

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDEN**  
**AFFECTED AREA 'G' - DEPTH - DRAINAGE**

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
351	11	2.02	4.09
352	11	2.02	4.09
353	11	2.02	4.09
354	11	2.02	4.09
355	11	2.02	4.09
356	11	2.02	4.09
357	11	2.02	4.09
358	11	2.02	4.09
359	11	2.02	4.09
360	11	2.02	4.09
361	11	2.02	4.09
362	11	2.02	4.09
363	11	2.02	4.09
364	11	2.02	4.09
365	11	2.02	4.09
366	11	2.02	4.09
367	11	2.02	4.09
368	11	2.02	4.09
369	11.1	2.12	4.50
370	11.1	2.12	4.50
371	11.1	2.12	4.50
372	11.2	2.22	4.94
373	11.3	2.32	5.39
374	11.4	2.42	5.87
375	11.4	2.42	5.87
376	11.7	2.72	7.41
377	11.8	2.82	7.97
378	11.9	2.92	8.54
379	11.9	2.92	8.54
380	12	3.02	9.13
381	12	3.02	9.13
382	12	3.02	9.13
383	12	3.02	9.13
384	12.1	3.12	9.75
385	12.3	3.32	11.04
386	12.3	3.32	11.04
387	12.4	3.42	11.71
388	12.5	3.52	12.41
389	12.6	3.62	13.12
390	12.8	3.82	14.61
391	12.9	3.92	15.38
392	13	4.02	16.18
393	13	4.02	16.18
394	13	4.02	16.18
395	13	4.02	16.18
396	13	4.02	16.18
397	13	4.02	16.18
398	13	4.02	16.18
399	13	4.02	16.18
400	13	4.02	16.18
	588.8		422.875
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g TOTAL

Number	n	(n-N)	(n-N) <sup>2</sup>
401	13.2	4.22	17.83
402	13.2	4.22	17.83
403	13.2	4.22	17.83
404	13.2	4.22	17.83
405	13.2	4.22	17.83
406	13.2	4.22	17.83
407	13.4	4.42	19.56
408	13.7	4.72	22.30
409	13.8	4.82	23.26
410	14	5.02	25.22
411	14	5.02	25.22
412	14	5.02	25.22
413	14	5.02	25.22
414	14	5.02	25.22
415	14.1	5.12	26.24
416	14.3	5.32	28.33
417	14.4	5.42	29.40
418	14.8	5.82	33.90
419	14.8	5.82	33.90
420	15	6.02	36.27
421	15	6.02	36.27
422	15	6.02	36.27
423	15	6.02	36.27
424	15	6.02	36.27
425	15	6.02	36.27
426	15	6.02	36.27
427	15	6.02	36.27
428	15.6	6.62	43.86
429	15.7	6.72	45.19
430	16	7.02	49.31
431	16	7.02	49.31
432	16	7.02	49.31
433	16	7.02	49.31
434	16	7.02	49.31
435	16.6	7.62	58.10
436	16.6	7.62	58.10
437	16.6	7.62	58.10
438	17	8.02	64.36
439	17	8.02	64.36
440	17	8.02	64.36
441	17	8.02	64.36
442	17.3	8.32	69.26
443	18	9.02	81.40
444	19	10.02	100.45
445	20	11.02	121.49
446	21	12.02	144.54
447	21	12.02	144.54
448		0.00	0.00
449		0.00	0.00
450		0.00	0.00
	727.9		2169.156
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**  
**AFFECTED AREA 'G' - DEPTH - DRAINAGE**

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
1	0.4	-0.8	0.7
2	0.4	-0.8	0.7
3	0.4	-0.8	0.7
4	0.4	-0.8	0.7
5	0.4	-0.8	0.7
6	0.5	-0.7	0.5
7	0.5	-0.7	0.5
8	0.6	-0.6	0.4
9	0.6	-0.6	0.4
10	0.6	-0.6	0.4
11	0.6	-0.6	0.4
12	0.6	-0.6	0.4
13	0.6	-0.6	0.4
14	0.6	-0.6	0.4
15	0.6	-0.6	0.4
16	0.7	-0.5	0.3
17	0.7	-0.5	0.3
18	0.7	-0.5	0.3
19	0.7	-0.5	0.3
20	0.7	-0.5	0.3
21	0.7	-0.5	0.3
22	0.7	-0.5	0.3
23	0.7	-0.5	0.3
24	0.7	-0.5	0.3
25	0.7	-0.5	0.3
26	0.8	-0.4	0.2
27	0.8	-0.4	0.2
28	0.8	-0.4	0.2
29	0.8	-0.4	0.2
30	0.8	-0.4	0.2
31	0.8	-0.4	0.2
32	0.8	-0.4	0.2
33	0.8	-0.4	0.2
34	0.8	-0.4	0.2
35	0.8	-0.4	0.2
36	0.8	-0.4	0.2
37	0.8	-0.4	0.2
38	0.8	-0.4	0.2
39	0.8	-0.4	0.2
40	0.8	-0.4	0.2
41	0.8	-0.4	0.2
42	0.8	-0.4	0.2
43	0.8	-0.4	0.2
44	0.8	-0.4	0.2
45	0.8	-0.4	0.2
46	0.8	-0.4	0.2
47	0.8	-0.4	0.2
48	0.9	-0.3	0.1
49	0.9	-0.3	0.1
50	0.9	-0.3	0.1
	48.1		3.4
	50.0		2.4
	50.0		2.4
	51.0		2.0
	59.6		0.3
	70.0		1.9
	85.4		13.2
	95.4		31.3
	544.6		71.1
	Sum(n)		Sum(n-N) <sup>2</sup>

No. of Samples (x) : **447**

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : **1.22**

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

Standard Deviation: **0.40**

2 Std Deviations: **0.80**

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

(df) = **1.649**

Area's Average Level (Aμ) = (N) + (df) x [(Sd)/SQRT(x)]

(Aμ) = **1.25** pCi/gTh (NAT)

GUIDELINE VALUE: **10** pCi/gTh (NAT)

Acceptable Level: **4.0** pCi/gTh (NAT)

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)	1.649	95%

Desired value(df) (X) **446** is calculated as follow:

EXP[(Ln(B)-Ln(A)) ÷ (Z-Y) (X-Y) + Ln(A)]

The (df) value for (X) **446** **1.649** **95%**

PERFORMED BY: James F. Keiser

DATE: 7-26-99

REVIEWED BY: W. Q. Rogers

DATE: 7-26-99

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDEN**  
**AFFECTED AREA 'G' - DEPTH - DRAINAGE**

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
51	0.9	-0.10	0.01
52	0.9	-0.10	0.01
53	0.9	-0.10	0.01
54	0.9	-0.10	0.01
55	0.9	-0.10	0.01
56	0.9	-0.10	0.01
57	0.9	-0.10	0.01
58	0.9	-0.10	0.01
59	0.9	-0.10	0.01
60	0.9	-0.10	0.01
61	0.9	-0.10	0.01
62	0.9	-0.10	0.01
63	0.9	-0.10	0.01
64	0.9	-0.10	0.01
65	0.9	-0.10	0.01
66	0.9	-0.10	0.01
67	0.9	-0.10	0.01
68	0.9	-0.10	0.01
69	0.9	-0.10	0.01
70	1	-0.00	0.00
71	1	-0.00	0.00
72	1	-0.00	0.00
73	1	-0.00	0.00
74	1	-0.00	0.00
75	1	-0.00	0.00
76	1	-0.00	0.00
77	1	-0.00	0.00
78	1	-0.00	0.00
79	1	-0.00	0.00
80	1	-0.00	0.00
81	1	-0.00	0.00
82	1	-0.00	0.00
83	1	-0.00	0.00
84	1	-0.00	0.00
85	1	-0.00	0.00
86	1	-0.00	0.00
87	1	-0.00	0.00
88	1	-0.00	0.00
89	1	-0.00	0.00
90	1	-0.00	0.00
91	1	-0.00	0.00
92	1	-0.00	0.00
93	1	-0.00	0.00
94	1	-0.00	0.00
95	1	-0.00	0.00
96	1	-0.00	0.00
97	1	-0.00	0.00
98	1	-0.00	0.00
99	1	-0.00	0.00
100	1	-0.00	0.00
	48.1		0.2
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
101	1	-0.00	0.00
102	1	-0.00	0.00
103	1	-0.00	0.00
104	1	-0.00	0.00
105	1	-0.00	0.00
106	1	-0.00	0.00
107	1	-0.00	0.00
108	1	-0.00	0.00
109	1	-0.00	0.00
110	1	-0.00	0.00
111	1	-0.00	0.00
112	1	-0.00	0.00
113	1	-0.00	0.00
114	1	-0.00	0.00
115	1	-0.00	0.00
116	1	-0.00	0.00
117	1	-0.00	0.00
118	1	-0.00	0.00
119	1	-0.00	0.00
120	1	-0.00	0.00
121	1	-0.00	0.00
122	1	-0.00	0.00
123	1	-0.00	0.00
124	1	-0.00	0.00
125	1	-0.00	0.00
126	1	-0.00	0.00
127	1	-0.00	0.00
128	1	-0.00	0.00
129	1	-0.00	0.00
130	1	-0.00	0.00
131	1	-0.00	0.00
132	1	-0.00	0.00
133	1	-0.00	0.00
134	1	-0.00	0.00
135	1	-0.00	0.00
136	1	-0.00	0.00
137	1	-0.00	0.00
138	1	-0.00	0.00
139	1	-0.00	0.00
140	1	-0.00	0.00
141	1	-0.00	0.00
142	1	-0.00	0.00
143	1	-0.00	0.00
144	1	-0.00	0.00
145	1	-0.00	0.00
146	1	-0.00	0.00
147	1	-0.00	0.00
148	1	-0.00	0.00
149	1	-0.00	0.00
150	1	-0.00	0.00
	50.0		0.0
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDEN**  
**AFFECTED AREA 'G' - DEPTH - DRAINAGE**

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
151	1	-0.00	0.00
152	1	-0.00	0.00
153	1	-0.00	0.00
154	1	-0.00	0.00
155	1	-0.00	0.00
156	1	-0.00	0.00
157	1	-0.00	0.00
158	1	-0.00	0.00
159	1	-0.00	0.00
160	1	-0.00	0.00
161	1	-0.00	0.00
162	1	-0.00	0.00
163	1	-0.00	0.00
164	1	-0.00	0.00
165	1	-0.00	0.00
166	1	-0.00	0.00
167	1	-0.00	0.00
168	1	-0.00	0.00
169	1	-0.00	0.00
170	1	-0.00	0.00
171	1	-0.00	0.00
172	1	-0.00	0.00
173	1	-0.00	0.00
174	1	-0.00	0.00
175	1	-0.00	0.00
176	1	-0.00	0.00
177	1	-0.00	0.00
178	1	-0.00	0.00
179	1	-0.00	0.00
180	1	-0.00	0.00
181	1	-0.00	0.00
182	1	-0.00	0.00
183	1	-0.00	0.00
184	1	-0.00	0.00
185	1	-0.00	0.00
186	1	-0.00	0.00
187	1	-0.00	0.00
188	1	-0.00	0.00
189	1	-0.00	0.00
190	1	-0.00	0.00
191	1	-0.00	0.00
192	1	-0.00	0.00
193	1	-0.00	0.00
194	1	-0.00	0.00
195	1	-0.00	0.00
196	1	-0.00	0.00
197	1	-0.00	0.00
198	1	-0.00	0.00
199	1	-0.00	0.00
200	1	-0.00	0.00
	50.0		0.0
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
201	1	-0.00	0.00
202	1	-0.00	0.00
203	1	-0.00	0.00
204	1	-0.00	0.00
205	1	-0.00	0.00
206	1	-0.00	0.00
207	1	-0.00	0.00
208	1	-0.00	0.00
209	1	-0.00	0.00
210	1	-0.00	0.00
211	1	-0.00	0.00
212	1	-0.00	0.00
213	1	-0.00	0.00
214	1	-0.00	0.00
215	1	-0.00	0.00
216	1	-0.00	0.00
217	1	-0.00	0.00
218	1	-0.00	0.00
219	1	-0.00	0.00
220	1	-0.00	0.00
221	1	-0.00	0.00
222	1	-0.00	0.00
223	1	-0.00	0.00
224	1	-0.00	0.00
225	1	-0.00	0.00
226	1	-0.00	0.00
227	1	-0.00	0.00
228	1	-0.00	0.00
229	1	-0.00	0.00
230	1	-0.00	0.00
231	1	-0.00	0.00
232	1	-0.00	0.00
233	1	-0.00	0.00
234	1	-0.00	0.00
235	1	-0.00	0.00
236	1	-0.00	0.00
237	1	-0.00	0.00
238	1	-0.00	0.00
239	1	-0.00	0.00
240	1	-0.00	0.00
241	1.1	0.10	0.01
242	1.1	0.10	0.01
243	1.1	0.10	0.01
244	1.1	0.10	0.01
245	1.1	0.10	0.01
246	1.1	0.10	0.01
247	1.1	0.10	0.01
248	1.1	0.10	0.01
249	1.1	0.10	0.01
250	1.1	0.10	0.01
	51.0		0.1
	Sum(n)		Sum(n-N) <sup>2</sup>



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**AFFECTED AREA 'G' - DEPTH - DRAINAGE**

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
251	1.1	0.10	0.01
252	1.1	0.10	0.01
253	1.1	0.10	0.01
254	1.1	0.10	0.01
255	1.1	0.10	0.01
256	1.1	0.10	0.01
257	1.1	0.10	0.01
258	1.1	0.10	0.01
259	1.1	0.10	0.01
260	1.1	0.10	0.01
261	1.1	0.10	0.01
262	1.1	0.10	0.01
263	1.1	0.10	0.01
264	1.2	0.20	0.04
265	1.2	0.20	0.04
266	1.2	0.20	0.04
267	1.2	0.20	0.04
268	1.2	0.20	0.04
269	1.2	0.20	0.04
270	1.2	0.20	0.04
271	1.2	0.20	0.04
272	1.2	0.20	0.04
273	1.2	0.20	0.04
274	1.2	0.20	0.04
275	1.2	0.20	0.04
276	1.2	0.20	0.04
277	1.2	0.20	0.04
278	1.2	0.20	0.04
279	1.2	0.20	0.04
280	1.2	0.20	0.04
281	1.2	0.20	0.04
282	1.2	0.20	0.04
283	1.2	0.20	0.04
284	1.2	0.20	0.04
285	1.2	0.20	0.04
286	1.2	0.20	0.04
287	1.2	0.20	0.04
288	1.2	0.20	0.04
289	1.2	0.20	0.04
290	1.2	0.20	0.04
291	1.2	0.20	0.04
292	1.3	0.30	0.09
293	1.3	0.30	0.09
294	1.3	0.30	0.09
295	1.3	0.30	0.09
296	1.3	0.30	0.09
297	1.3	0.30	0.09
298	1.3	0.30	0.09
299	1.3	0.30	0.09
300	1.3	0.30	0.09
	59.6		2.0
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
301	1.3	0.30	0.09
302	1.3	0.30	0.09
303	1.3	0.30	0.09
304	1.3	0.30	0.09
305	1.3	0.30	0.09
306	1.3	0.30	0.09
307	1.3	0.30	0.09
308	1.3	0.30	0.09
309	1.3	0.30	0.09
310	1.3	0.30	0.09
311	1.3	0.30	0.09
312	1.3	0.30	0.09
313	1.3	0.30	0.09
314	1.4	0.40	0.16
315	1.4	0.40	0.16
316	1.4	0.40	0.16
317	1.4	0.40	0.16
318	1.4	0.40	0.16
319	1.4	0.40	0.16
320	1.4	0.40	0.16
321	1.4	0.40	0.16
322	1.4	0.40	0.16
323	1.4	0.40	0.16
324	1.4	0.40	0.16
325	1.4	0.40	0.16
326	1.4	0.40	0.16
327	1.4	0.40	0.16
328	1.4	0.40	0.16
329	1.4	0.40	0.16
330	1.4	0.40	0.16
331	1.4	0.40	0.16
332	1.4	0.40	0.16
333	1.4	0.40	0.16
334	1.4	0.40	0.16
335	1.4	0.40	0.16
336	1.4	0.40	0.16
337	1.4	0.40	0.16
338	1.5	0.50	0.25
339	1.5	0.50	0.25
340	1.5	0.50	0.25
341	1.5	0.50	0.25
342	1.5	0.50	0.25
343	1.5	0.50	0.25
344	1.5	0.50	0.25
345	1.5	0.50	0.25
346	1.5	0.50	0.25
347	1.5	0.50	0.25
348	1.5	0.50	0.25
349	1.5	0.50	0.25
350	1.5	0.50	0.25
	70.0		8.1
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDEN**  
**AFFECTED AREA 'G' - DEPTH - DRAINAGE**

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
351	1.5	0.28	0.08
352	1.5	0.28	0.08
353	1.5	0.28	0.08
354	1.5	0.28	0.08
355	1.5	0.28	0.08
356	1.5	0.28	0.08
357	1.5	0.28	0.08
358	1.5	0.28	0.08
359	1.5	0.28	0.08
360	1.6	0.38	0.15
361	1.6	0.38	0.15
362	1.6	0.38	0.15
363	1.6	0.38	0.15
364	1.6	0.38	0.15
365	1.6	0.38	0.15
366	1.6	0.38	0.15
367	1.6	0.38	0.15
368	1.6	0.38	0.15
369	1.6	0.38	0.15
370	1.6	0.38	0.15
371	1.7	0.48	0.23
372	1.7	0.48	0.23
373	1.7	0.48	0.23
374	1.7	0.48	0.23
375	1.7	0.48	0.23
376	1.7	0.48	0.23
377	1.7	0.48	0.23
378	1.7	0.48	0.23
379	1.7	0.48	0.23
380	1.7	0.48	0.23
381	1.7	0.48	0.23
382	1.7	0.48	0.23
383	1.8	0.58	0.34
384	1.8	0.58	0.34
385	1.8	0.58	0.34
386	1.8	0.58	0.34
387	1.8	0.58	0.34
388	1.8	0.58	0.34
389	1.8	0.58	0.34
390	1.9	0.68	0.46
391	1.9	0.68	0.46
392	1.9	0.68	0.46
393	1.9	0.68	0.46
394	1.9	0.68	0.46
395	1.9	0.68	0.46
396	1.9	0.68	0.46
397	2	0.78	0.61
398	2	0.78	0.61
399	2	0.78	0.61
400	2	0.78	0.61
	85.4		13.165
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g Th (NAT)

Number	n	(n-N)	(n-N) <sup>2</sup>
401	2	0.78	0.61
402	2	0.78	0.61
403	2	0.78	0.61
404	2	0.78	0.61
405	2	0.78	0.61
406	2	0.78	0.61
407	2	0.78	0.61
408	2	0.78	0.61
409	2	0.78	0.61
410	2	0.78	0.61
411	2	0.78	0.61
412	2	0.78	0.61
413	2	0.78	0.61
414	2	0.78	0.61
415	2	0.78	0.61
416	2	0.78	0.61
417	2	0.78	0.61
418	2	0.78	0.61
419	2	0.78	0.61
420	2	0.78	0.61
421	2	0.78	0.61
422	2	0.78	0.61
423	2	0.78	0.61
424	2	0.78	0.61
425	2	0.78	0.61
426	2	0.78	0.61
427	2	0.78	0.61
428	2	0.78	0.61
429	2	0.78	0.61
430	2	0.78	0.61
431	2	0.78	0.61
432	2	0.78	0.61
433	2	0.78	0.61
434	2	0.78	0.61
435	2	0.78	0.61
436	2	0.78	0.61
437	2	0.78	0.61
438	2	0.78	0.61
439	2	0.78	0.61
440	2	0.78	0.61
441	2	0.78	0.61
442	2.2	0.98	0.96
443	2.2	0.98	0.96
444	2.2	0.98	0.96
445	2.2	0.98	0.96
446	2.2	0.98	0.96
447	2.4	1.18	1.40
448		0.00	0.00
449		0.00	0.00
450		0.00	0.00
	95.4		31.265
	Sum(n)		Sum(n-N) <sup>2</sup>

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
1	380	E	-	615	N	6346	7	7	8.4	0.7
2	380	E	-	620	N	6950	7	8	6.9	0.8
3	380	E	-	625	N	7064	7	6	9.5	0.7
4	380	E	-	630	N	6342	7	6	7.8	0.7
5	380	E	-	635	N	7040	7	7	7.8	0.8
6	380	E	-	640	N	7746	7	7	7.5	0.9
7	380	E	-	645	N	7312	7	8	8.8	0.9
8	380	E	-	650	N	7526	7	8	7	1
9	380	E	-	655	N	7870	8	7	9.1	1.1
10	380	E	-	660	N	8054	10	9	12.2	1
11	380	E	-	665	N	7856	8	8	10.1	1.1
12	380	E	-	670	N	8164	10	9	10.6	1
13	380	E	-	675	N	8674	10	8	12.2	1.1
14	380	E	-	680	N	9088	9	9	8.4	0.9
15	380	E	-	685	N	9230	9	9	11.4	1.3
16	380	E	-	690	N	7986	13	14	6.6	1
17	380	E	-	695	N	7734	14	12	8.1	0.9
18	380	E	-	700	N	7420	14	14	7.2	0.9
19	380	E	-	705	N	7764	15	13	5.8	1
20	380	E	-	710	N	6894	14	13	6.1	0.7

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr92LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM8000N/ATotal U410CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTh(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY:W. A. RogersDATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
21	380	E	-	715	N	8486	9	9	11	1.2
22	380	E	-	720	N	9550	10	10	13.5	1.6
23	380	E	-	725	N	7546	12	11	5.2	1.1
24	380	E	-	735	N	4920	15	15	12.3	1.2
25	380	E	-	740	N	9522	13	12	9.6	1.3
26	380	E	-	745	N	9476	13	13	9.4	1.5
27	380	E	-	750	N	9600	12	13	10.1	1.4
28	380	E	-	755	N	8944	13	12	12	0.9
29	385	E	-	600	N	6918	10	9	5.6	0.9
30	385	E	-	605	N	6720	11	9	5.5	1
31	385	E	-	610	N	6850	10	9	5.5	1
32	385	E	-	615	N	7092	10	9	5.9	1.2
33	385	E	-	620	N	6966	10	10	4.7	1
34	385	E	-	625	N	7348	11	10	5.3	1.2
35	385	E	-	630	N	7532	11	11	7.1	1.2
36	385	E	-	635	N	7156	10	10	5.8	1
37	385	E	-	640	N	8422	10	9	6.9	1
38	385	E	-	645	N	8300	12	11	6.1	0.7
39	385	E	-	650	N	7316	8	8	7.8	0.9
40	385	E	-	655	N	8550	10	9	12	1.1

INSTRUMENTS:RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Total U

4

10

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:W. G. RogersDATE:9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
41	385	E	-	660	N	9198	9	9	11.3	0.8
42	385	E	-	665	N	8962	11	10	11.3	0.8
43	385	E	-	670	N	8334	10	9	9.7	1.1
44	385	E	-	675	N	8478	9	8	10.5	1.4
45	385	E	-	680	N	9462	9	10	8.9	0.8
46	385	E	-	685	N	9322	10	9	10.6	1.2
47	385	E	-	690	N	9570	11	11	8.6	1.8
48	385	E	-	695	N	9230	10	12	8.1	1.7
49	385	E	-	700	N	9914	10	11	9.6	1.4
50	385	E	-	705	N	9650	11	10	10.2	1.2
51	385	E	-	710	N	9232	9	10	13.4	1.6
52	385	E	-	715	N	9598	9	9	11.7	1.7
53	385	E	-	725	N	8022	14	12	13.1	1
54	385	E	-	730	N	8064	12	13	10.1	0.5
55	385	E	-	735	N	7452	14	14	12.6	0.8
56	385	E	-	740	N	9210	14	13	12	1.2
57	385	E	-	750	N	9716	13	13	10.7	1.3
58	385	E	-	755	N	9760	13	13	13.3	1.3
59	390	E	-	645	N	8666	10	11	9.7	0.9
60	390	E	-	650	N	8492	10	9	10.4	1.2

**INSTRUMENTS:****RESULTS IN: BACKGROUND MDA**

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr 9 2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM 8000 N/A

CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

Total U	4	10
pCi/g Th(Nat)	1.5	1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. C. Rogers*

DATE: 9-13-99



**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
61	390	E	-	655	N	8792	9	9	7.8	1.2
62	390	E	-	660	N	9064	9	8	10.8	1.2
63	390	E	-	665	N	9860	10	9	12.6	0.9
64	390	E	-	670	N	8770	9	8	11.2	1
65	390	E	-	675	N	9052	9	10	11.6	1.4
66	390	E	-	680	N	9272	10	9	7.5	1.6
67	390	E	-	685	N	9212	9	10	13.9	1
68	390	E	-	690	N	9770	11	11	10	1.7
69	390	E	-	695	N	9790	12	12	7.8	1.5
70	390	E	-	700	N	10132	10	11	13.8	1.3
71	390	E	-	705	N	10202	10	10	12.8	1.3
72	390	E	-	710	N	9840	10	9	15.1	1.7
73	390	E	-	715	N	9510	9	9	14.3	1.7
74	390	E	-	720	N	9810	10	10	16.5	1.8
75	390	E	-	725	N	10090	11	12	8.1	1.5
76	390	E	-	730	N	10320	11	10	13	1.8
77	390	E	-	735	N	10630	12	11	15.7	2
78	390	E	-	740	N	10012	10	10	12.5	1.3
79	390	E	-	745	N	9110	14	12	14.1	1.3
80	390	E	-	755	N	9598	13	14	15.4	1.4

INSTRUMENTS:RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr 9 2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM 8000 N/A

Total U 4 10

CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g Th(Nat) 1.5 1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. G. Rogers*

DATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
81	395	E	-	645	N	8004	11	11	7.7	0.4
82	395	E	-	650	N	8050	10	9	9.5	1.1
83	395	E	-	655	N	8510	10	10	9.8	1.4
84	395	E	-	660	N	9782	9	10	7.9	1.4
85	395	E	-	665	N	9320	8	9	7.9	1
86	395	E	-	670	N	8342	8	8	13	0.8
87	395	E	-	675	N	9652	11	10	15.4	1.2
88	395	E	-	680	N	9674	10	9	8.1	0.9
89	395	E	-	685	N	9490	9	10	13.4	1.5
90	395	E	-	690	N	9892	12	12	7.3	2
91	395	E	-	695	N	9772	12	11	8.3	1.4
92	395	E	-	700	N	10222	10	10	10.8	1.7
93	395	E	-	705	N	10382	11	10	14.1	1.6
94	395	E	-	710	N	9732	11	10	15.7	2
95	395	E	-	715	N	9962	10	9	17.5	1.9
96	395	E	-	720	N	9732	9	10	19.1	1.7
97	395	E	-	725	N	9366	9	9	14.2	1.9
98	395	E	-	730	N	9504	9	10	15.1	2
99	395	E	-	735	N	8880	9	9	14.1	2.2
100	395	E	-	740	N	9400	13	13	15.8	1.1

INSTRUMENTS:RESULTS IN: BACKGROUND      MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

W.A. RogersDATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
101	395	E	-	745	N	9552	13	13	17.6	1.3
102	395	E	-	750	N	9664	14	13	11.4	1.3
103	395	E	-	755	N	9462	13	12	12.7	1.1
104	400	E	-	645	N	8142	12	12	7.3	0.8
105	400	E	-	650	N	9362	10	10	12.1	1.4
106	400	E	-	655	N	9288	10	9	8.6	1.3
107	400	E	-	660	N	9742	10	9	9.6	1.1
108	400	E	-	665	N	9358	10	9	7.3	1.3
109	400	E	-	670	N	9208	9	9	13.9	0.8
110	400	E	-	675	N	9718	10	9	15.7	1.3
111	400	E	-	680	N	9684	12	11	10.3	1
112	400	E	-	685	N	10164	10	10	15	1.5
113	400	E	-	690	N	9678	12	11	9.1	1.5
114	400	E	-	695	N	9944	10	12	6.8	1.7
115	400	E	-	700	N	10682	11	11	13.6	1.5
116	400	E	-	705	N	10516	11	11	14.2	1.5
117	400	E	-	710	N	10016	10	10	12.9	1.8
118	400	E	-	715	N	9904	9	9	14.8	1.9
119	400	E	-	720	N	10206	10	10	15	1.9
120	400	E	-	725	N	9680	10	9	21.2	2

## INSTRUMENTS:

## RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.C. Rogers*

DATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
121	400	E	-	730	N	9860	10	10	19.4	1.8
122	400	E	-	735	N	8360	14	13	8.2	0.8
123	400	E	-	740	N	8662	13	12	8.7	1.1
124	400	E	-	745	N	9676	13	14	14.2	1.2
125	400	E	-	750	N	9966	13	13	9.8	1.3
126	400	E	-	755	N	9778	14	14	15.1	1.3
127	405	E	-	645	N	7842	12	11	9.1	0.6
128	405	E	-	650	N	9716	10	9	11.6	1
129	405	E	-	655	N	9338	9	10	12.1	1.3
130	405	E	-	660	N	9688	10	10	5	1.1
131	405	E	-	665	N	9356	9	10	10.9	0.8
132	405	E	-	670	N	10012	10	9	10.9	0.8
133	405	E	-	675	N	9682	10	9	11.2	1.4
134	405	E	-	680	N	10650	10	11	7.7	1.9
135	405	E	-	685	N	10830	11	11	12.5	1.8
136	405	E	-	690	N	10250	12	11	13.1	1.6
137	405	E	-	695	N	10212	11	11	11.8	1.5
138	405	E	-	700	N	10270	11	10	14.5	1.3
139	405	E	-	705	N	10486	11	10	16.5	1.7
140	405	E	-	710	N	9574	11	10	16.4	1.5

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr92LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM8000N/ATotal U410CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTh(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY:W. A. RogersDATE:9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
141	405	E	-	715	N	10396	11	10	20.3	2
142	405	E	-	720	N	10084	10	10	17.9	1.9
143	405	E	-	725	N	9906	10	9	12.8	1.9
144	405	E	-	730	N	9642	10	10	11.5	1.7
145	405	E	-	735	N	10054	10	9	15.4	2.2
146	405	E	-	740	N	9934	14	13	13.2	1.3
147	405	E	-	745	N	9936	14	13	11.1	1.2
148	405	E	-	750	N	9770	14	13	9.1	1.2
149	405	E	-	755	N	9788	13	12	16.4	1.2
150	405	E	-	645	N	8856	12	12	8.9	1
151	410	E	-	650	N	9240	9	9	14.1	1
152	410	E	-	655	N	9514	11	10	12.1	1.2
153	410	E	-	660	N	9870	10	11	6.6	1.1
154	410	E	-	665	N	9692	11	10	10.4	1.1
155	410	E	-	670	N	10068	10	10	13.6	1.2
156	410	E	-	675	N	9652	10	11	11.9	1.2
157	410	E	-	680	N	9092	11	10	10	1.7
158	410	E	-	685	N	9136	10	10	11.7	1.6
159	410	E	-	690	N	10250	11	12	9.4	1.8
160	410	E	-	695	N	10310	12	12	11.6	1.9

INSTRUMENTS:RESULTS IN: BACKGROUND      MDALUDLUM MICRO 'R' METER - MODEL 19    S/N 111299μR/hr                      9                      2LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR    S/N 97264CPM                      8000                      N/ACIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

Total U	4	10
pCi/g      Th(Nat)	1.5	1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.A. Rogers*DATE: *9-13-99*



**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
161	410	E	-	700	N	10608	10	11	11.5	1.7
162	410	E	-	705	N	10546	11	11	10.9	1.5
163	410	E	-	710	N	9994	9	10	16.2	1.7
164	410	E	-	715	N	10158	10	10	13.8	1.8
165	410	E	-	720	N	9846	9	9	15.9	1.7
166	410	E	-	725	N	9882	10	10	9.4	1.6
167	410	E	-	730	N	9360	10	9	13.7	1.7
168	410	E	-	735	N	10160	10	10	18.3	1.5
169	410	E	-	740	N	9876	14	14	11	1.1
170	410	E	-	745	N	10190	14	13	12.4	1.2
171	410	E	-	750	N	9828	15	13	10.5	1.3
172	410	E	-	755	N	9334	13	12	11.6	1.1
173	415	E	-	645	N	9564	12	12	9	0.9
174	415	E	-	650	N	9494	10	10	10.8	1.3
175	415	E	-	655	N	9514	11	10	9.5	1.4
176	415	E	-	660	N	9558	10	10	11.2	1
177	415	E	-	665	N	9386	10	11	8.9	1.1
178	415	E	-	670	N	9962	11	10	13.2	0.9
179	415	E	-	675	N	9870	10	9	15.8	1.3
180	415	E	-	680	N	9066	11	9	12.8	1.7

INSTRUMENTS:RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

pR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.A. Rogers*

DATE:

*9-13-99*

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
181	415	E	-	685	N	9018	11	11	13.9	1.2
182	415	E	-	690	N	10164	12	11	8.4	1.8
183	415	E	-	695	N	10382	11	10	8.7	1.8
184	415	E	-	700	N	11026	11	12	11.6	1.7
185	415	E	-	705	N	10722	11	10	13.4	1.3
186	415	E	-	710	N	10754	12	11	10.9	1.7
187	415	E	-	715	N	10540	12	11	10.2	1.6
188	415	E	-	720	N	10630	11	11	11.6	1.3
189	415	E	-	725	N	10224	10	11	9.2	1.3
190	415	E	-	730	N	9988	10	10	8.9	1.2
191	415	E	-	735	N	10976	11	11	8.3	1.6
192	415	E	-	740	N	9834	15	13	10.6	1.3
193	415	E	-	745	N	9866	14	15	9.2	1.4
194	415	E	-	750	N	10036	15	13	10.4	1.3
195	415	E	-	755	N	9012	14	13	9.2	1.4
196	420	E	-	645	N	9540	12	12	5.2	1.2
197	420	E	-	650	N	9966	11	10	10.4	0.6
198	420	E	-	655	N	9730	10	9	10.1	1.3
199	420	E	-	660	N	9586	10	9	10.6	1.3
200	420	E	-	665	N	9616	10	10	11.8	1.2

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr92LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM8000N/ATotal U410CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTh(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

W.A. Rozen

DATE:

8-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
201	420	E	-	670	N	10702	11	11	14.9	1.2
202	420	E	-	675	N	9878	11	10	15.4	1.2
203	420	E	-	680	N	8878	11	10	15.1	1.4
204	420	E	-	685	N	8972	11	11	12.2	1.6
205	420	E	-	690	N	10488	11	12	13.2	1.9
206	420	E	-	695	N	10206	11	11	13.1	1.7
207	420	E	-	700	N	10738	11	10	9.9	1.6
208	420	E	-	705	N	10776	11	11	14.6	1.3
209	420	E	-	710	N	10944	11	10	7.5	1.2
210	420	E	-	715	N	10672	11	11	15.2	1
211	420	E	-	720	N	10400	11	10	12.4	1.1
212	420	E	-	725	N	10246	11	11	6.6	1.2
213	420	E	-	730	N	10374	11	10	9.6	1.3
214	420	E	-	735	N	10438	11	11	5.9	1.2
215	420	E	-	740	N	9640	13	12	13.9	1.2
216	420	E	-	745	N	9766	13	13	11.7	1.2
217	420	E	-	750	N	9972	14	13	11	1.3
218	425	E	-	645	N	9474	12	12	10.1	1.2
219	425	E	-	650	N	9648	10	10	11.7	1.2
220	425	E	-	655	N	9620	10	9	12.5	1.2

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. C. Rogers*

DATE:

*9-13-99*

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
221	425	E	-	660	N	9482	10	9	10	1.3
222	425	E	-	665	N	9902	12	11	14.6	1.2
223	425	E	-	670	N	10214	11	11	13.9	1.3
224	425	E	-	675	N	9806	10	11	15.7	1.1
225	425	E	-	680	N	9152	10	11	14.4	1.6
226	425	E	-	685	N	8972	9	10	13.9	1.4
227	425	E	-	690	N	10396	13	11	15.9	2
228	425	E	-	695	N	10102	12	12	11.2	1.6
229	425	E	-	700	N	10742	10	11	12.2	1.8
230	425	E	-	705	N	10424	13	12	13.9	1.5
231	425	E	-	710	N	10416	12	12	14.6	1.8
232	425	E	-	715	N	10244	11	11	11.1	1.7
233	425	E	-	720	N	9882	10	10	7.8	1.4
234	425	E	-	725	N	9216	10	10	11	1.2
235	425	E	-	730	N	10296	10	10	8.7	1.3
236	425	E	-	735	N	9786	11	11	8.2	1.5
237	425	E	-	740	N	9900	10	11	12.7	1.2
238	425	E	-	745	N	10076	14	13	12.5	1.3
239	425	E	-	750	N	9772	14	13	9.7	1.4
240	430	E	-	645	N	10116	13	14	6.9	1.4

INSTRUMENTS:RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY: W.A. RogersDATE: 9-13-99

CIMARRON CORPORATION  
 CIMARRON FACILITY  
 Sub-Area "G" Affected Expanded Drainage  
 Surface Soil Samples

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
241	430	E	-	650	N	9718	10	9	8.6	1.3
242	430	E	-	655	N	9522	10	10	12.2	1.5
243	430	E	-	660	N	9918	11	10	9.1	1
244	430	E	-	665	N	9980	11	11	14.5	1.3
245	430	E	-	670	N	10536	12	11	17.1	1.1
246	430	E	-	675	N	9862	11	9	15.9	1.1
247	430	E	-	680	N	9322	11	11	11.9	1.7
248	430	E	-	685	N	8884	11	11	15.1	1.7
249	430	E	-	690	N	10088	12	13	7.2	1.9
250	430	E	-	695	N	9820	12	12	14.2	1.7
251	430	E	-	700	N	10342	12	12	12.5	1.2
252	430	E	-	705	N	9748	12	13	12.2	1.4
253	430	E	-	710	N	10128	12	11	11.6	2.1
254	430	E	-	715	N	9972	12	11	12.8	1.5
255	430	E	-	720	N	9806	11	10	10.6	1.5
256	430	E	-	725	N	9864	9	10	9	1.3
257	430	E	-	730	N	9788	10	10	9.3	1.2
258	430	E	-	735	N	9922	9	10	12.7	1
259	430	E	-	740	N	9918	9	10	12.9	1.2
260	430	E	-	745	N	10140	14	13	10.7	1.3

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

 $\mu$ R/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.C. Rogers*

DATE: 9-13-99



**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
261	430	E	-	750	N	9986	13	14	15.1	1.3
262	430	E	-	755	N	9168	11	11	9.5	1.2
263	435	E	-	645	N	9744	14	12	9.4	1
264	435	E	-	650	N	9660	10	10	10.5	1.2
265	435	E	-	655	N	9512	10	10	12.3	1
266	435	E	-	660	N	9678	9	9	8.1	1.1
267	435	E	-	665	N	9960	11	10	11.3	1.2
268	435	E	-	670	N	10638	11	11	11.9	1.3
269	435	E	-	675	N	9990	10	10	11.6	1.4
270	435	E	-	680	N	11264	11	11	11.1	2
271	435	E	-	685	N	8880	10	11	12.4	1.4
272	435	E	-	690	N	10344	12	11	8.3	1.7
273	435	E	-	695	N	10246	12	11	12.2	1.7
274	435	E	-	700	N	10556	12	12	10.1	1.4
275	435	E	-	705	N	10158	12	12	10.4	1.7
276	435	E	-	710	N	10140	11	11	12.8	1.4
277	435	E	-	715	N	9912	12	12	13.1	2
278	435	E	-	720	N	9896	10	10	10.4	1.1
279	435	E	-	725	N	9482	10	10	7.4	1.5
280	435	E	-	730	N	9520	9	9	9.3	1.1

INSTRUMENTS:RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.C. Rogers*

DATE:

*9-13-99*

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
281	435	E	-	735	N	9820	10	10	13.9	1.2
282	435	E	-	740	N	8100	15	14	11.2	0.9
283	435	E	-	745	N	10130	14	13	13.7	1.3
284	435	E	-	750	N	9894	14	13	15.4	1.3
285	435	E	-	755	N	9350	12	12	10.9	1.2
286	440	E	-	645	N	9706	13	12	9	1.1
287	440	E	-	650	N	9206	9	10	11.3	1.3
288	440	E	-	655	N	9684	10	11	9.5	1.4
289	440	E	-	660	N	9728	10	9	10.5	1.2
290	440	E	-	665	N	9566	11	10	11.1	1.4
291	440	E	-	670	N	10230	11	10	15.3	1.3
292	440	E	-	675	N	10142	11	10	13.3	1.3
293	440	E	-	680	N	10780	11	11	13.7	1.7
294	440	E	-	685	N	8970	11	10	13.2	1.7
295	440	E	-	690	N	9904	12	11	11.2	1.8
296	440	E	-	695	N	10150	12	11	8.7	1.7
297	440	E	-	700	N	10228	12	12	9.5	1.6
298	440	E	-	705	N	10146	12	11	11.2	1.4
299	440	E	-	710	N	9800	12	12	12.2	1.6
300	440	E	-	715	N	10058	12	10	10.1	1.9

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.C. Rogers*

DATE:

9-13-99

CIMARRON CORPORATION  
 CIMARRON FACILITY  
 Sub-Area "G" Affected Expanded Drainage  
 Surface Soil Samples

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
301	440	E	-	720	N	9900	10	9	10.3	1.2
302	440	E	-	725	N	9370	10	10	20.5	1
303	440	E	-	730	N	10290	11	10	11.1	1.8
304	440	E	-	735	N	9940	10	10	12.6	1.4
305	440	E	-	740	N	9836	12	13	13.2	0.9
306	440	E	-	745	N	9872	13	12	10.2	1.3
307	440	E	-	750	N	9818	15	12	14.3	1.3
308	440	E	-	755	N	9840	14	13	11.8	1.1
309	445	E	-	645	N	9740	14	13	10.6	1.2
310	445	E	-	650	N	9538	11	10	12.8	1.2
311	445	E	-	655	N	9444	11	10	12.8	1.2
312	445	E	-	660	N	9742	10	10	10.3	1.1
313	445	E	-	665	N	10070	11	11	12.1	1.2
314	445	E	-	670	N	10662	10	11	14.7	1.5
315	445	E	-	675	N	10014	11	10	13.1	1.2
316	445	E	-	680	N	9172	11	10	13.1	1.5
317	445	E	-	685	N	8970	11	10	12.1	1.3
318	445	E	-	690	N	10634	11	11	9.9	1.7
319	445	E	-	695	N	10428	13	13	10.2	1.7
320	445	E	-	700	N	10424	13	12	13.3	1.4

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.A. Rogers*

DATE:

9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
321	445	E	-	705	N	10462	12	12	7.6	1.5
322	445	E	-	710	N	10408	12	12	10	1.6
323	445	E	-	715	N	10454	13	13	9.8	1.6
324	445	E	-	720	N	9650	11	10	7.8	1.1
325	445	E	-	725	N	9784	10	10	12.1	1.1
326	445	E	-	730	N	9604	10	9	13.5	1.3
327	445	E	-	735	N	9388	10	9	13.5	1.3
328	445	E	-	740	N	9518	9	9	12.1	1
329	445	E	-	745	N	9638	14	13	16.8	1.2
330	445	E	-	750	N	10106	13	14	12.1	1.1
331	445	E	-	755	N	9078	14	13	11.2	0.8
332	450	E	-	645	N	9648	14	13	12.1	0.9
333	450	E	-	650	N	9478	10	10	12.3	1.3
334	450	E	-	655	N	9446	10	10	11.1	1.3
335	450	E	-	660	N	9964	10	10	13.5	1
336	450	E	-	665	N	9726	11	11	11.3	1.3
337	450	E	-	670	N	10520	10	10	15.7	1.1
338	450	E	-	675	N	9476	12	10	14.2	1.3
339	450	E	-	680	N	9414	10	11	8.3	1.7
340	450	E	-	685	N	9056	10	10	10	1.5

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. A. Rogers*

DATE:

9-13-99

CIMARRON CORPORATION  
 CIMARRON FACILITY  
 Sub-Area "G" Affected Expanded Drainage  
 Surface Soil Samples

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
341	450	E	-	690	N	10232	12	10	7.7	1.7
342	450	E	-	695	N	10428	12	12	14	1.3
343	450	E	-	700	N	10012	13	12	11.8	1.7
344	450	E	-	705	N	10088	13	12	10.1	1.7
345	450	E	-	710	N	9948	12	11	10.8	1.3
346	450	E	-	715	N	9352	9	10	7.2	1.2
347	450	E	-	720	N	10086	10	10	10	1.4
348	450	E	-	725	N	9940	10	9	13.3	1.2
349	450	E	-	730	N	9436	9	9	9.7	1.5
350	450	E	-	735	N	9506	9	9	9.1	1.4
351	450	E	-	740	N	9318	13	14	11.3	1.4
352	450	E	-	745	N	9514	15	14	9.5	1.6
353	450	E	-	750	N	9898	13	14	8.1	1.5
354	450	E	-	755	N	10528	11	11	17	2
355	455	E	-	645	N	9920	12	13	9.5	1.1
356	455	E	-	650	N	9524	10	10	9.2	1.2
357	455	E	-	655	N	9614	10	10	10.7	1.3
358	455	E	-	660	N	9734	11	10	12.6	1.3
359	455	E	-	665	N	9818	10	10	11.1	0.9
360	455	E	-	670	N	10140	10	11	17.4	0.9

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.A. Boyer*

DATE:

9-13-99



**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
361	455	E	-	675	N	9724	10	10	12	1.4
362	455	E	-	680	N	9178	10	10	11.3	1.5
363	455	E	-	685	N	9070	11	11	8.9	1.5
364	455	E	-	690	N	10282	12	12	12	1.5
365	455	E	-	695	N	10450	12	13	12.7	1.3
366	455	E	-	700	N	10722	13	12	11.4	1.5
367	455	E	-	705	N	10364	12	11	11.3	1.6
368	455	E	-	710	N	10452	14	12	12.4	2
369	455	E	-	715	N	9986	10	11	11.3	1.3
370	455	E	-	720	N	10156	10	10	12.7	1.1
371	455	E	-	725	N	10098	10	10	13.6	1.2
372	455	E	-	730	N	10046	10	10	10.6	1.3
373	455	E	-	735	N	10128	9	9	10.9	1.3
374	455	E	-	740	N	9186	9	9	12.7	1.1
375	455	E	-	745	N	10196	13	14	8.9	1.6
376	455	E	-	750	N	10160	15	13	5.5	1.5
377	455	E	-	755	N	11474	10	9	15	2
378	460	E	-	645	N	9772	13	13	9.5	1
379	460	E	-	650	N	9746	9	10	11.3	1.2
380	460	E	-	655	N	9512	11	11	14.1	1.1

INSTRUMENTS:RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. A. Rogers*

DATE:

9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
381	460	E	-	660	N	9828	10	10	13.2	0.9
382	460	E	-	665	N	9222	10	10	12.5	1.1
383	460	E	-	670	N	10376	10	9	15.6	1.1
384	460	E	-	675	N	9862	10	10	16.5	1.1
385	460	E	-	680	N	8972	11	10	11.7	1.4
386	460	E	-	685	N	9170	11	10	9.7	1
387	460	E	-	690	N	10264	12	11	8.3	2
388	460	E	-	695	N	10784	13	12	10.6	1.7
389	460	E	-	700	N	10444	13	12	10.9	1.6
390	460	E	-	705	N	10186	13	11	7.3	1.7
391	460	E	-	710	N	10590	13	12	11.5	1.6
392	460	E	-	715	N	10156	10	10	14.1	1.4
393	460	E	-	720	N	10208	11	10	12.5	1.3
394	460	E	-	725	N	10084	10	10	13.2	1.3
395	460	E	-	730	N	9886	10	9	12.8	1.4
396	460	E	-	735	N	9824	10	10	9.2	1.5
397	460	E	-	740	N	9640	10	10	14.3	1.1
398	460	E	-	745	N	9960	14	14	11.7	1.2
399	460	E	-	750	N	10296	14	13	12.6	1.4
400	460	E	-	755	N	9714	10	10	7	1

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr 9 2LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM 8000 N/ATotal U 4 10CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/g Th(Nat) 1.5 1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. a. Rogers*DATE: *9-13-99*

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
401	460	E	-	760	N	9714	10	10	7	1
402	465	E	-	650	N	9702	14	13	11.3	1
403	465	E	-	655	N	9388	10	9	11.1	1.2
404	465	E	-	660	N	9714	10	9	11.7	1
405	465	E	-	665	N	10034	10	9	10	1.2
406	465	E	-	670	N	9256	10	9	10.1	1.3
407	465	E	-	675	N	10212	11	11	11.8	1.2
408	465	E	-	680	N	9580	11	10	10.6	1.4
409	465	E	-	685	N	10192	10	10	9	1
410	465	E	-	690	N	9884	10	9	10.9	1
411	465	E	-	695	N	11102	12	12	10.3	1.9
412	465	E	-	700	N	10928	11	11	8.8	1.9
413	465	E	-	705	N	10846	11	11	5.3	2
414	465	E	-	710	N	10548	11	10	5.7	2.1
415	465	E	-	715	N	10652	11	11	8.1	2
416	465	E	-	720	N	10220	11	11	12.9	1.5
417	465	E	-	725	N	10230	10	10	11	1.2
418	465	E	-	730	N	10216	10	10	7.4	1.6
419	465	E	-	735	N	10008	10	9	10.5	1.4
420	465	E	-	740	N	9528	10	10	13.8	1.3

INSTRUMENTS:RESULTS IN: BACKGROUND      MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr                      9                      2LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM                      8000                      N/ACIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

	Total U	4	10
pCi/g	Th(Nat)	1.5	1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

W.A. RogersDATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
421	465	E	-	745	N	10162	10	9	14.5	1.5
422	465	E	-	750	N	10100	15	14	10.1	1.2
423	465	E	-	755	N	9582	13	13	10.6	1.5
424	465	E	-	760	N	10800	10	10	13	1
425	470	E	-	655	N	9740	14	14	12.1	0.9
426	470	E	-	660	N	9616	11	10	10.9	1.3
427	470	E	-	665	N	9962	12	10	8.7	1.5
428	470	E	-	670	N	9898	11	10	11	1.2
429	470	E	-	675	N	9622	10	10	13.8	1.1
430	470	E	-	680	N	10438	11	11	12.3	1.1
431	470	E	-	685	N	9814	9	10	13.8	1.1
432	470	E	-	690	N	10274	10	9	12.4	1.4
433	470	E	-	695	N	10588	11	11	9.5	2
434	470	E	-	700	N	10788	11	12	9.3	2.3
435	470	E	-	705	N	10860	13	12	8.4	2
436	470	E	-	710	N	10820	11	10	7.4	2.1
437	470	E	-	715	N	11012	12	11	5.6	2.2
438	470	E	-	720	N	10946	11	12	6.2	2
439	470	E	-	725	N	10848	10	10	9.5	1.2
440	470	E	-	730	N	10108	9	9	12	1.3

INSTRUMENTS:RESULTS IN: BACKGROUND      MDALUDLUM MICRO 'R' METER - MODEL 19   S/N 111299μR/hr92LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR   S/N 97264CPM8000N/ATotal U410CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTh(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY:W.A. RogersDATE:9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
441	470	E	-	735	N	10148	10	10	11.4	1.2
442	470	E	-	740	N	10266	10	10	11.1	1.1
443	470	E	-	745	N	10212	10	10	17.2	1.1
444	470	E	-	750	N	10204	14	15	10	1.2
445	470	E	-	755	N	10148	15	13	8.5	1.5
446	470	E	-	760	N	9354	13	13	10.9	1.2
447	475	E	-	655	N	9456	12	14	10.8	1.3
448	475	E	-	660	N	9416	11	10	10.4	1.4
449	475	E	-	665	N	9760	10	10	12.2	1.5
450	475	E	-	670	N	10014	10	9	9.6	1.2
451	475	E	-	675	N	10368	11	10	11.2	1.2
452	475	E	-	680	N	10340	10	11	13.9	1.2
453	475	E	-	685	N	6862	10	11	11	1.3
454	475	E	-	690	N	10208	10	11	11.2	1.5
455	475	E	-	695	N	11180	10	10	10.3	1.3
456	475	E	-	700	N	10870	11	11	10.1	1.5
457	475	E	-	705	N	10568	11	11	8.9	1.4
458	475	E	-	710	N	10870	11	11	11.2	1.2
459	475	E	-	715	N	10550	11	11	11.2	1.4
460	475	E	-	720	N	8404	14	13	5.5	1.4

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr 9 2LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM 8000 N/ATotal U 4 10CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/g Th(Nat) 1.5 1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

W. a. Rogers

DATE:

9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
461	475	E	-	725	N	10520	11	11	13	1.3
462	475	E	-	730	N	10324	11	11	9.1	1.1
463	475	E	-	735	N	10036	10	11	9.2	1.2
464	475	E	-	740	N	9882	10	10	11.8	1
465	475	E	-	745	N	9606	9	9	13.4	1
466	475	E	-	750	N	10406	10	10	10.5	1.3
467	475	E	-	755	N	10096	14	13	15.6	1.3
468	475	E	-	760	N	9572	13	12	9.5	1.2
469	480	E	-	660	N	9666	14	13	5.7	1.3
470	480	E	-	665	N	9828	10	10	11.4	1.3
471	480	E	-	670	N	9818	10	10	10.8	1
472	480	E	-	675	N	9564	10	10	8.9	1
473	480	E	-	680	N	9754	11	10	10.2	0.9
474	480	E	-	685	N	10648	11	10	14.6	1.3
475	480	E	-	690	N	9916	10	11	12.8	1.2
476	480	E	-	695	N	10186	10	10	13	1.3
477	480	E	-	700	N	10712	10	10	9.3	1.2
478	480	E	-	705	N	10368	11	11	10.4	1.1
479	480	E	-	710	N	10346	11	10	10.2	1.2
480	480	E	-	715	N	10712	12	11	5.8	1.6

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. A. Rogers*

DATE: 9-13-99



**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
481	480	E	-	720	N	10318	10	11	12.7	1.4
482	480	E	-	725	N	10532	11	11	13	1.3
483	480	E	-	730	N	10406	10	10	10.7	1.4
484	480	E	-	735	N	9764	10	9	7.9	1
485	480	E	-	740	N	9478	10	9	8.4	0.7
486	480	E	-	745	N	9866	10	10	10.3	1.1
487	480	E	-	750	N	10402	10	10	16.1	1.2
488	480	E	-	755	N	10076	14	13	9.5	1.4
489	480	E	-	760	N	9478	14	15	7.8	1.2
490	485	E	-	665	N	9518	11	11	8.3	1.3
491	485	E	-	670	N	9638	10	9	9.2	1.1
492	485	E	-	675	N	10082	11	10	12	1.3
493	485	E	-	680	N	10130	10	10	13.2	1.1
494	485	E	-	685	N	9690	11	11	16.1	1.4
495	485	E	-	690	N	9990	11	10	10.3	1.5
496	485	E	-	695	N	10988	11	10	9.9	1.2
497	485	E	-	700	N	10946	11	11	9.3	1.1
498	485	E	-	705	N	10942	10	10	10.5	1.5
499	485	E	-	710	N	11218	12	11	9.2	1.4
500	485	E	-	715	N	10850	10	11	7.2	1.4

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr 9 2LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM 8000 N/ATotal U 4 10CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/g Th(Nat) 1.5 1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:W.A. PogueDATE: 8-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
501	485	E	-	720	N	10322	11	11	9	1.3
502	485	E	-	725	N	10652	10	10	9.8	1.3
503	485	E	-	730	N	10182	11	11	10.6	1.1
504	485	E	-	735	N	9914	10	10	14.6	1.3
505	485	E	-	740	N	10172	10	10	14.5	1.2
506	485	E	-	745	N	10568	10	10	12.5	1.3
507	485	E	-	750	N	9996	14	13	8	1.5
508	485	E	-	755	N	9310	12	12	8.7	1
509	485	E	-	760	N	10732	10	10	13	1
510	490	E	-	670	N	9864	11	10	7.9	1.3
511	490	E	-	675	N	10606	10	9	11.6	1.2
512	490	E	-	680	N	10204	11	10	14.8	1
513	490	E	-	685	N	9868	11	10	11.6	1.5
514	490	E	-	690	N	9976	11	10	10.5	1.3
515	490	E	-	695	N	10764	10	11	11	1.1
516	490	E	-	700	N	10410	11	10	8.6	1.2
517	490	E	-	705	N	10918	10	11	9.7	1.4
518	490	E	-	710	N	10298	11	11	13.6	2.1
519	490	E	-	715	N	10566	10	10	8.8	1.4
520	490	E	-	720	N	10644	11	10	8.3	1.4

INSTRUMENTS:RESULTS IN: BACKGROUND      MDALUDDLUM MICRO 'R' METER - MODEL 19   S/N 111299µR/hr92LUDDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR   S/N 97264CPM8000N/ATotal U410CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTh(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY: W. a. RogersDATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
521	490	E	-	725	N	10412	11	11	13.6	1.3
522	490	E	-	730	N	10210	10	10	12.7	0.9
523	490	E	-	735	N	10082	10	11	10.1	1
524	490	E	-	740	N	10220	11	10	6.8	1
525	490	E	-	745	N	11080	11	11	14.1	1.1
526	490	E	-	750	N	10158	14	12	11.4	1
527	490	E	-	755	N	10016	10	10	16.6	1.8
528	490	E	-	760	N	10406	11	11	10.8	1.2
529	495	E	-	675	N	9414	10	8	5.1	0.9
530	495	E	-	680	N	9636	10	11	9.6	0.9
531	495	E	-	685	N	10508	10	11	9.6	1.3
532	495	E	-	690	N	9838	10	10	11.5	1.3
533	495	E	-	695	N	10306	11	11	14.3	1
534	495	E	-	700	N	10426	12	11	6	1
535	495	E	-	705	N	10866	10	11	10.5	0.8
536	495	E	-	710	N	10566	12	12	7	1
537	495	E	-	715	N	10722	10	12	13	1.2
538	495	E	-	720	N	10674	11	11	10.7	1.2
539	495	E	-	725	N	10664	12	11	13.5	1.5
540	495	E	-	730	N	10496	11	10	15.3	1.3

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr92LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM8000N/ATotal U410CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTh(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY:W.A. RogersDATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
541	495	E	-	735	N	10006	12	11	13	1.4
542	495	E	-	740	N	9932	11	11	16.5	1.5
543	495	E	-	745	N	9986	11	11	15.8	1.3
544	495	E	-	750	N	10180	11	10	19.5	1.2
545	495	E	-	755	N	10634	11	9	16.2	1.4
546	495	E	-	760	N	10424	10	10	18.2	1.4
547	495	E	-	765	N	8282	13	13	10.2	1.9
548	500	E	-	680	N	10042	10	10	8.1	1.4
549	500	E	-	685	N	10560	11	10	11.1	1.1
550	500	E	-	690	N	10416	11	11	8.2	1.5
551	500	E	-	695	N	9994	12	9	10.2	1.3
552	500	E	-	700	N	10140	11	10	9.7	1.7
553	500	E	-	705	N	10286	10	9	11.7	1.3
554	500	E	-	710	N	10120	11	11	11.1	1.4
555	500	E	-	715	N	9794	11	10	9.7	1.7
556	500	E	-	720	N	10130	10	9	11.1	1.1
557	500	E	-	725	N	10122	11	11	12.4	1.3
558	500	E	-	730	N	10030	10	11	11.4	1.3
559	500	E	-	735	N	9090	11	10	16.4	1.1
560	500	E	-	740	N	9690	9	9	12	1.2

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDDLUM MICRO 'R' METER - MODEL 19 S/N 111299µR/hr92LUDDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM8000N/ACIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTotal U410Th(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY: W.A. RyanDATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
561	500	E	-	745	N	10440	10	9	12.6	1.2
562	500	E	-	750	N	9856	10	10	12.6	1.3
563	500	E	-	755	N	10160	10	10	16	1.5
564	500	E	-	760	N	9762	10	11	15.2	1.3
565	500	E	-	765	N	10256	11	11	13.3	1.4
566	505	E	-	680	N	9864	10	10	8.2	1.3
567	505	E	-	685	N	10160	12	10	10.6	1.3
568	505	E	-	690	N	10566	11	10	12.8	1.2
569	505	E	-	695	N	10474	11	11	11.9	1.4
570	505	E	-	700	N	10578	10	10	12.8	1.3
571	505	E	-	705	N	10972	12	11	11.8	1.2
572	505	E	-	710	N	10564	11	11	10.7	1.3
573	505	E	-	715	N	10600	11	10	11.1	1.5
574	505	E	-	720	N	11104	11	11	12.2	1.7
575	505	E	-	725	N	10910	11	11	11	1.3
576	505	E	-	730	N	10978	12	11	11.7	1
577	505	E	-	735	N	10420	11	12	13.7	1.5
578	505	E	-	740	N	10702	11	11	11	1.3
579	505	E	-	745	N	10550	10	10	9.9	1.5
580	505	E	-	750	N	10700	11	11	12.9	1.4

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Total U 4

10

Th(Nat) 1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.A. Rogers*

DATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
581	505	E	-	755	N	10010	12	11	15.5	1.4
582	505	E	-	760	N	10966	11	11	21	1.3
583	505	E	-	765	N	11146	11	11	15.4	1.2
584	510	E	-	685	N	10064	11	11	11.3	1.2
585	510	E	-	690	N	10422	12	10	14.8	1.2
586	510	E	-	695	N	10562	11	11	11.3	1.3
587	510	E	-	700	N	13200	12	11	10.9	1.4
588	510	E	-	705	N	10726	11	11	12	1.4
589	510	E	-	710	N	10464	11	11	11.5	1.6
590	510	E	-	715	N	10586	11	12	11.3	1.1
591	510	E	-	720	N	10204	12	11	9.2	1.5
592	510	E	-	725	N	10846	12	12	8.7	1.4
593	510	E	-	730	N	10592	11	12	11.3	1.4
594	510	E	-	735	N	10036	11	10	10.8	1.5
595	510	E	-	740	N	10546	10	12	10.7	1.4
596	510	E	-	745	N	10316	11	10	9.7	1.4
597	510	E	-	750	N	10560	12	10	12.9	1.4
598	510	E	-	755	N	11070	12	11	16.5	1.6
599	510	E	-	760	N	11010	12	11	14.6	1.2
600	510	E	-	765	N	10566	11	11	14.2	1.5

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

 $\mu\text{R/hr}$ 

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.A. Rogers*

DATE: 9-13-99



**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
601	515	E	-	685	N	10208	10	11	13.4	1.3
602	515	E	-	690	N	10442	10	10	14.1	1.2
603	515	E	-	695	N	10316	10	10	11.1	1.5
604	515	E	-	700	N	10278	10	9	12.1	1.2
605	515	E	-	705	N	10342	10	9	8.8	1.3
606	515	E	-	710	N	10288	9	9	8.5	1.4
607	515	E	-	715	N	10546	10	11	11.2	1.2
608	515	E	-	720	N	10624	10	10	8.9	1.5
609	515	E	-	725	N	10648	11	10	10	1.5
610	515	E	-	730	N	10536	9	10	11.9	1.4
611	515	E	-	735	N	10506	10	10	9	1.3
612	515	E	-	740	N	10602	9	10	12.4	1.4
613	515	E	-	745	N	10214	10	10	12.1	1.4
614	515	E	-	750	N	10482	9	10	14.6	1.1
615	515	E	-	755	N	10560	12	11	16.9	1.5
616	515	E	-	760	N	10860	11	10	14.1	1.5
617	515	E	-	765	N	9948	10	10	14.6	1.2
618	520	E	-	685	N	10196	12	11	13.3	1.2
619	520	E	-	690	N	10110	10	11	10.2	1.4
620	520	E	-	695	N	10072	11	11	12.9	1.5

INSTRUMENTS:RESULTS IN: BACKGROUND MDALUDLUM MICRO 'R' METER - MODEL 19 S/N 111299μR/hr92LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264CPM8000N/ATotal U410CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTORpCi/gTh(Nat)1.51

BACKGROUND NOT SUBTRACTED

REVIEWED BY:W. G. BoyerDATE:9-13-99

CIMARRON CORPORATION  
 CIMARRON FACILITY  
 Sub-Area "G" Affected Expanded Drainage  
 Surface Soil Samples

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
621	520	E	-	700	N	10044	11	11	11	1.4
622	520	E	-	705	N	10302	12	11	13	1.4
623	520	E	-	710	N	10254	12	11	10.6	1.1
624	520	E	-	715	N	10158	12	12	12	1.3
625	520	E	-	720	N	10032	12	12	10.3	1.4
626	520	E	-	725	N	10254	11	11	8.3	1.6
627	520	E	-	730	N	10594	12	11	11.1	1.3
628	520	E	-	735	N	9906	12	11	11.7	1.2
629	520	E	-	740	N	10144	10	10	12.4	1.3
630	520	E	-	745	N	10394	12	12	11.8	1.4
631	520	E	-	750	N	10532	12	11	20.4	1.3
632	520	E	-	755	N	10474	12	11	20.4	1.3
633	520	E	-	760	N	9816	11	11	13.4	1.2
634	520	E	-	765	N	11344	12	10	12	2
635	525	E	-	685	N	9834	9	9	9.3	1.5
636	525	E	-	690	N	10010	11	10	14.2	1.3
637	525	E	-	695	N	10060	10	10	13.2	1.3
638	525	E	-	700	N	10266	10	10	13.6	1.3
639	525	E	-	705	N	10112	10	11	11.6	1.4
640	525	E	-	710	N	10526	9	11	11.6	1.4

## INSTRUMENTS:

RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMARRON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. A. Rogers*

DATE: 9-13-99

CIMARRON CORPORATION  
 CIMARRON FACILITY  
 Sub-Area "G" Affected Expanded Drainage  
 Surface Soil Samples

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
641	525	E	-	715	N	10210	10	9	14	1.3
642	525	E	-	720	N	10286	12	11	10.2	1.4
643	525	E	-	725	N	10360	11	11	13.6	1.3
644	525	E	-	730	N	10108	10	10	12.8	1.2
645	525	E	-	735	N	10264	11	10	14.6	1.2
646	525	E	-	740	N	9962	11	10	12.6	1.2
647	525	E	-	745	N	9860	12	11	13.5	1.4
648	525	E	-	750	N	10172	10	10	17.1	1.2
649	525	E	-	755	N	10630	11	10	10.9	1.3
650	525	E	-	760	N	9010	10	9	6.9	1
651	525	E	-	765	N	10732	10	11	10	1
652	530	E	-	685	N	10282	15	14	11.5	1
653	530	E	-	690	N	10676	14	13	8	1.2
654	530	E	-	695	N	10942	13	14	10.1	1.3
655	530	E	-	700	N	10910	14	14	8.6	1.2
656	530	E	-	705	N	11250	15	14	8.2	1.2
657	530	E	-	710	N	10886	15	14	9.2	1.1
658	530	E	-	715	N	10892	15	14	8.9	1.1
659	530	E	-	720	N	10410	14	15	10.3	0.9
660	530	E	-	725	N	10298	15	14	8.1	1.3

## INSTRUMENTS:

## RESULTS IN: BACKGROUND MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr	9	2
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LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM	8000	N/A
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Total U	4	10
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CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g	Th(Nat)	1.5	1
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BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W. A. P. Jones*

DATE: 9-13-99

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
661	530	E	-	730	N	10390	14	14	9.2	1.1
662	530	E	-	735	N	10320	15	14	10.2	1.3
663	530	E	-	740	N	9882	13	14	11	0.9
664	530	E	-	745	N	10466	15	13	11.8	0.9
665	530	E	-	750	N	10328	14	15	15.8	1
666	530	E	-	755	N	10232	14	15	14.6	1.2
667	530	E	-	760	N	9100	13	12	13.1	1.3
668	530	E	-	765	N	11260	12	12	14	1
669	535	E	-	685	N	10632	11	10	4.2	1.5
670	535	E	-	690	N	10908	11	10	7.8	1.4
671	535	E	-	695	N	10854	10	10	7.8	1.4
672	535	E	-	700	N	10614	10	11	7.9	1.4
673	535	E	-	705	N	10882	11	11	7.3	1.4
674	535	E	-	710	N	11012	11	10	10.1	1.2
675	535	E	-	715	N	10884	11	12	7.5	1.2
676	535	E	-	720	N	11350	11	11	7.9	1.5
677	535	E	-	725	N	11078	12	11	8.2	1.6
678	535	E	-	730	N	10924	11	11	8.8	1.5
679	535	E	-	735	N	11008	10	12	10.2	1.3
680	535	E	-	740	N	10352	11	11	11.1	1.4

INSTRUMENTS:RESULTS IN: BACKGROUND      MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY:

*W.A. Rogers*

DATE:

*7-13-99*

**CIMARRON CORPORATION**  
**CIMARRON FACILITY**  
**Sub-Area "G" Affected Expanded Drainage**  
**Surface Soil Samples**

LN #	GRID NUMBER					3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	0-6" Sample	
									Total-U	Th (Nat)
681	535	E	-	745	N	10318	10	11	10.9	1.4
682	535	E	-	750	N	10722	12	11	11	1.5
683	535	E	-	755	N	10810	11	10	11.8	1.5
684	535	E	-	760	N	11056	12	10	16.8	1.4
685	535	E	-	765	N	10958	11	10	7.9	1.7
686	540	E	-	755	N	11238	12	12	11	2.4
687	540	E	-	760	N	10518	10	10	13.2	1.9
688	540	E	-	765	N	11278	11	11	9	1.6
689	565	E	-	770	N	11178	11	12	9	1
690	570	E	-	770	N	10754	12	12	8	2
691	590	E	-	770	N	10398	11	11	13.2	2
692	590	E	-	775	N	10960	11	11	8.6	1.7
693	645	E	-	785	N	9534	10	10	10	1
694	650	E	-	785	N	9232	10	10	9	1

INSTRUMENTS:RESULTS IN: BACKGROUND      MDA

LUDLUM MICRO 'R' METER - MODEL 19 S/N 111299

μR/hr

9

2

LUDLUM 2221, UNSHIELDED 3" X 1/2" NaI DETECTOR S/N 97264

CPM

8000

N/A

Total U

4

10

CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR

pCi/g

Th(Nat)

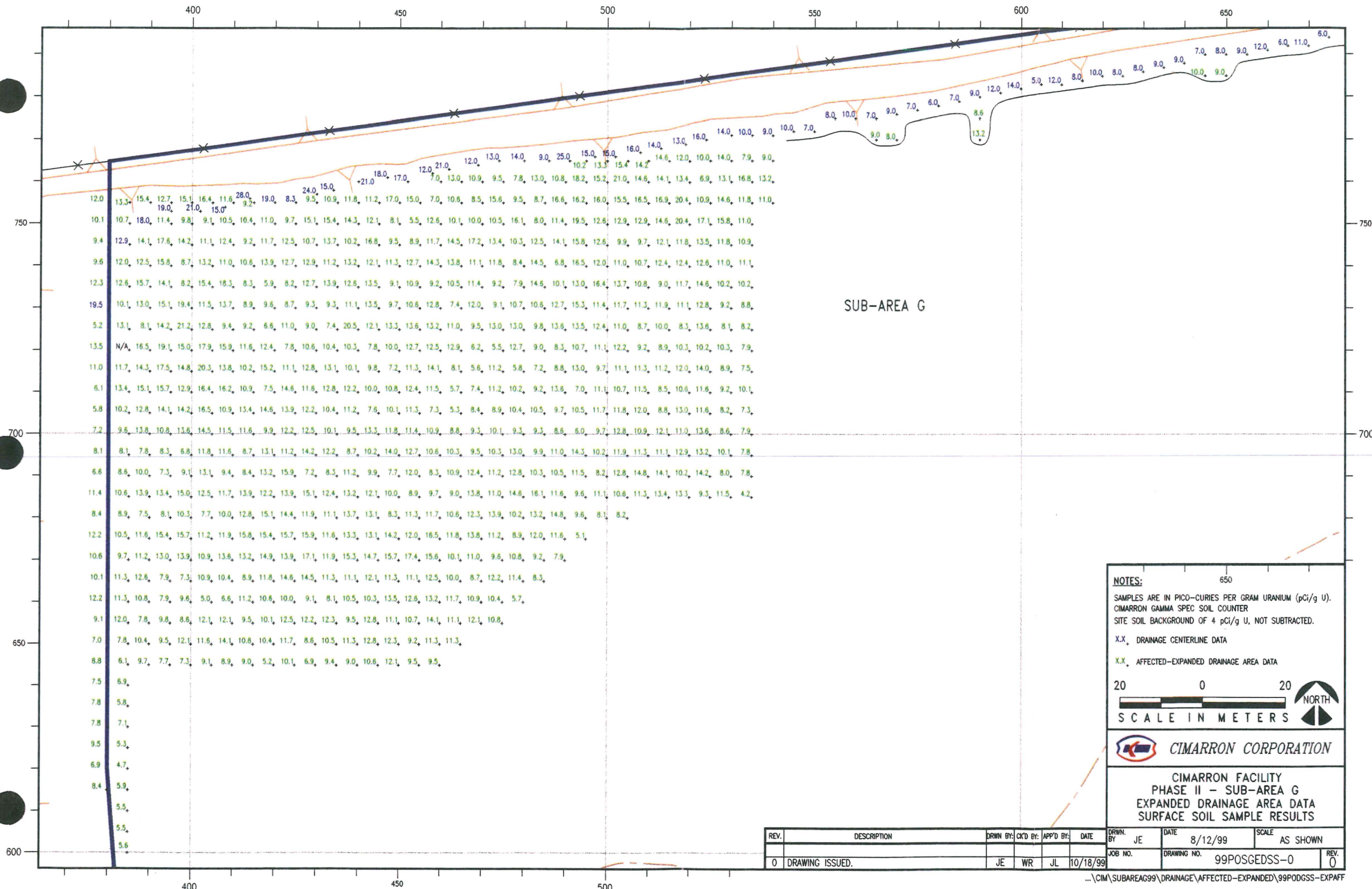
1.5

1

BACKGROUND NOT SUBTRACTED

REVIEWED BY: W.O. RogersDATE: 9-13-99






**NOTES:**

SAMPLES ARE IN PICO-CURIES PER GRAM URANIUM (pCi/g U).  
CIMARRON GAMMA SPEC SOIL COUNTER  
SITE SOIL BACKGROUND OF 4 pCi/g U, NOT SUBTRACTED.

X.X. DRAINAGE CENTERLINE DATA  
X.X. AFFECTED-EXPANDED DRAINAGE AREA DATA

20 0 20  
SCALE IN METERS

 **CIMARRON CORPORATION**

**CIMARRON FACILITY  
PHASE II - SUB-AREA G  
EXPANDED DRAINAGE AREA DATA  
SURFACE SOIL SAMPLE RESULTS**

REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE	DRWN BY:	DATE	SCALE
0	DRAWING ISSUED.	JE	WR	JL	10/18/99	JE	8/12/99	AS SHOWN

JOB NO. 99POSGEDSS-0  
REV. 0