07
612	1.0	-0.16	0.02
613	0.9	-0.26	0.07
614	0.9	-0.26	0.07
615	0.9	-0.26	0.07
616	1.0	-0.16	0.02
617	0.9	-0.26	0.07
618	1.0	-0.16	0.02
619	0.9	-0.26	0.07
620	1.2	0.04	0.00
621	1.2	0.04	0.00
622	1.1	-0.06	0.00
623	1.0	-0.16	0.02
624	1.1	-0.06	0.00
625	0.7	-0.46	0.21
626	0.9	-0.26	0.07
627	1.0	-0.16	0.02
628	1.3	0.14	0.02
629	1.2	0.04	0.00
630	1.1	-0.06	0.00
631	0.8	-0.36	0.13
632	0.7	-0.46	0.21
633	0.9	-0.26	0.07
634	0.9	-0.26	0.07
635	1.1	-0.06	0.00
636	1.2	0.04	0.00
637	0.9	-0.26	0.07
638	0.9	-0.26	0.07
639	0.9	-0.26	0.07
640	1.0	-0.16	0.02
641	0.8	-0.36	0.13
642	1.0	-0.16	0.02
643	0.8	-0.36	0.13
644	0.6	-0.56	0.31
645	1.1	-0.06	0.00
646	1.3	0.14	0.02
647	1.1	-0.06	0.00
648	1.3	0.14	0.02
649	1.0	-0.16	0.02
650	1.1	-0.06	0.00
	49.1		2.798
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
651	1.0	-0.16	0.02
652	0.7	-0.46	0.21
653	0.9	-0.26	0.07
654	1.0	-0.16	0.02
655	0.9	-0.26	0.07
656	0.7	-0.46	0.21
657	0.8	-0.36	0.13
658	1.2	0.04	0.00
659	1.2	0.04	0.00
660	1.3	0.14	0.02
661	1.1	-0.06	0.00
662	1.3	0.14	0.02
663	1.3	0.14	0.02
664	1.0	-0.16	0.02
665	1.1	-0.06	0.00
666	1.1	-0.06	0.00
667	1.1	-0.06	0.00
668	1.1	-0.06	0.00
669	1.3	0.14	0.02
670	1.2	0.04	0.00
671	1.3	0.14	0.02
672	1.4	0.24	0.06
673	1.6	0.44	0.20
674	1.1	-0.06	0.00
675	1.2	0.04	0.00
676	1.1	-0.06	0.00
677	1.1	-0.06	0.00
678	1.2	0.04	0.00
679	0.9	-0.26	0.07
680	1.0	-0.16	0.02
681	1.2	0.04	0.00
682	0.9	-0.26	0.07
683	1.0	-0.16	0.02
684	1.2	0.04	0.00
685	1.2	0.04	0.00
686	1.3	0.14	0.02
687	1.2	0.04	0.00
688	1.3	0.14	0.02
689	1.2	0.04	0.00
690	1.4	0.24	0.06
691	1.4	0.24	0.06
692	1.1	-0.06	0.00
693	1.2	0.04	0.00
694	1.1	-0.06	0.00
695	0.8	-0.36	0.13
696	1.1	-0.06	0.00
697	1.3	0.14	0.02
698	1.2	0.04	0.00
699	1.1	-0.06	0.00
700	1.2	0.04	0.00
	56.6		1.659
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
701	1.3	0.14	0.02
702	1.2	0.04	0.00
703	1.3	0.14	0.02
704	1.3	0.14	0.02
705	1.3	0.14	0.02
706	1.3	0.14	0.02
707	1.1	-0.06	0.00
708	1.3	0.14	0.02
709	1.0	-0.16	0.02
710	1.0	-0.16	0.02
711	1.4	0.24	0.06
712	1.4	0.24	0.06
713	1.6	0.44	0.20
714	1.2	0.04	0.00
715	1.2	0.04	0.00
716	1.1	-0.06	0.00
717	1.0	-0.16	0.02
718	1.4	0.24	0.06
719	1.3	0.14	0.02
720	1.2	0.04	0.00
721	1.3	0.14	0.02
722	1.0	-0.16	0.02
723	1.2	0.04	0.00
724	1.1	-0.06	0.00
725	1.1	-0.06	0.00
726	1.1	-0.06	0.00
727	0.8	-0.36	0.13
728	1.4	0.24	0.06
729	1.3	0.14	0.02
730	1.2	0.04	0.00
731	1.3	0.14	0.02
732	1.2	0.04	0.00
733	1.3	0.14	0.02
734	1.3	0.14	0.02
735	1.2	0.04	0.00
736	1.2	0.04	0.00
737	1.3	0.14	0.02
738	1.3	0.14	0.02
739	1.3	0.14	0.02
740	1.3	0.14	0.02
741	1.1	-0.06	0.00
742	1.6	0.44	0.20
743	1.1	-0.06	0.00
744	1.0	-0.16	0.02
745	0.7	-0.46	0.21
746	0.6	-0.56	0.31
747	1.0	-0.16	0.02
748	0.8	-0.36	0.13
749	1.1	-0.06	0.00
750	1.0	-0.16	0.02
	59.1		1.946
	Sum(n)		Sum(n-N) <sup>2</sup>



**CIMARRON CORPORATION - CIMARRON FACILITY  
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE  
AREA "O" WASTE POND # 2 (AFFECTED) SURFACE**

n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
751	1.2	0.04	0.00
752	0.9	-0.26	0.07
753	1.3	0.14	0.02
754	1.1	-0.06	0.00
755	1.3	0.14	0.02
756	1.2	0.04	0.00
757	1.1	-0.06	0.00
758	1.5	0.34	0.12
759	1.6	0.44	0.20
760	1.1	-0.06	0.00
761	1.4	0.24	0.06
762	1.6	0.44	0.20
763	1.3	0.14	0.02
764	1.3	0.14	0.02
765	1.3	0.14	0.02
766	1.4	0.24	0.06
767	1.2	0.04	0.00
768	1.5	0.34	0.12
769	1.4	0.24	0.06
770	1.2	0.04	0.00
771	1.3	0.14	0.02
772	1.5	0.34	0.12
773	1.1	-0.06	0.00
774	1.4	0.24	0.06
775	1.1	-0.06	0.00
776	1.1	-0.06	0.00
777	1.3	0.14	0.02
778	1.3	0.14	0.02
779	1.6	0.44	0.20
780	1.3	0.14	0.02
781	1.3	0.14	0.02
782	1.3	0.14	0.02
783	1.4	0.24	0.06
784		0.00	0.00
785		0.00	0.00
786		0.00	0.00
787		0.00	0.00
788		0.00	0.00
789		0.00	0.00
790		0.00	0.00
791		0.00	0.00
792		0.00	0.00
793		0.00	0.00
794		0.00	0.00
795		0.00	0.00
796		0.00	0.00
797		0.00	0.00
798		0.00	0.00
799		0.00	0.00
800		0.00	0.00
	42.9		1.559
	Sum(n)		Sum(n-N) <sup>2</sup>

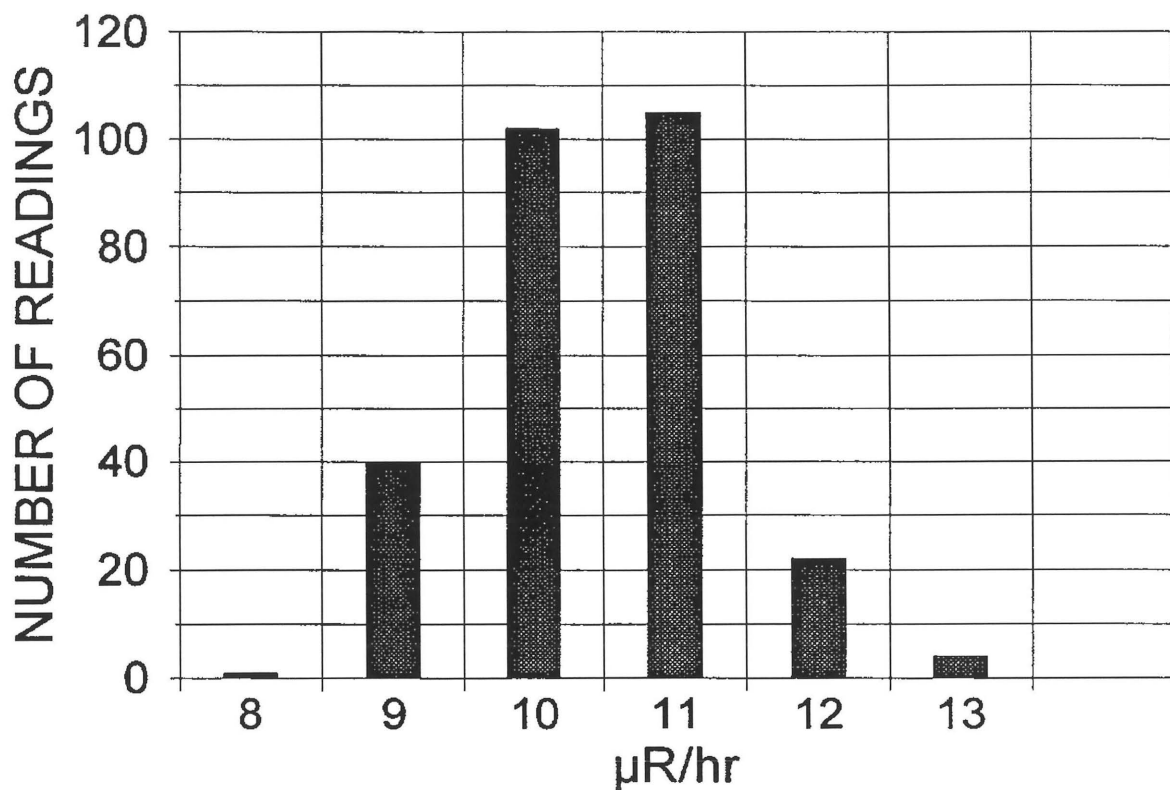
n = pCi/g Th (NAT)			
Number	n	(n-N)	(n-N) <sup>2</sup>
801		0.00	0.00
802		0.00	0.00
803		0.00	0.00
804		0.00	0.00
805		0.00	0.00
806		0.00	0.00
807		0.00	0.00
808		0.00	0.00
809		0.00	0.00
810		0.00	0.00
811		0.00	0.00
812		0.00	0.00
813		0.00	0.00
814		0.00	0.00
815		0.00	0.00
816		0.00	0.00
817		0.00	0.00
818		0.00	0.00
819		0.00	0.00
820		0.00	0.00
821		0.00	0.00
822		0.00	0.00
823		0.00	0.00
824		0.00	0.00
825		0.00	0.00
826		0.00	0.00
827		0.00	0.00
828		0.00	0.00
829		0.00	0.00
830		0.00	0.00
831		0.00	0.00
832		0.00	0.00
833		0.00	0.00
834		0.00	0.00
835		0.00	0.00
836		0.00	0.00
837		0.00	0.00
838		0.00	0.00
839		0.00	0.00
840		0.00	0.00
841		0.00	0.00
842		0.00	0.00
843		0.00	0.00
844		0.00	0.00
845		0.00	0.00
846		0.00	0.00
847		0.00	0.00
848		0.00	0.00
849		0.00	0.00
850		0.00	0.00
	0		0.000
	Sum(n)		Sum(n-N) <sup>2</sup>



Thursday, January 14, 1999

PHASE III - AREA "O" WASTE POND # 2- AFFECTED  
LUDLUM 19 MICRO-R METER  
READINGS AT SURFACE  
SITE BACKGROUND OF 9  $\mu$ R/hr NOT SUBTRACTED  
RESULTS IN  $\mu$ R/hr  
OCTOBER, 1998

## MICRO "R" READINGS @ SURFACE FREQUENCY DISTRIBUTION

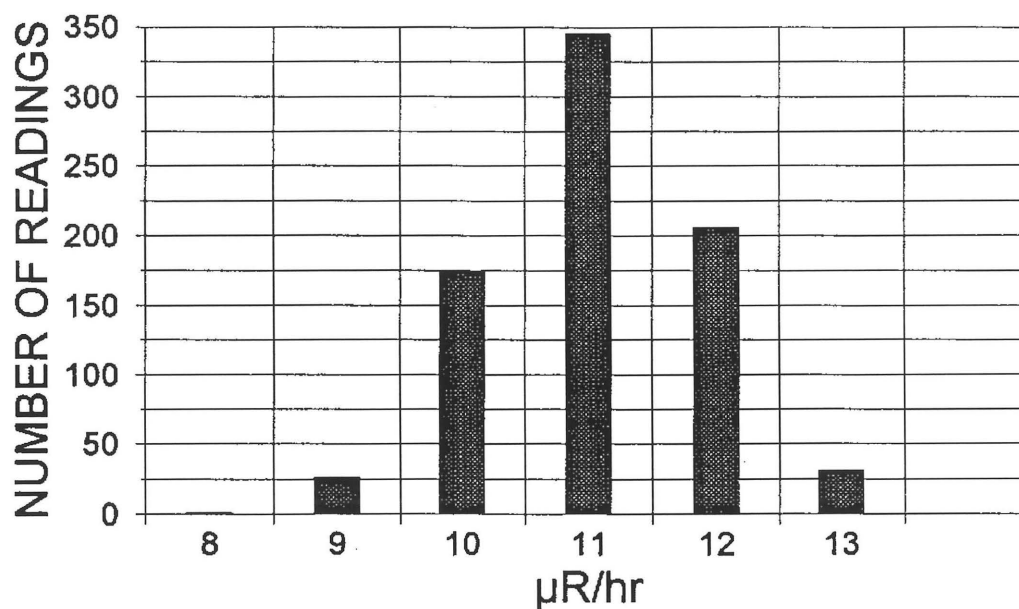


NUMBER OF READINGS	783
AVERAGE READING	11
MINIMUM READING	9
MAXIMUM READING	13
STANDARD DEVIATION	1

Thursday, January 14, 1999

PHASE III - AREA "O" WASTE POND # 2- AFFECTED  
LUDLUM 19 MICRO-R METER READINGS  
@ 1 METER ABOVE SURFACE  
SITE BACKGROUND OF 9  $\mu$ R/hr NOT SUBTRACTED  
RESULTS IN  $\mu$ R/hr  
OCTOBER 1998

## MICRO "R" READINGS @1 METER FREQUENCY DISTRIBUTION



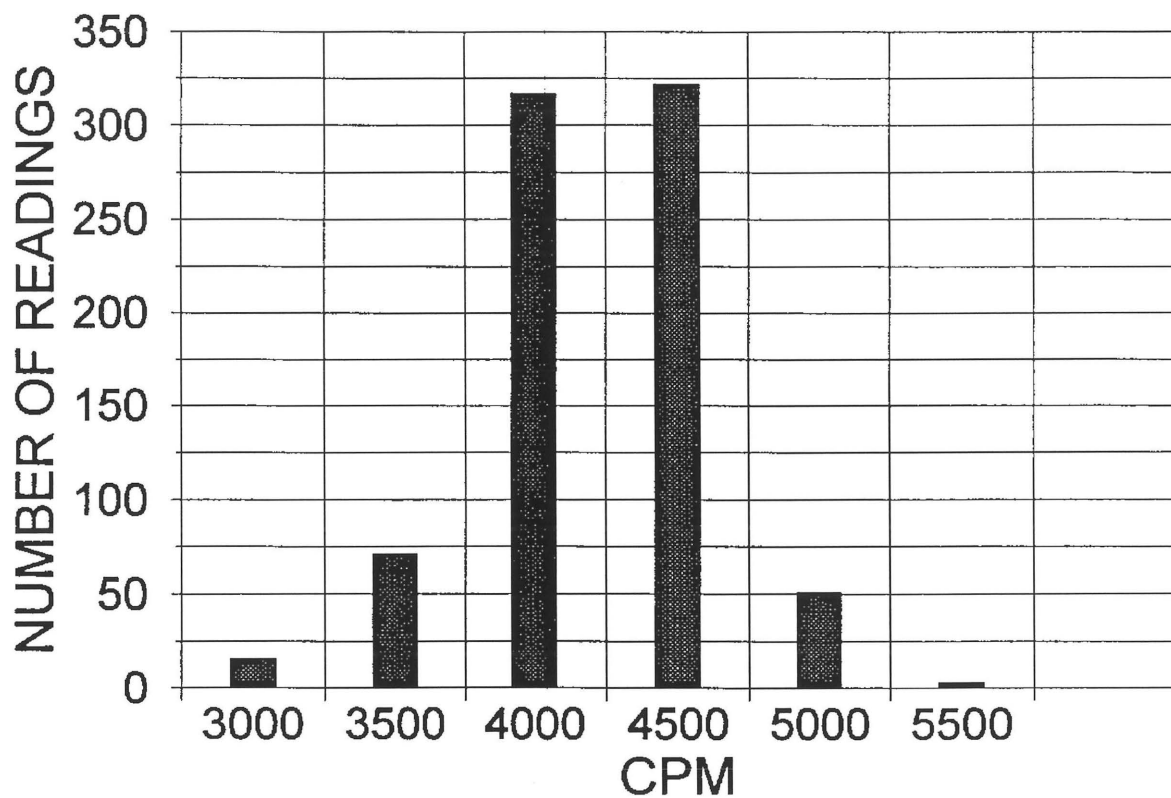
NUMBER OF READINGS	783
AVERAGE READING	11
MINIMUM READING	8
MAXIMUM READING	13
STANDARD DEVIATION	1

Thursday, January 14, 1999

PHASE III - AREA "O" WASTE POND # 2 AFFECTED  
3" NaI DETECTOR  
GROSS GAMMA READINGS IN CPM  
LUDLUM MODEL 2220 S/N 48395 (SHIELDED)  
BACKGROUND AVERAGE: 3000 CPM

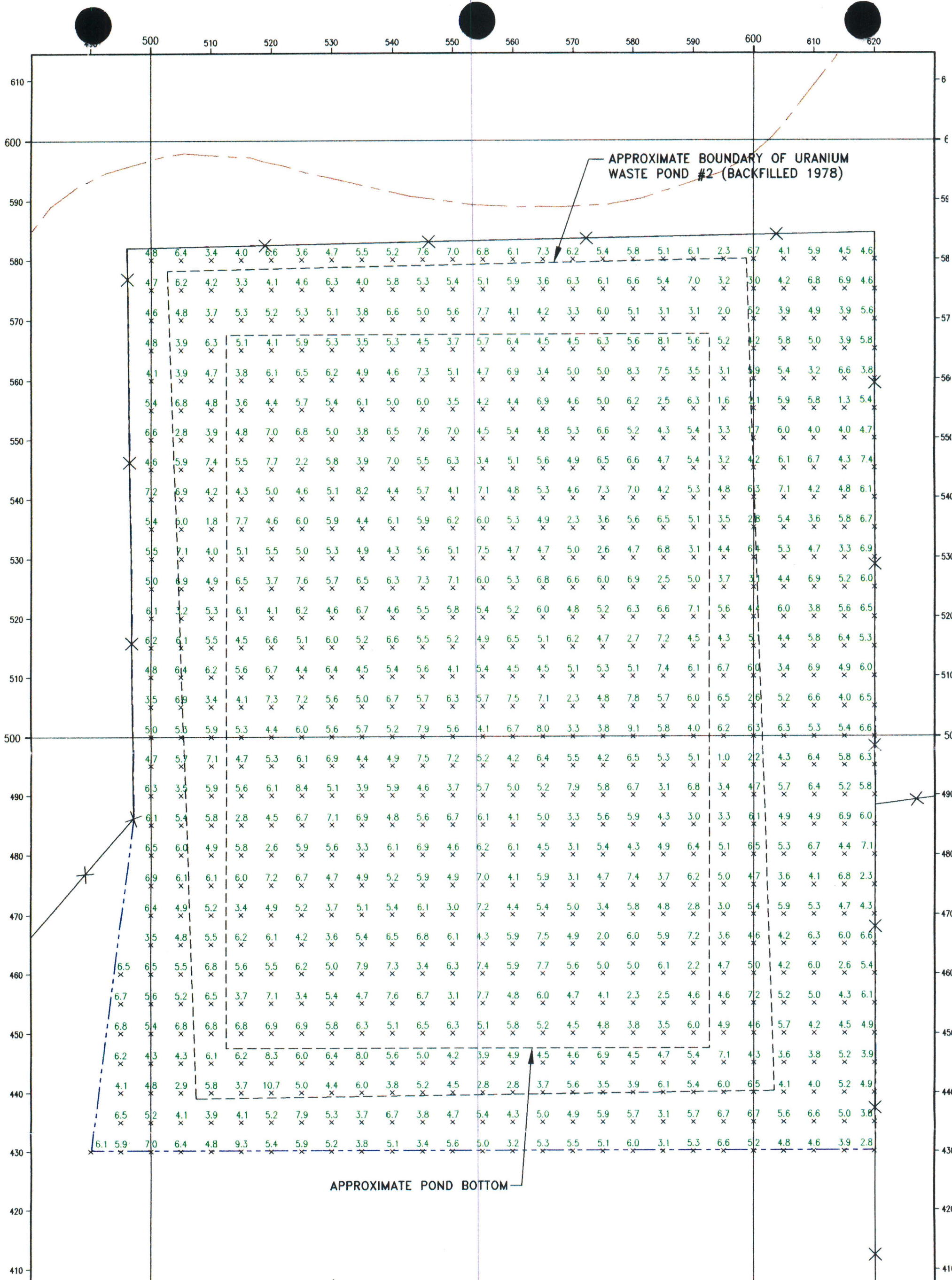
OCTOBER 1998

## 3" NaI DETECTOR READINGS FREQUENCY DISTRIBUTION



NUMBER OF READINGS	783
AVERAGE READING	3956
MINIMUM READING	2460
MAXIMUM READING	5370
STANDARD DEVIATION	401





**NOTES**

URANIUM (pCi/g U).

CIMARRON GAMMA SPEC SOIL COUNTER.

SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U, NOT SUBTRACTED

**LEGEND**

6 URANIUM  
1 - 30 pCi/g U

60 URANIUM  
31 - 90 pCi/g U

R HIT ROCK - NO SAMPLE

**CIMARRON CORPORATION**

**CIMARRON FACILITY**

**PHASE III - SUB-AREA O (Surface)**

**URANIUM WASTE POND #2**

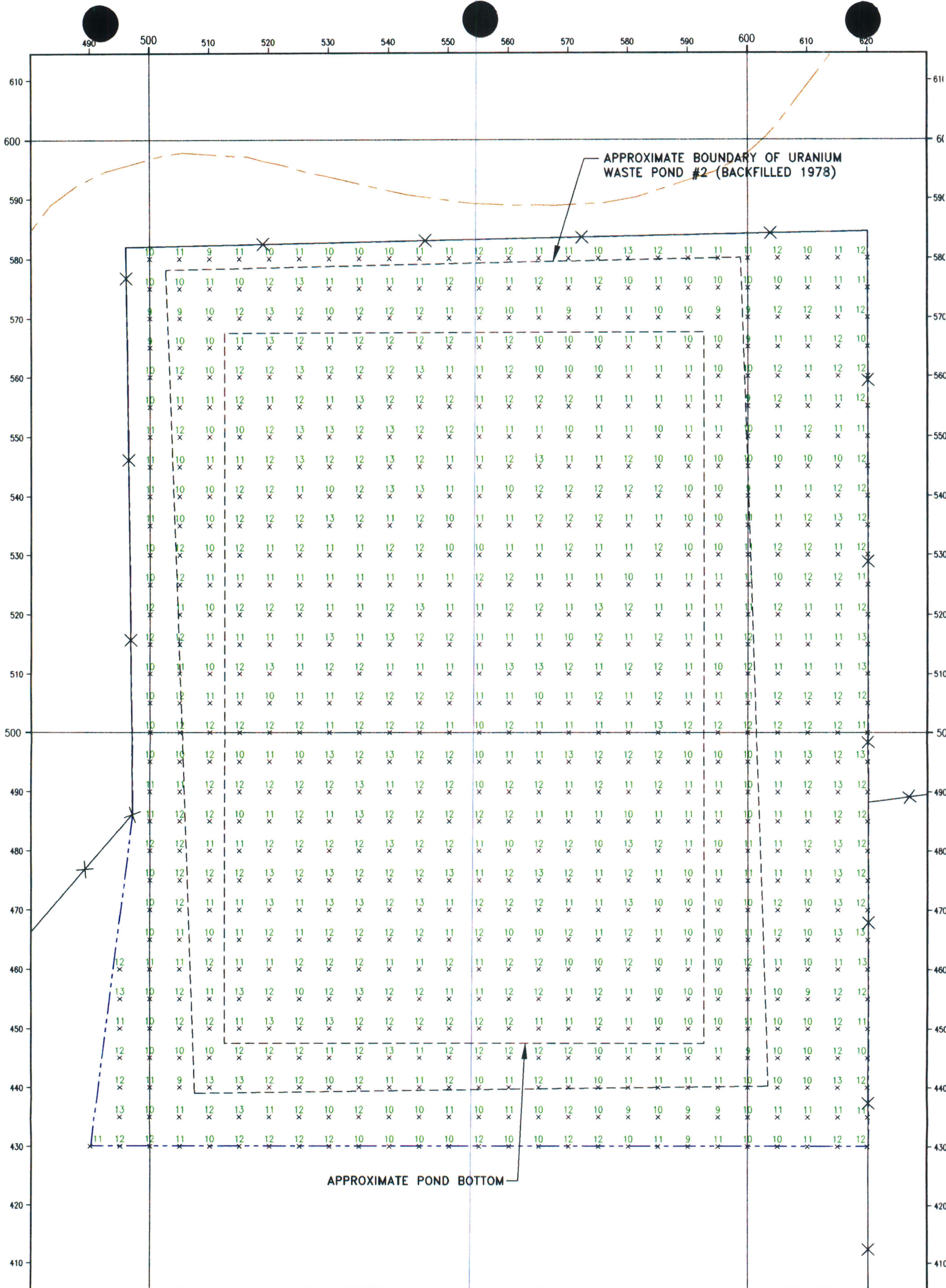
**FINAL STATUS SURVEY RESULTS - SOIL**

**SOIL SAMPLE ALIQUOT: 0 - 6"**

DRWN. BY	JE	DATE	12/5/98	SCALE:	AS SHOWN
JOB NO.	DRAWING NO. 98POP2SS-0			REV.	0

REV.	DESCRIPTION	DRWN BY	CK'D BY	APPD BY	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/3/99





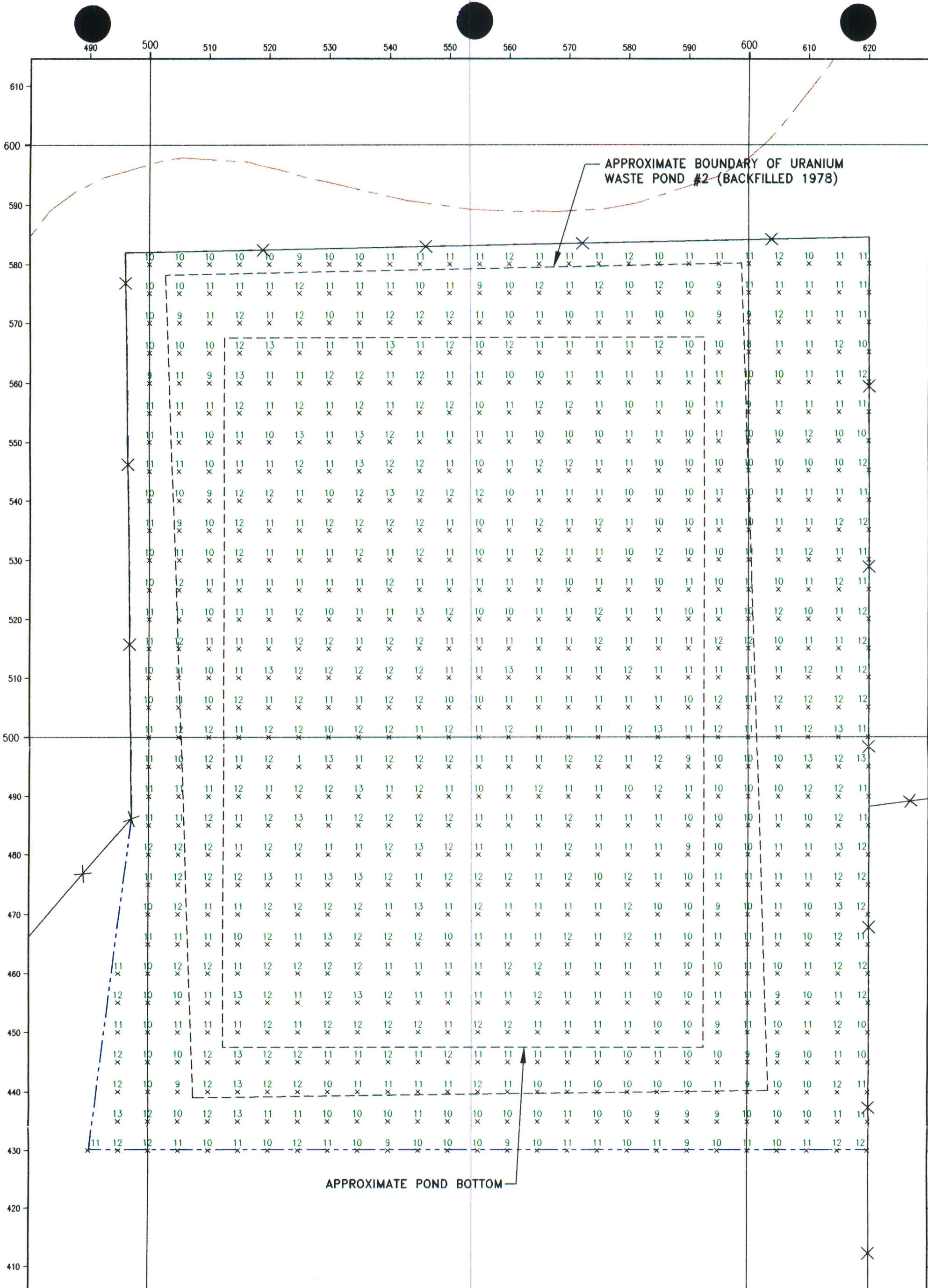
**NOTES**  
READINGS ARE IN MICRO-R/HR ( $\mu$ R/Hr)  
INSTRUMENT: LUDLUM MICRO-R METER  
SERIAL NO: 111299  
MODEL NO: 19  
BACKGROUND: 9  $\mu$ R/Hr.

**LEGEND**  
9+  $\leq 19 \mu$ R/Hr  
20+  $> 19 \mu$ R/Hr

**CIMARRON CORPORATION**  
CIMARRON FACILITY  
PHASE III - SUB-AREA 0 (Surface)  
URANIUM WASTE POND #2  
FINAL STATUS MICRO-R SURVEY RESULTS  
AT LAND SURFACE


REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE	DRWN. BY:	DATE	SCALE:
0	DRAWING ISSUED.	JE	WR	JL	2/3/99	JE	12/5/98	AS SHOWN
						JOB NO.	DRAWING NO.	REV.
							98POP2UR-0	0





**NOTES**  
READINGS ARE IN MICRO-R/HR ( $\mu$ R/Hr)  
INSTRUMENT: LUDLUM MICRO-R METER  
SERIAL NO: 111299  
MODEL NO: 19  
BACKGROUND: 9  $\mu$ R/Hr.

**LEGEND**  
9+  $\leq$  19  $\mu$ R/Hr  
20+  $>$  19  $\mu$ R/Hr

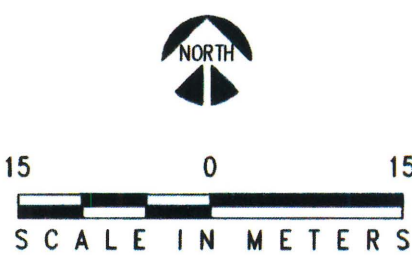
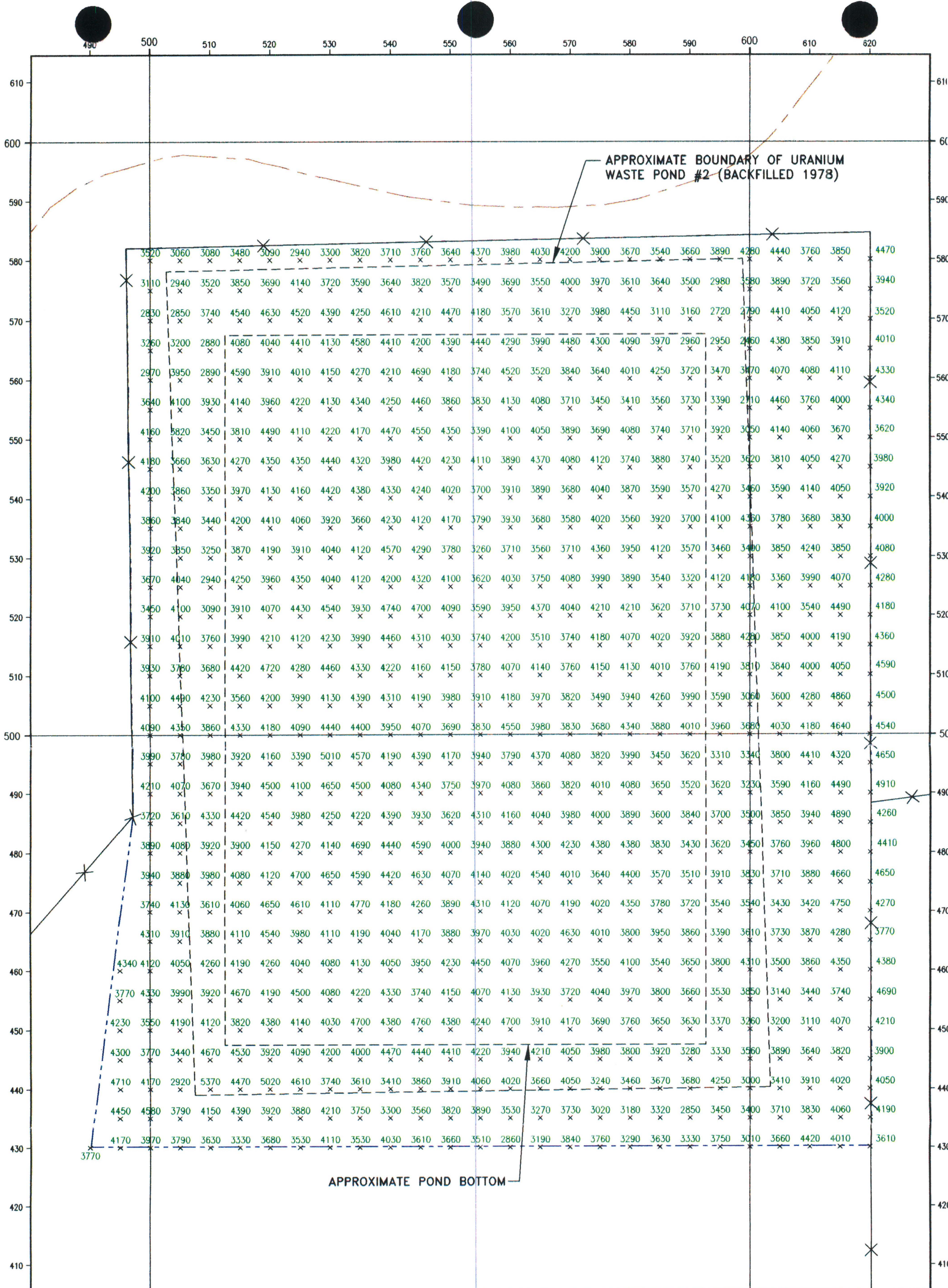
**CIMARRON CORPORATION**

**CIMARRON FACILITY**  
**PHASE III - SUB-AREA O (Surface)**  
**URANIUM WASTE POND #2**  
**FINAL STATUS MICRO-R SURVEY RESULTS**  
**AT ONE METER ABOVE SURFACE**

DRWN. BY: JE	DATE: 12/5/98	SCALE: AS SHOWN
JOB NO.	DRAWING NO. 98POP2UR-1	REV. 0


REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/3/99





**NOTES:**  
INSTRUMENT: LUDLUM 2220, S/N 48395,  
LEAD-SHIELDED 3" X 1/2"  
NaI DETECTOR.  
BACKGROUND: 3000 CPM

**LEGEND**  
3560 + < 6000 CPM  
8290 + > 6000 CPM

**CIMARRON CORPORATION**

**CIMARRON FACILITY**  
**PHASE III - SUB-AREA O (Surface)**  
**URANIUM WASTE POND #2**  
**FINAL STATUS GAMMA SURVEY RESULTS**  
**READINGS IN CPM (3" DET.) AT SURFACE**

DRWN. BY	JE	DATE	12/5/98	SCALE	AS SHOWN
JOB NO.	DRAWING NO. 98POP23D-0			REV.	0

REV.	DESCRIPTION	DRWN BY	CKD BY	APPD BY	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/3/99