

**TRUE MEAN ACTIVITY VS.  
GUIDELINE VALUE AT 95% CONFIDENCE  
PHASE III SUB-AREA "O" WASTE POND #1  
(0 TO 1 METER)**

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

Number	n	(n-N)	(n-N) <sup>2</sup>
1	6.7	-1.5	2.2
2	5.7	-2.5	6.1
3	8.7	0.5	0.3
4	8.7	0.5	0.3
5	7.3	-0.9	0.8
6	7.7	-0.5	0.2
7	9.3	1.1	1.3
8	7.0	-1.2	1.4
9	7.4	-0.8	0.6
10	8.7	0.5	0.3
11	7.0	-1.2	1.4
12	8.3	0.1	0.0
13	9.0	0.8	0.7
14	24.0	15.8	250.5
15	8.7	0.5	0.3
16	6.3	-1.9	3.5
17	8.7	0.5	0.3
18	11.0	2.8	8.0
19	6.7	-1.5	2.2
20	9.7	1.5	2.3
21	8.0	-0.2	0.0
22	5.7	-2.5	6.1
23	8.7	0.5	0.3
24	21.6	13.4	180.3
25	7.3	-0.9	0.8
26	8.0	-0.2	0.0
27	6.7	-1.5	2.2
28	7.0	-1.2	1.4
29	9.0	0.8	0.7
30	6.9	-1.3	1.6
31	11.7	3.5	12.4
32	7.2	-1.0	0.9
33	7.0	-1.2	1.4
34	10.3	2.1	4.5
35	8.3	0.1	0.0
36	6.8	-1.4	1.9
37	15.5	7.3	53.7
38	7.3	-0.9	0.8
39	7.7	-0.5	0.2
40	7.3	-0.9	0.8
41	7.7	-0.5	0.2
42	7.3	-0.9	0.8
43	8.1	-0.1	0.0
44	6.6	-1.6	2.5
45	7.5	-0.7	0.5
46	7.4	-0.8	0.6
47	6.8	-1.4	1.9
48	7.3	-0.9	0.8
49	7.7	-0.5	0.2
50	9.3	1.1	1.3
	383.5		144.1
	248.8		153.1
	1062.6		858.2
	Sum(n)		Sum(n-N)

No. of Samples (x) : 130

**COUNT TIME: 5 MINUTES**

**Sample Mean (N) = Sum(n) ÷ (x)**

Sample Mean (N) : 8.17

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

Standard Deviation: 2.58

2 Std Deviations:	5.16
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**Degree of Freedom(df).= (x) - 1**      **Data listed on Table B-1**

 $(df) = 1.658$ 

**Area's Average Level ( $A_{\mu}$ ) = (N) + (df) x [(Sd)/SQRT(x)]**

$$\langle A \mu \rangle = \boxed{8.55}$$

GUIDELINE VALUE:	94
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Acceptable Level:	98.0
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pCi/gU    TOTAL U

pCi/gU TOTAL U

pCi/gU      TOTAL U

TABLE B-1

(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)	400	is (B)	1.649	95%
(df) low value(Y)	120	is (A)	1.658	95%
Desired value(df) (X)	129	is calculated as follow:		
$\text{EXP}[(\text{Ln}(\text{B}) - \text{Ln}(\text{A})) + (\text{Z} - \text{Y})] \times (\text{X} - \text{Y}) + \text{Ln}(\text{A})$				
The (df) value for (X)	129	1.658	95%	

PERFORMED BY: Deanna Guckert

DATE: 3/11/98

REVIEWED BY: W. G. Rogers

DATE: 3-11-98



**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
51	6.4	-1.77	3.15
52	7.6	-0.57	0.33
53	11.7	3.53	12.43
54	7.3	-0.87	0.76
55	6.0	-2.17	4.73
56	7.7	-0.47	0.22
57	10.3	2.13	4.52
58	5.7	-2.47	6.12
59	6.7	-1.47	2.17
60	6.7	-1.47	2.17
61	9.8	1.63	2.64
62	6.7	-1.47	2.17
63	6.6	-1.57	2.48
64	7.1	-1.07	1.15
65	8.6	0.43	0.18
66	7.2	-0.97	0.95
67	6.3	-1.87	3.51
68	11.8	3.63	13.15
69	8.5	0.33	0.11
70	4.3	-3.87	15.01
71	12.0	3.83	14.64
72	7.7	-0.47	0.22
73	6.7	-1.47	2.17
74	7.2	-0.97	0.95
75	7.5	-0.67	0.45
76	7.0	-1.17	1.38
77	7.7	-0.47	0.22
78	9.0	0.83	0.68
79	7.3	-0.87	0.76
80	7.4	-0.77	0.60
81	7.0	-1.17	1.38
82	6.6	-1.57	2.48
83	5.9	-2.27	5.17
84	9.3	1.13	1.27
85	8.7	0.53	0.28
86	7.3	-0.87	0.76
87	7.0	-1.17	1.38
88	7.0	-1.17	1.38
89	10.0	1.83	3.33
90	6.3	-1.87	3.51
91	7.3	-0.87	0.76
92	11.0	2.83	7.99
93	7.0	-1.17	1.38
94	7.0	-1.17	1.38
95	8.8	0.63	0.39
96	7.2	-0.97	0.95
97	7.3	-0.87	0.76
98	8.3	0.13	0.02
99	6.0	-2.17	4.73
100	6.0	-2.17	4.73
	383.5		144.1
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
101	9.0	0.83	0.68
102	6.0	-2.17	4.73
103	11.3	3.13	9.77
104	7.3	-0.87	0.76
105	7.0	-1.17	1.38
106	8.3	0.13	0.02
107	8.7	0.53	0.28
108	9.2	1.03	1.05
109	11.5	3.33	11.06
110	7.7	-0.47	0.22
111	8.5	0.33	0.11
112	8.0	-0.17	0.03
113	7.3	-0.87	0.76
114	11.7	3.53	12.43
115	9.1	0.93	0.86
116	6.2	-1.97	3.90
117	7.6	-0.57	0.33
118	16.6	8.43	71.00
119	7.5	-0.67	0.45
120	6.3	-1.87	3.51
121	7.7	-0.47	0.22
122	8.0	-0.17	0.03
123	8.2	0.03	0.00
124	9.8	1.63	2.64
125	8.0	-0.17	0.03
126	4.5	-3.67	13.50
127	6.0	-2.17	4.73
128	5.5	-2.67	7.15
129	7.3	-0.87	0.76
130	9.0	0.83	0.68
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
	248.8		153.1
	Sum(n)		Sum(n-N) <sup>2</sup>

**TRUE MEAN ACTIVITY VS.  
GUIDELINE VALUE AT 95% CONFIDENCE  
PHASE III SUB-AREA "O" WASTE POND #1  
(1 TO 2 METER)**

$$n = pCi/q \text{ TOTAL U}$$
[illegible]

No. of Samples (x) : 121

**COUNT TIME: 5 MINUTES**

**Sample Mean (N) = Sum(n) ÷ (x)**

Sample Mean (N): 15.08

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

Standard Deviation: 14.14

2 Std Deviations:	28.28
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Degree of Freedom(df).= (x) - 1      Data listed on Table B-1

 $(df) = 1.658$ 

**Area's Average Level ( $A_{\mu}$ ) =  $(N) + (df) \times [(Sd)/SQRT(x)]$**

$$(A\mu) = \boxed{17.21}$$

**GUIDELINE VALUE:**

**Acceptable Level:**

pCi/gU    TOTAL U

pCi/gU    TOTAL U

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%**

**95%**

Desired value(df): (X)

120

is calculated as follow:

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

The (df) value for (X)

120

1.658	95%
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**PERFORMED BY:**

DATE: 3/11/98

REVIEWED BY:

DATE: 3-11-98

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDEN**

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
51	47.6	32.52	1057.86
52	12.1	-2.98	8.85
53	8.3	-6.78	45.90
54	6	-9.08	82.36
55	8.3	-6.78	45.90
56	6.0	-9.08	82.36
57	8.0	-7.08	50.06
58	13.3	-1.78	3.15
59	10.0	-5.08	25.76
60	8.7	-6.38	40.64
61	35.5	20.42	417.17
62	10.0	-5.08	25.76
63	18.7	3.62	13.14
64	24.7	9.62	92.64
65	10.7	-4.38	19.14
66	28.0	12.92	167.05
67	18.7	3.62	13.14
68	23.3	8.22	67.65
69	8.0	-7.08	50.06
70	6.7	-8.38	70.14
71	19.0	3.92	15.40
72	6.7	-8.38	70.14
73	8.7	-6.38	40.64
74	26.3	11.22	126.00
75	13.0	-2.08	4.31
76	8.3	-6.78	45.90
77	9.0	-6.08	36.91
78	9.7	-5.38	28.89
79	7.0	-8.08	65.21
80	25.5	10.42	108.68
81	12.0	-3.08	9.46
82	21.0	5.92	35.10
83	48.5	33.42	1117.22
84	8.7	-6.38	40.64
85	8.0	-7.08	50.06
86	7.7	-7.38	54.39
87	7.0	-8.08	65.21
88	6.7	-8.38	70.14
89	13.0	-2.08	4.31
90	10.0	-5.08	25.76
91	6.7	-8.38	70.14
92	8.0	-7.08	50.06
93	23.9	8.82	77.88
94	8.3	-6.78	45.90
95	38.4	23.32	544.05
96	41.5	26.42	698.27
97	8.7	-6.38	40.64
98	7.7	-7.38	54.39
99	8	-7.08	50.06
100	4.0	-11.08	122.66
	743.6		6147.2
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g TOTAL

Number	n	(n-N)	(n-N) <sup>2</sup>
101	12.7	-2.38	5.64
102	7.3	-7.78	60.45
103	8.3	-6.78	45.90
104	8.3	-6.78	45.90
105	6.0	-9.08	82.36
106	27.0	11.92	142.20
107	25.8	10.72	115.02
108	8.3	-6.78	45.90
109	9.3	-5.78	33.35
110	7.0	-8.08	65.21
111	9.0	-6.08	36.91
112	74.4	59.32	3519.43
113	39.8	24.72	611.32
114	47.4	32.32	1044.89
115	103.8	88.72	7872.09
116	6.3	-8.78	77.00
117	7.0	-8.08	65.21
118	9.2	-5.88	34.52
119	8.1	-6.98	48.65
120	9.0	-6.08	36.91
121	9.0	-6.08	36.91
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
	443.0		14025.8
	Sum(n)		Sum(n-N) <sup>2</sup>

**TRUE MEAN ACTIVITY VS.  
GUIDELINE VALUE AT 95% CONFIDENCE  
PHASE III SUB-AREA "O" WASTE POND #1  
(2 TO 3 METER)**

$$n = pCi/q \text{ TOTAL U}$$
[illegible]

No. of Samples (x) : 49

**COUNT TIME: 5 MINUTES**

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

**Sample Mean (N):** 28.26

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

Standard Deviation: 16.01

2 Std Deviations:	32.02
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**Degree of Freedom(df).= (x) - 1** Data listed on Table B-1

$$(df) = 1.679$$

**Area's Average Level ( $A_{\mu}$ ) =  $(N) + (df) \times [(Sd)/SQRT(x)]$**

$$(A_M) = \boxed{32.10}$$

GUIDELINE VALUE:	N/A
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Acceptable Level:	N/A
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pCi/qU    TOTAL U

pCi/gU    TOTAL U

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)	60	is (B)	1.671	95%
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(df) low value(Y)	40	is (A)	1.684	95%
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Desired value(df) (X)	48	is calculated as follow:
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$$\text{EXP}[(\text{Ln}(B) - \text{Ln}(A)) \div (Z - Y)]^{(X - Y) + \text{Ln}(A)}$$

The (df) value for (X)	48	1.679	95%
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PERFORMED BY: Neanna Tucker

DATE: 3/11/98

REVIEWED BY: W.A. Rogers

DATE: 3-11-98

**TRUE MEAN ACTIVITY VS.  
GUIDELINE VALUE AT 95% CONFIDENCE  
PHASE III SUB-AREA "O" WASTE POND #1  
(0 TO 2 METER AVERAGE)**

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

Number	n	(n-N)	(n-N) <sup>2</sup>
1	8.2	-3.2	10.0
2	7.5	-3.9	14.9
3	8.0	-3.4	11.3
4	8.5	-2.9	8.2
5	9.0	-2.4	5.6
6	24.1	12.7	162.3
7	8.7	-2.7	7.1
8	8.0	-3.4	11.3
9	15.2	3.8	14.8
10	8.9	-2.5	6.0
11	9.0	-2.4	5.6
12	9.3	-2.1	4.2
13	11.5	0.1	0.0
14	20.4	9.0	81.7
15	8.0	-3.4	11.3
16	6.8	-4.6	20.8
17	9.8	-1.6	2.4
18	9.3	-2.1	4.2
19	13.7	2.3	5.5
20	7.5	-3.9	14.9
21	7.8	-3.6	12.7
22	6.0	-5.4	28.7
23	8.0	-3.4	11.3
24	18.6	7.2	52.4
25	7.8	-3.6	12.7
26	7.5	-3.9	14.9
27	8.7	-2.7	7.1
28	9.5	-1.9	3.5
29	10.0	-1.4	1.8
30	19.4	8.0	64.7
31	10.0	-1.4	1.8
32	15.4	4.0	16.3
33	7.2	-4.2	17.3
34	11.5	0.1	0.0
35	7.8	-3.6	12.7
36	9.1	-2.3	5.1
37	12.6	1.2	1.5
38	7.5	-3.9	14.9
39	8.7	-2.7	7.1
40	6.2	-5.2	26.6
41	9.5	-1.9	3.5
42	27.1	15.7	247.8
43	13.2	1.8	3.4
44	15.6	4.2	18.0
45	10.4	-1.0	0.9
46	8.1	-3.3	10.6
47	13.9	2.5	6.5
48	9.5	-1.9	3.5
49	6.8	-4.6	20.8
50	9.3	-2.1	4.2
	565.0		1512.2
	377.6		4162.4
	1476.7		6708.8
	Sum(n)		Sum(n-N) <sup>2</sup>

No. of Samples (x) : 130

**COUNT TIME: 5 MINUTES**

**Sample Mean (N) = Sum(n) ÷ (x)**

Sample Mean (N) : 11.36

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

Standard Deviation: 7.21

2 Std Deviations:	14.42
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**Degree of Freedom(df). = (x) - 1**      **Data listed on Table B-1**

 $(df) = 1.658$ 

**Area's Average Level ( $A_{\mu}$ ) = (N) + (df) x [(Sd)/SQRT(x)]**

$$(A_{\mu}) = \boxed{12.41}$$

**GUIDELINE VALUE:**

**Acceptable Level:**

pCi/gU    TOTAL U

pCi/gU    TOTAL U

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
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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)	400	is (B)	1.649	95%
(df) low value(Y)	120	is (A)	1.658	95%

Desired value(df) (X)	129	is calculated as follow:
-----------------------	-----	--------------------------

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

The (df) value for (X)	129	1.658	95%
------------------------	-----	-------	-----

**PERFORMED BY:**

DATE: 3/11/98

REVIEWED BY:

DATE: 3-11-98



**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
51	27	15.64	244.63
52	9.9	-1.46	2.13
53	10	-1.36	1.85
54	6.7	-4.66	21.71
55	7.2	-4.16	17.30
56	6.8	-4.56	20.79
57	9.2	-2.16	4.66
58	9.5	-1.86	3.46
59	8.3	-3.06	9.36
60	7.7	-3.66	13.39
61	22.5	11.14	124.12
62	8.3	-3.06	9.36
63	12.7	1.34	1.80
64	15.9	4.54	20.62
65	9.6	-1.76	3.09
66	17.6	6.24	38.95
67	12.5	1.14	1.30
68	17.5	6.14	37.71
69	8.3	-3.06	9.36
70	5.5	-5.86	34.33
71	15.5	4.14	17.15
72	7.2	-4.16	17.30
73	7.7	-3.66	13.39
74	16.8	5.44	29.60
75	10.3	-1.06	1.12
76	7.7	-3.66	13.39
77	8.3	-3.06	9.36
78	9.3	-2.06	4.24
79	7.2	-4.16	17.30
80	16.5	5.14	26.43
81	9.5	-1.86	3.46
82	13.8	2.44	5.96
83	27.2	15.84	250.93
84	9.0	-2.36	5.57
85	8.3	-3.06	9.36
86	7.5	-3.86	14.89
87	7.0	-4.36	19.00
88	7.0	-4.36	19.00
89	8.3	-3.06	9.36
90	9.7	-1.66	2.75
91	8.7	-2.66	7.07
92	8.8	-2.56	6.55
93	7.5	-3.86	14.89
94	15.5	4.14	17.15
95	8.5	-2.86	8.18
96	22.8	11.44	130.89
97	24.4	13.04	170.06
98	8.5	-2.86	8.18
99	6.8	-4.56	20.79
100	7.0	-4.36	19.00
	565.0		1512.2
	Sum(n)		Sum(n-N) <sup>2</sup>

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
101	9.0	-2.36	5.57
102	5.0	-6.36	40.44
103	12.0	0.64	0.41
104	7.3	-4.06	16.48
105	7.7	-3.66	13.39
106	8.3	-3.06	9.36
107	7.3	-4.06	16.48
108	18.1	6.74	45.44
109	18.7	7.34	53.89
110	8.0	-3.36	11.28
111	8.5	-2.86	8.18
112	8.7	-2.66	7.07
113	7.2	-4.16	17.30
114	10.3	-1.06	1.12
115	41.8	30.44	926.64
116	23.0	11.64	135.51
117	27.5	16.14	260.52
118	60.2	48.84	2385.42
119	7.5	-3.86	14.89
120	6.3	-5.06	25.60
121	7.7	-3.66	13.39
122	7.5	-3.86	14.89
123	8.7	-2.66	7.07
124	9.0	-2.36	5.57
125	8.5	-2.86	8.18
126	4.5	-6.86	47.05
127	7.5	-3.86	14.89
128	5.5	-5.86	34.33
129	7.3	-4.06	16.48
130	9.0	-2.36	5.57
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
	377.6		4162.4
	Sum(n)		Sum(n-N) <sup>2</sup>

**TRUE MEAN ACTIVITY VS.  
GUIDELINE VALUE AT 95% CONFIDENCE  
PHASE III SUB-AREA "O" WASTE POND #1  
(0 TO 3 METER AVERAGE)**

PAGE 1 OF 2

**CIMARRON CORPORATION - CIMARRON FACILITY**  
**TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE**


n = pCi/g TOTAL U

Number	n	(n-N)	(n-N) <sup>2</sup>
51	26.5	13.66	186.49
52	12.8	-0.04	0.00
53	10	-2.84	8.09
54	6.7	-6.14	37.75
55	7.2	-5.64	31.85
56	6.8	-6.04	36.53
57	9.2	-3.64	13.28
58	9.5	-3.34	11.18
59	9.6	-3.24	10.52
60	7.7	-5.14	26.46
61	32.2	19.36	374.66
62	8.3	-4.54	20.65
63	17.1	4.26	18.11
64	24.5	11.66	135.87
65	12.6	-0.24	0.06
66	29.9	17.06	290.91
67	15.4	2.56	6.53
68	27.6	14.76	217.74
69	9.2	-3.64	13.28
70	5.5	-7.34	53.93
71	15.5	2.66	7.06
72	7.2	-5.64	31.85
73	7.7	-5.14	26.46
74	20.8	7.96	63.30
75	16.4	3.56	12.65
76	7.7	-5.14	26.46
77	8.3	-4.54	20.65
78	9.3	-3.54	12.56
79	7.2	-5.64	31.85
80	21.7	8.86	78.43
81	17.3	4.46	19.86
82	28.5	15.66	245.12
83	32.2	19.36	374.66
84	9.0	-3.84	14.78
85	8.3	-4.54	20.65
86	7.5	-5.34	28.56
87	7.0	-5.84	34.15
88	7.0	-5.84	34.15
89	8.3	-4.54	20.65
90	11.3	-1.54	2.38
91	8.7	-4.14	17.17
92	8.8	-4.04	16.35
93	7.5	-5.34	28.56
94	24.2	11.36	128.96
95	7.7	-5.14	26.46
96	22.7	9.86	97.14
97	30.2	17.36	301.24
98	8.5	-4.34	18.87
99	6.8	-6.04	36.53
100	7.0	-5.84	34.15
	678.6		3305.5
	Sum(n)		Sum(n-N) <sup>2</sup>

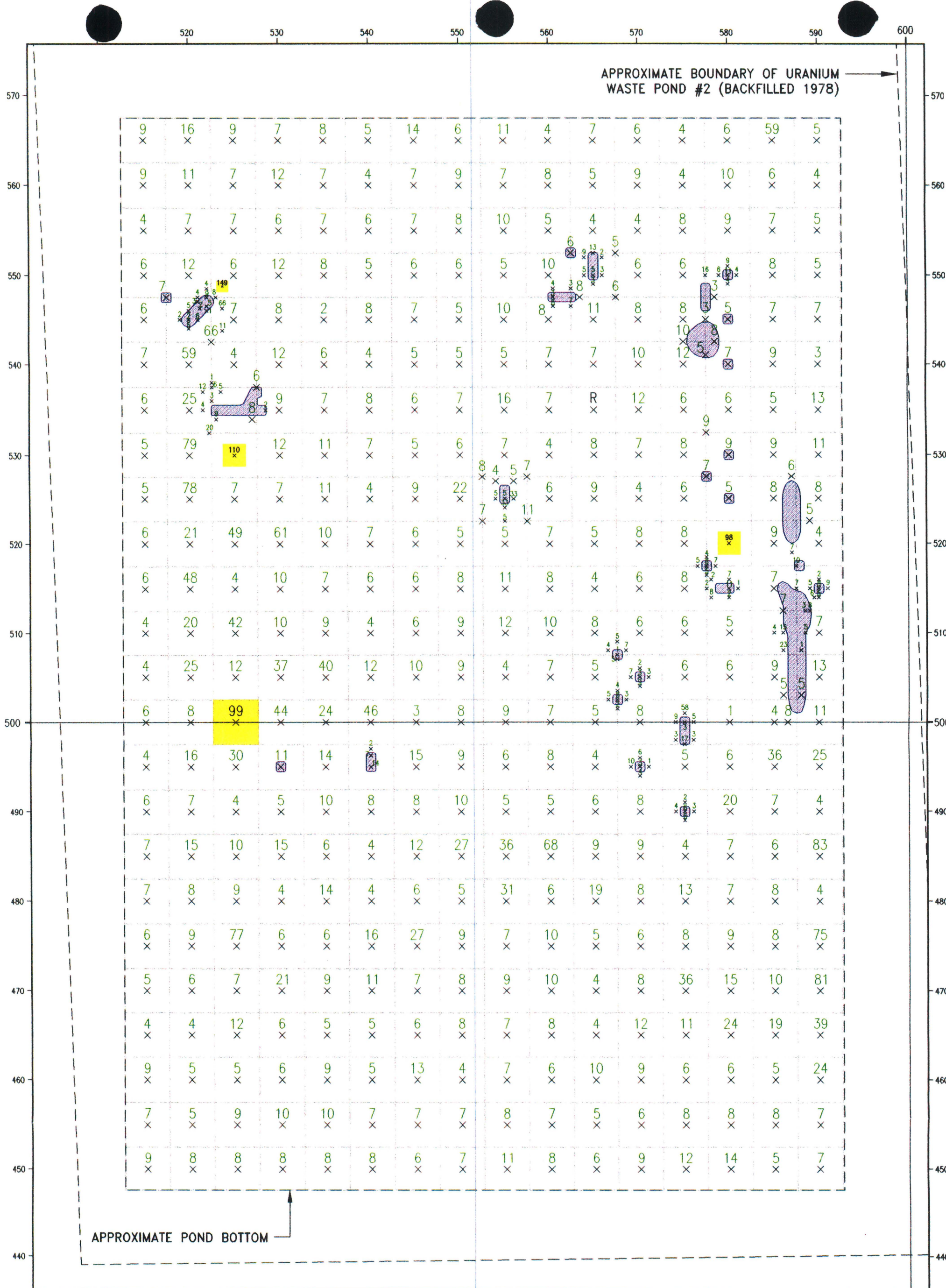
n = pCi/g TOTAL U


Number	n	(n-N)	(n-N) <sup>2</sup>
101	9.0	-3.84	14.78
102	5.0	-7.84	61.53
103	12.0	-0.84	0.71
104	7.3	-5.54	30.73
105	7.7	-5.14	26.46
106	8.3	-4.54	20.65
107	7.3	-5.54	30.73
108	21.4	8.56	73.21
109	17.4	4.56	20.76
110	8.0	-4.84	23.46
111	8.5	-4.34	18.87
112	8.7	-4.14	17.17
113	7.2	-5.64	31.85
114	10.3	-2.54	6.47
115	36.5	23.66	559.61
116	23.8	10.96	120.04
117	24.9	12.06	145.35
118	55.8	42.96	1845.23
119	7.5	-5.34	28.56
120	6.3	-6.54	42.82
121	7.7	-5.14	26.46
122	7.5	-5.34	28.56
123	8.9	-3.94	15.55
124	10.0	-2.84	8.09
125	8.5	-4.34	18.87
126	4.5	-8.34	69.62
127	7.5	-5.34	28.56
128	5.5	-7.34	53.93
129	7.3	-5.54	30.73
130	9.0	-3.84	14.78
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
	369.3		3414.1
	Sum(n)		Sum(n-N) <sup>2</sup>

WASTE POND #2 BACKGROUND SOIL TOP CAP	
SOIL SAMPLE ALIQUOT	VALUE IN pCi/g URANIUM
0 - 1'	7.0
1' - 2'	7.4
2' - 3'	6.5
3' - 4'	4.9

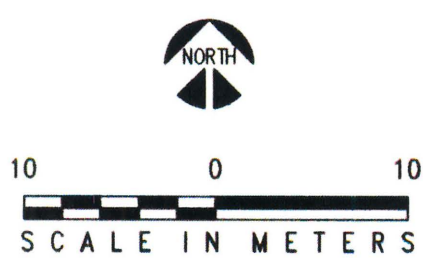
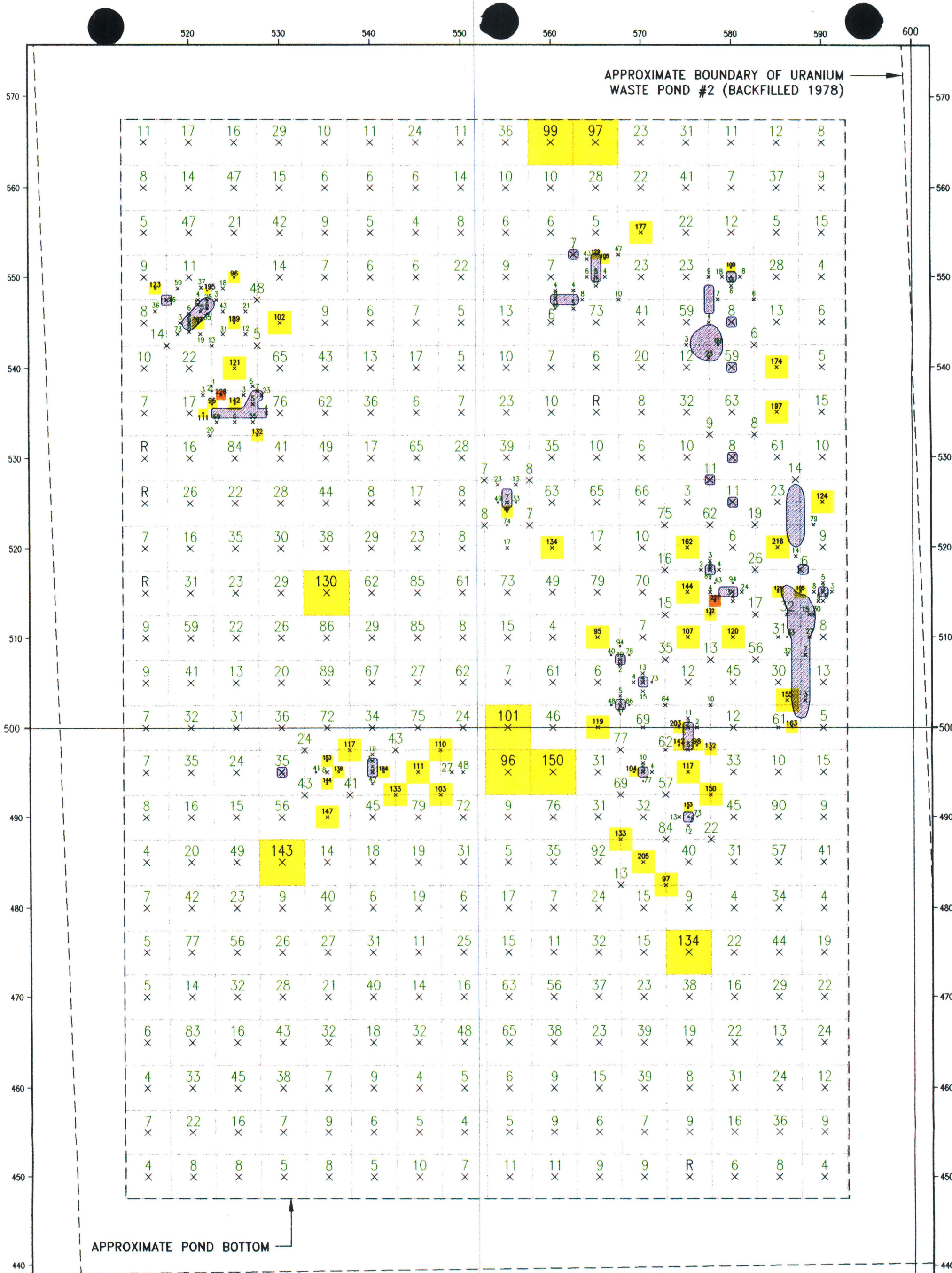
<div>NOTES</div> <div>URANIUM (pCi/g U).</div> <div>CIMARRON GAMMA SPEC SOIL COUNTER.</div> <div>SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U, NOT SUBTRACTED</div>		<div>LEGEND</div> <div><div>6</div>URANIUM 1 – 94 pCi/g U</div> <div><div>120</div>URANIUM 95 – 219 pCi/g U</div> <div><div>245</div>URANIUM &gt; 219 pCi/g U</div> <div><div>R</div>HIT ROCK— NO SAMPLE</div>	<div> CIMARRON CORPORATION</div>						
		<div>CIMARRON FACILITY</div> <div>PHASE III – SUB-AREA 0</div> <div>URANIUM WASTE POND #2</div> <div>FINAL STATUS SURVEY RESULTS – SOIL</div> <div>SOIL SAMPLE ALIQUOT: 0 – 4'</div>							
REV.	DESCRIPTION	DRWN BY:	CHK'D BY:	APP'D BY:	DATE	DRWN. BY	DATE	SCALE:	AS SHOWN
						JE	1/13/98		
0	DRAWING ISSUED.	JE	WR	JL	2/16/98	JOB NO.	DRAWING NO.	97POP2SS-0 to 3	REV. 0





<b>NOTES</b> URANIUM (pCi/g U).  CIMARRON GAMMA SPEC SOIL COUNTER.  SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U, NOT SUBTRACTED		<b>LEGEND</b> <div>6 URANIUM 1 - 94 pCi/g U</div> <div>120 URANIUM 95 - 219 pCi/g U</div> <div>245 URANIUM &gt; 219 pCi/g U</div> <div>R HIT ROCK— NO SAMPLE</div>		<div> <b>CIMARRON CORPORATION</b></div> <div><b>CIMARRON FACILITY PHASE III - SUB-AREA O URANIUM WASTE POND #2 FINAL STATUS SURVEY RESULTS - SOIL SOIL SAMPLE ALIQUOT: 4' - 5'</b></div>						
REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE	DRWN BY:	DATE	SCALE:	AS SHOWN	
0	DRAWING ISSUED.	JE	WR	JL	2/16/98	JE	1/13/98			
		JOB NO.		DRAWING NO.		97POP2SS-4		REV.		0






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 - 94 pCi/g U  
120 URANIUM  
95 - 219 pCi/g U  
245 URANIUM  
> 219 pCi/g U  
R x HIT ROCK -  
NO SAMPLE

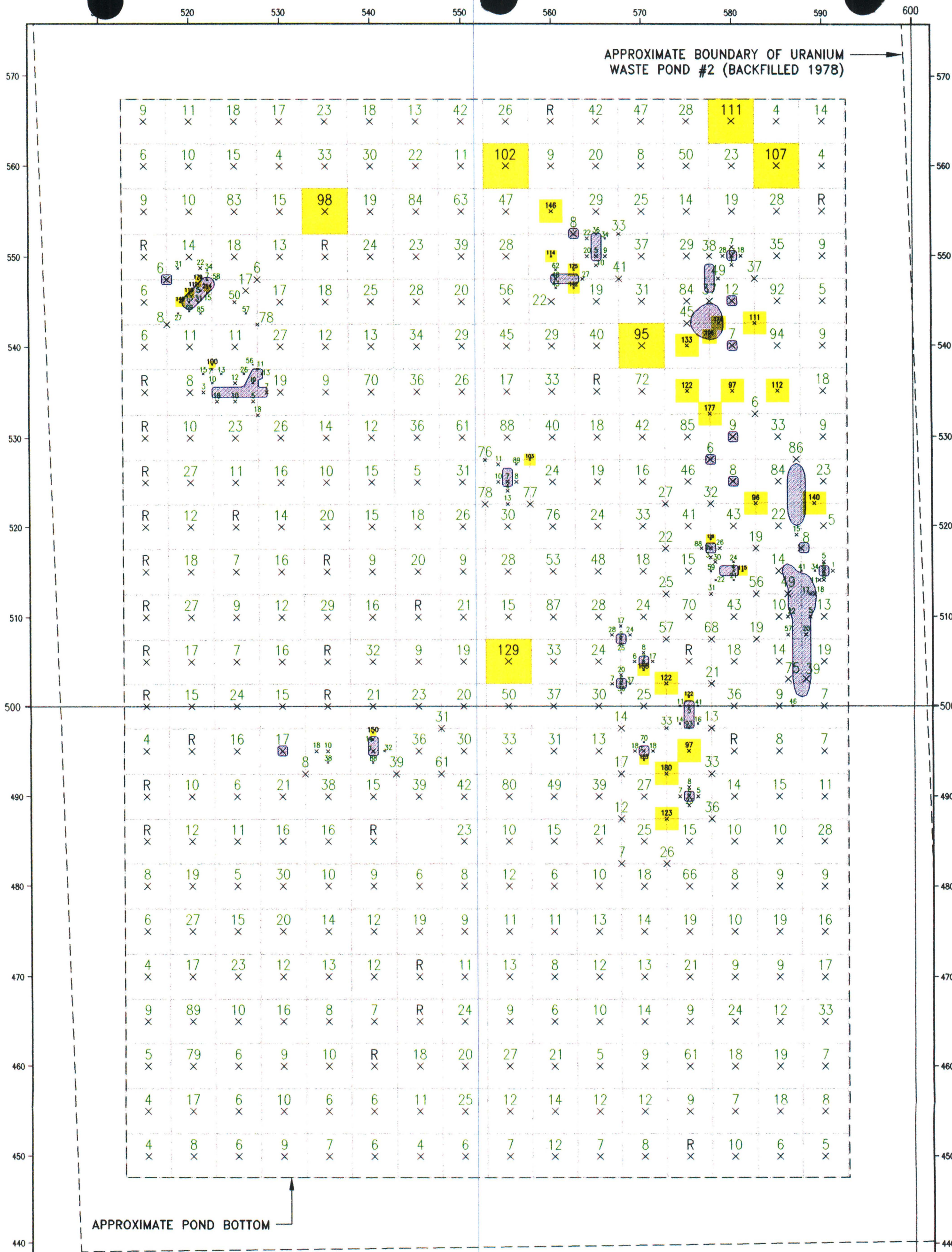
REV.	DESCRIPTION	DRWN BY	CHK'D BY	APP'D BY	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/16/98

 **CIMARRON CORPORATION**

**CIMARRON FACILITY  
PHASE III - SUB-AREA O  
URANIUM WASTE POND #2  
FINAL STATUS SURVEY RESULTS - SOIL  
SOIL SAMPLE ALIQUOT: 5' - 6'**

DRWN. BY	JE	DATE	1/13/98	SCALE	AS SHOWN
JOB NO.		DRAWING NO.	97POP2SS-5	REV.	0

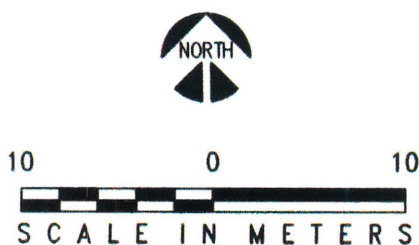




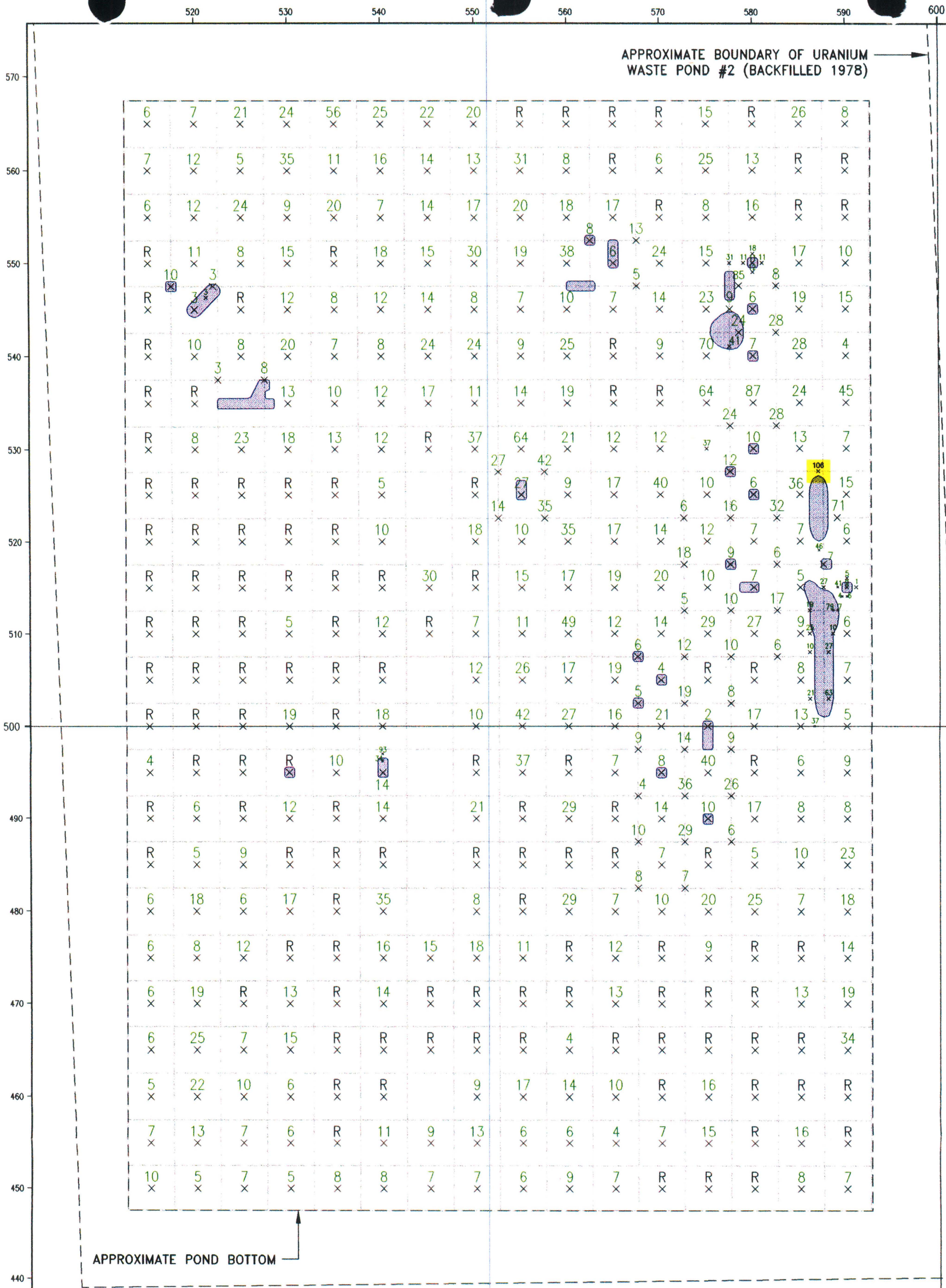
NOTES			
URANIUM (pCi/g U).			
CIMARRON GAMMA SPEC SOIL COUNTER.			
SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U, NOT SUBTRACTED			
REV.	DESCRIPTION	DRWN BY:	CK'D BY:
0	DRAWING ISSUED.	JE	WR

LEGEND			
6	URANIUM	1 - 94 pCi/g U	
120	URANIUM	95 - 219 pCi/g U	
245	URANIUM	> 219 pCi/g U	
R	HIT ROCK - NO SAMPLE		
DRWN BY:	JE	DATE	2/16/98

CIMARRON CORPORATION			
CIMARRON FACILITY			
PHASE III - SUB-AREA O			
URANIUM WASTE POND #2			
FINAL STATUS SURVEY RESULTS - SOIL			
SOIL SAMPLE ALIQUOT: 6" - 7"			
DRWN. BY	JE	DATE	1/13/98
JOB NO.		DRAWING NO.	97POP2SS-6
REV.	0	SCALE:	AS SHOWN







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 - 94 pCi/g U  
120 URANIUM  
95 - 219 pCi/g U  
245 URANIUM  
> 219 pCi/g U  
R HIT ROCK -  
NO SAMPLE

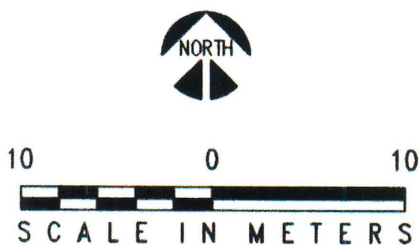


CIMARRON CORPORATION

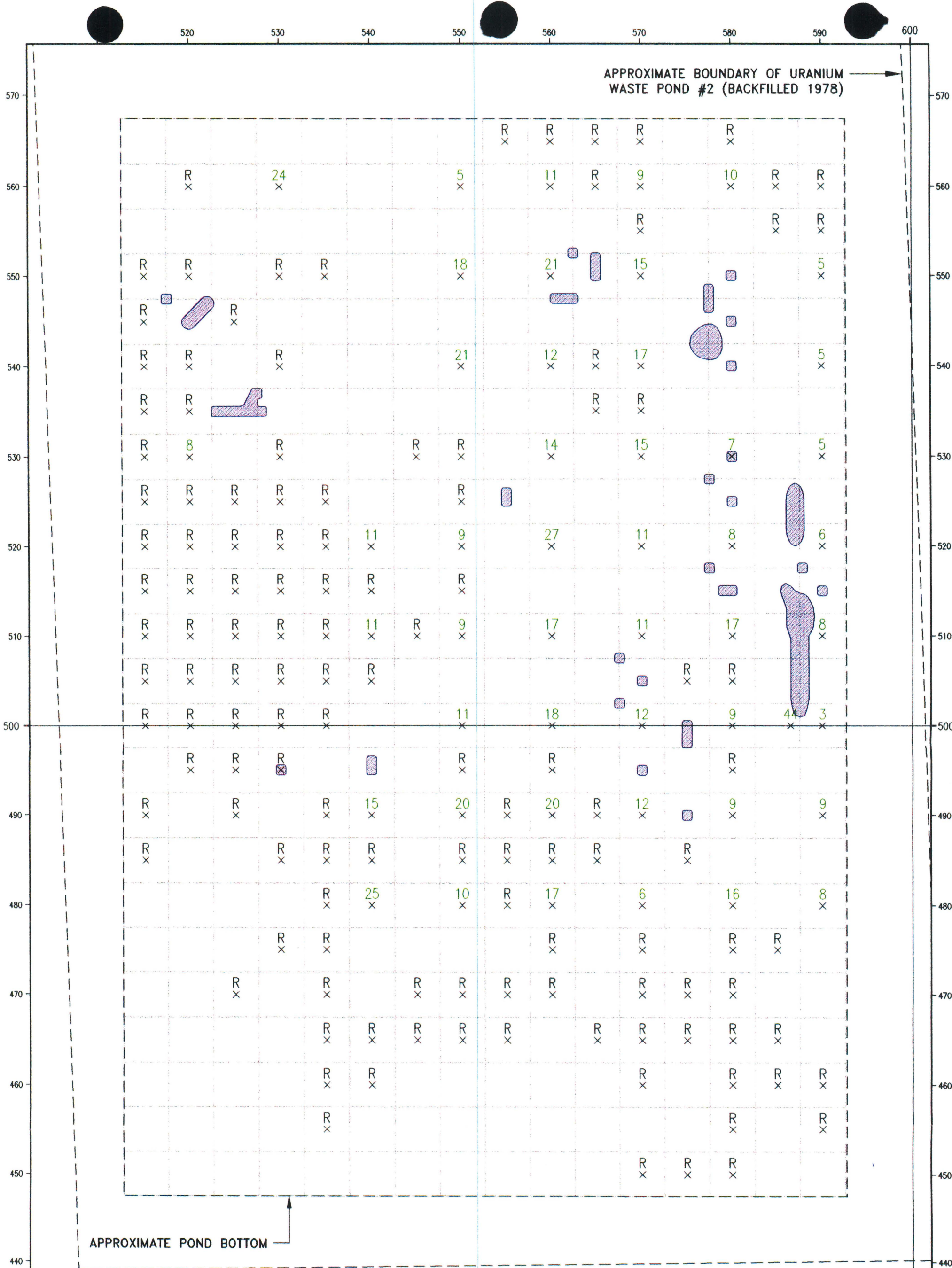
CIMARRON FACILITY  
PHASE III - SUB-AREA O  
URANIUM WASTE POND #2  
FINAL STATUS SURVEY RESULTS - SOIL  
SOIL SAMPLE ALIQUOT: 7' - 8'


REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/16/98

DRWN. BY: JE	DATE: 1/13/98	SCALE: AS SHOWN
JOB NO.	DRAWING NO. 97POP2SS-7	REV. 0









10 0 10

SCALE IN METERS


**NOTES**


URANIUM (pCi/g U).


CIMARRON GAMMA SPEC SOIL COUNTER.


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


**LEGEND**

 URANIUM 1 - 94 pCi/g U

 URANIUM 95 - 219 pCi/g U

 URANIUM > 219 pCi/g U

 HIT ROCK - NO SAMPLE



**CIMARRON CORPORATION**

**CIMARRON FACILITY**

**PHASE III - SUB-AREA O**

**URANIUM WASTE POND #2**

**FINAL STATUS SURVEY RESULTS - SOIL**

**SOIL SAMPLE ALIQUOT: 8' - 9'**

REV.	DESCRIPTION	DRWN. BY:	CHK'D BY:	APP'D BY:	DATE	DRWN. BY:	DATE	SCALE:
0	DRAWING ISSUED.	JE	WR	JL	2/16/98	JE	1/13/98	AS SHOWN

JOB NO. 97POP2SS-8

DRAWING NO. 97POP2SS-8

REV. 0

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION WASTE POND NO. 2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	515E-450N	7.0	7.4	6.5	5	9	4	4	10	
2	515E-455N	7.0	7.4	6.5	5	7	7	4	7	
3	515E-460N	7.0	7.4	6.5	5	9	4	5	5	
4	515E-465N	7.0	7.4	6.5	5	4	6	9	6	
5	515E-470N	7.0	7.4	6.5	5	5	5	4	6	
6	515E-475N	7.0	7.4	6.5	5	6	5	6	6	
7	515E-480N	7.0	7.4	6.5	5	7	7	8	6	
8	515E-485N	7.0	7.4	6.5	5	7	4	ROCK		
9	515E-490N	7.0	7.4	6.5	5	6	8	ROCK		
10	515E-495N	7.0	7.4	6.5	5	4	7	4	4	
11	515E-500N	7.0	7.4	6.5	5	6	7	ROCK		
12	515E-505N	7.0	7.4	6.5	5	4	9	ROCK		
13	515E-510N	7.0	7.4	6.5	5	4	9	ROCK		
14	515E-515N	7.0	7.4	6.5	5	6	ROCK			
15	515E-520N	7.0	7.4	6.5	5	6	7	ROCK		
16	515E-525N	7.0	7.4	6.5	5	5	ROCK			
17	515E-530N	7.0	7.4	6.5	5	5	ROCK			
18	515E-535N	7.0	7.4	6.5	5	6	7	ROCK		
19	515E-540N	7.0	7.4	6.5	5	7	10	6	ROCK	
20	515E-545N	7.0	7.4	6.5	5	6	8	6	ROCK	
21	515E-550N	7.0	7.4	6.5	5	6	9	ROCK		
22	515E-555N	7.0	7.4	6.5	5	4	5	9	6	
23	515E-560N	7.0	7.4	6.5	5	9	8	6	7	
24	515E-565N	7.0	7.4	6.5	5	9	11	9	6	
25										
26										
27										
28										
29										
30										

INSTRUMENTS

CIMARRON SOIL COUNTER X"X4"X16" NaI DETECTOR Total U

BACKGROUND

4

MDA

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W. A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	516.25E-546.25N	7.0	7.4	6.5	5		36			
2	516.25E-548.75N	7.0	7.4	6.5	5		123			
3	517.5E-542.5N	7.0	7.4	6.5	5		14	8		
4	517.5E-547.5N	7.0	7.4	6.5	5	7	16	6	10	
5	518.75E-543.75N	7.0	7.4	6.5	5		73	27		
6	518.75E-548.75N	7.0	7.4	6.5	5		59	31		
7	519E-545N	7.0	7.4	6.5	5	2	3	146		
8										
9										
10										
11										
12										
13										
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27										
28										
29										
30										

INSTRUMENTS:

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

RESULTS IN

pCi/g

BACKGROUND

Total-U 4

MDA

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W. a. Rogers*

DATE: 10-2-97



CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 9/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	520E-450N	7.0	7.4	6.5	5	8	8	8	5	
2	520E-455N	7.0	7.4	6.5	5	5	22	17	13	
3	520E-460N	7.0	7.4	6.5	5	5	33	79	22	
4	520E-465N	7.0	7.4	6.5	5	4	83	89	25	
5	520E-470N	7.0	7.4	6.5	5	6	14	17	19	
6	520E-475N	7.0	7.4	6.5	5	9	77	27	8	
7	520E-480N	7.0	7.4	6.5	5	8	42	19	18	
8	520E-485N	7.0	7.4	6.5	5	15	20	12	5	
9	520E-490N	7.0	7.4	6.5	5	7	16	10	6	
10	520E-495N	7.0	7.4	6.5	5	16	35	ROCK		
11	520E-500N	7.0	7.4	6.5	5	8	32	15	ROCK	
12	520E-505N	7.0	7.4	6.5	5	25	41	17	ROCK	
13	520E-510N	7.0	7.4	6.5	5	20	59	27	ROCK	
14	520E-515N	7.0	7.4	6.5	5	48	31	18	ROCK	
15	520E-520N	7.0	7.4	6.5	5	21	16	12	ROCK	
16	520E-525N	7.0	7.4	6.5	5	78	26	27	ROCK	
17	520E-530N	7.0	7.4	6.5	5	79	16	10	8	8
18	520E-535N	7.0	7.4	6.5	5	25	17	8	ROCK	
19	520E-540N	7.0	7.4	6.5	5	59	22	11	10	ROCK
20	520E-544N	7.0	7.4	6.5	5	6	8	69		
21	520E-545N	7.0	7.4	6.5	5	2	6	13	3	
22	520E-546N	7.0	7.4	6.5	5	5	6	110		
23	520E-550N	7.0	7.4	6.5	5	12	11	14	11	ROCK
24	520E-555N	7.0	7.4	6.5	5	7	47	10	12	
25	520E-560N	7.0	7.4	6.5	5	11	14	10	12	ROCK
26	520E-565N	7.0	7.4	6.5	5	16	17	11	7	
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

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

pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Azar*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	521E-545N	7.0	7.4	6.5	5	6	107	31		
2	521E-547N	7.0	7.4	6.5	5	3	1	119		
3	521E-547.5N	7.0	7.4	6.5	5	4	4	179		
4	521.25E-543.75N	7.0	7.4	6.5	5		19	85		
5	521.25E-546.25N	7.0	7.4	6.5	5	2	5	5	3	
6	521.25E-548.75N	7.0	7.4	6.5	5		37	22		
7	521.5E-535N	7.0	7.4	6.5	5	4	111	3		
8	521.5E-537N	7.0	7.4	6.5	5	12	3	15		
9	522E-546N	7.0	7.4	6.5	5	1	35	15		
10	522E-546.5N	7.0	7.4	6.5	5	5	6	214		
11	522E-547.5N	7.0	7.4	6.5	5	9	25	7	3	
12	522E-548.5N	7.0	7.4	6.5	5	4	195	34		
13	522.25E-532.5N	7.0	7.4	6.5	5	20	20			
14	522.5E-536N	7.0	7.4	6.5	5	3	96	10		
15	522.5E-537.5N	7.0	7.4	6.5	5	6	2	7	3	
16	522.5E-538N	7.0	7.4	6.5	5	1	1	100		
17	522.5E-542.5N	7.0	7.4	6.5	5	66	13			
18	523E-534N	7.0	7.4	6.5	5	9	69	18		
19	523E-547.5N	7.0	7.4	6.5	5	8	3	58		
20	523.5E-537N	7.0	7.4	6.5	5	5	228	13		
21	523.75E-543.75N	7.0	7.4	6.5	5	11	31			
22	523.75E-546.25N	7.0	7.4	6.5	5	66	43			
23	523.75E-548.75N	7.0	7.4	6.5	5	149	18			
24										
25										
26										
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W. A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	525E-450N	7.0	7.4	6.5	5	8	8	6	7	
2	525E-455N	7.0	7.4	6.5	5	9	16	6	7	
3	525E-460N	7.0	7.4	6.5	5	5	45	6	10	
4	525E-465N	7.0	7.4	6.5	5	12	16	10	7	
5	525E-470N	7.0	7.4	6.5	5	7	32	23	ROCK	
6	525E-475N	7.0	7.4	6.5	5	77	56	15	12	
7	525E-480N	7.0	7.4	6.5	5	9	23	5	6	
8	525E-485N	7.0	7.4	6.5	5	10	49	11	9	
9	525E-490N	7.0	7.4	6.5	5	4	15	6	ROCK	
10	525E-495N	7.0	7.4	6.5	5	30	24	16	ROCK	
11	525E-500N	7.0	7.4	6.5	5	99	31	24	ROCK	
12	525E-505N	7.0	7.4	6.5	5	12	13	7	ROCK	
13	525E-510N	7.0	7.4	6.5	5	42	22	9	ROCK	
14	525E-515N	7.0	7.4	6.5	5	4	23	7	ROCK	
15	525E-520N	7.0	7.4	6.5	5	49	35	ROCK		
16	525E-525N	7.0	7.4	6.5	5	7	22	11	ROCK	
17	525E-530N	7.0	7.4	6.5	5	110	84	23	23	
18	525E-534N	7.0	7.4	6.5	5		6	10		
19	525E-536N	7.0	7.4	6.5	5		142	12		
20	525E-540N	7.0	7.4	6.5	5	4	121	11	8	
21	525E-545N	7.0	7.4	6.5	5	7	189	50	ROCK	
22	525E-550N	7.0	7.4	6.5	5	6	96	18	8	
23	525E-555N	7.0	7.4	6.5	5	7	21	83	24	
24	525E-560N	7.0	7.4	6.5	5	7	47	15	5	
25	525E-565N	7.0	7.4	6.5	5	9	16	18	21	
26										
27										
28										
29										
30										

INSTRUMENTS:

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

RESULTS IN

pCi/g

BACKGROUND

Total-U 4

MDA

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	526E-537N	7.0	7.4	6.5	5		3	26		
2	526.25E-543.75N	7.0	7.4	6.5	5		12	57		
3	526.25E-546.25N	7.0	7.4	6.5	5		21	17		
4	527E-534N	7.0	7.4	6.5	5	8	35	5		
5	527E-536N	7.0	7.4	6.5	5		5	10		
6	527E-538N	7.0	7.4	6.5	5		6	56		
7	527.5E-532.5N	7.0	7.4	6.5	5		132	18		
8	527.5E-537.5N	7.0	7.4	6.5	5	6	7	11	8	
9	527.5E-542.5N	7.0	7.4	6.5	5		5	78		
10	527.5E-547.5N	7.0	7.4	6.5	5		48	6		
11	528E-537N	7.0	7.4	6.5	5		23	13		
12	528.5E-535N	7.0	7.4	6.5	5	2	4	7		
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
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24										
25										
26										
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4" IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: W.G. Rogers

DATE: 10-2-97



CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	530E-450N	7.0	7.4	6.5	5	8	5	9	5	
2	530E-455N	7.0	7.4	6.5	5	10	7	10	6	
3	530E-460N	7.0	7.4	6.5	5	6	38	9	6	
4	530E-465N	7.0	7.4	6.5	5	6	43	16	15	
5	530E-470N	7.0	7.4	6.5	5	21	28	12	13	
6	530E-475N	7.0	7.4	6.5	5	6	26	20	ROCK	
7	530E-480N	7.0	7.4	6.5	5	4	9	30	17	
8	530E-485N	7.0	7.4	6.5	5	15	143	16	ROCK	
9	530E-490N	7.0	7.4	6.5	5	5	56	21	12	
10	530E-495N	7.0	7.4	6.5	5	11	35	17	ROCK	
11	530E-500N	7.0	7.4	6.5	5	44	36	15	19	ROCK
12	530E-505N	7.0	7.4	6.5	5	37	20	16	ROCK	
13	530E-510N	7.0	7.4	6.5	5	10	26	12	5	ROCK
14	530E-515N	7.0	7.4	6.5	5	10	29	16	ROCK	
15	530E-520N	7.0	7.4	6.5	5	61	30	14	ROCK	
16	530E-525N	7.0	7.4	6.5	5	7	28	16	ROCK	
17	530E-530N	7.0	7.4	6.5	5	12	41	26	18	ROCK
18	530E-535N	7.0	7.4	6.5	5	9	76	19	13	
19	530E-540N	7.0	7.4	6.5	5	12	65	27	20	ROCK
20	530E-545N	7.0	7.4	6.5	5	8	102	17	12	
21	530E-550N	7.0	7.4	6.5	5	12	14	13	15	ROCK
22	530E-555N	7.0	7.4	6.5	5	6	42	15	9	
23	530E-560N	7.0	7.4	6.5	5	12	15	4	35	24
24	530E-565N	7.0	7.4	6.5	5	7	29	17	24	
25	532.5E-492.5	7.0	7.4	6.5	5		43	8		
26	532.5E-497.5N	7.0	7.4	6.5	5		24			
27	533.75E-495N	7.0	7.4	6.5	5		41	18		
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: W. a. Rogers

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	535E-450N	7.0	7.4	6.5	5	8	8	7	8	
2	535E-455N	7.0	7.4	6.5	5	10	9	6	ROCK	
3	535E-460N	7.0	7.4	6.5	5	9	7	10	ROCK	
4	535E-465N	7.0	7.4	6.5	5	5	32	8	ROCK	
5	535E-470N	7.0	7.4	6.5	5	9	21	13	ROCK	
6	535E-475N	7.0	7.4	6.5	5	6	27	14	ROCK	
7	535E-480N	7.0	7.4	6.5	5	14	40	10	ROCK	
8	535E-485N	7.0	7.4	6.5	5	6	14	16	ROCK	
9	535E-490N	7.0	7.4	6.5	5	10	147	38	ROCK	
10	535E-493.75N	7.0	7.4	6.5	5		144	38		
11	535E-495N	7.0	7.4	6.5	5	14	8	10	10	
12	535E-496.25N	7.0	7.4	6.5	5		153			
13	535E-500N	7.0	7.4	6.5	5	24	72	ROCK		
14	535E-505N	7.0	7.4	6.5	5	40	89	ROCK		
15	535E-510N	7.0	7.4	6.5	5	9	86	29	ROCK	
16	535E-515N	7.0	7.4	6.5	5	7	130	ROCK		
17	535E-520N	7.0	7.4	6.5	5	10	38	20	ROCK	
18	535E-525N	7.0	7.4	6.5	5	11	44	10	ROCK	
19	535E-530N	7.0	7.4	6.5	5	11	49	14	13	
20	535E-535N	7.0	7.4	6.5	5	7	62	9	10	
21	535E-540N	7.0	7.4	6.5	5	6	43	12	7	
22	535E-545N	7.0	7.4	6.5	5	2	9	18	8	
23	535E-550N	7.0	7.4	6.5	5	8	7	ROCK		
24	535E-555N	7.0	7.4	6.5	5	7	9	98	20	
25	535E-560N	7.0	7.4	6.5	5	7	6	33	11	
26	535E-565N	7.0	7.4	6.5	5	8	10	23	56	
27	536.25E-495N	7.0	7.4	6.5	5		138			
28	537.5E-492.5N	7.0	7.4	6.5	5		41			
29	537.5E-497.5N	7.0	7.4	6.5	5		117			
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

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

pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	540E-450N	7.0	7.4	6.5	5	8	5	6	8	
2	540E-455N	7.0	7.4	6.5	5	7	6	6	11	
3	540E-460N	7.0	7.4	6.5	5	5	9	ROCK		
4	540E-465N	7.0	7.4	6.5	5	5	18	7	ROCK	
5	540E-470N	7.0	7.4	6.5	5	11	40	12	14	
6	540E-475N	7.0	7.4	6.5	5	16	31	12	16	
7	540E-480N	7.0	7.4	6.5	5	4	6	9	35	25
8	540E-485N	7.0	7.4	6.5	5	4	18	ROCK		
9	540E-490N	7.0	7.4	6.5	5	8	45	15	14	15
10	540E-493.75	7.0	7.4	6.5	5		42	88		
11	540E-495N	7.0	7.4	6.5	5	14	5	7	14	
12	540E-496.25N	7.0	7.4	6.5	5	7	3	14	34	
13	540E-497N	7.0	7.4	6.5	5	2	19	150	93	
14	540E-500N	7.0	7.4	6.5	5	46	34	21	18	
15	540E-505N	7.0	7.4	6.5	5	12	67	32	ROCK	
16	540E-510N	7.0	7.4	6.5	5	4	29	16	12	11
17	540E-515N	7.0	7.4	6.5	5	6	62	9	ROCK	
18	540E-520N	7.0	7.4	6.5	5	7	29	15	10	11
19	540E-525N	7.0	7.4	6.5	5	4	8	15	5	
20	540E-530N	7.0	7.4	6.5	5	7	17	12	12	
21	540E-535N	7.0	7.4	6.5	5	8	36	70	12	
22	540E-540N	7.0	7.4	6.5	5	4	13	13	8	
23	540E-545N	7.0	7.4	6.5	5	8	6	25	12	
24	540E-550N	7.0	7.4	6.5	5	5	6	24	18	
25	540E-555N	7.0	7.4	6.5	5	6	5	19	7	
26	540E-560N	7.0	7.4	6.5	5	4	6	30	16	
27	540E-565N	7.0	7.4	6.5	5	5	11	18	25	
28	541.25E-495N	7.0	7.4	6.5	5		184	32		
29	542.5E-492.5N	7.0	7.4	6.5	5		133	39		
30	542.5E-497.5N	7.0	7.4	6.5	5		43			

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

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

pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W-a. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	545E-450N	7.0	7.4	6.5	5	6	10	4	7	
2	545E-455N	7.0	7.4	6.5	5	7	5	11	9	
3	545E-460N	7.0	7.4	6.5	5	13	4	18		
4	545E-465N	7.0	7.4	6.5	5	6	32	ROCK		
5	545E-470N	7.0	7.4	6.5	5	7	14	ROCK		
6	545E-475N	7.0	7.4	6.5	5	27	11	19	15	
7	545E-480N	7.0	7.4	6.5	5	6	19	6		
8	545E-485N	7.0	7.4	6.5	5	12	19			
9	545E-490N	7.0	7.4	6.5	5	8	79	39		
10	545E-495N	7.0	7.4	6.5	5	15	111	36		
11	545E-500N	7.0	7.4	6.5	5	3	75	23		
12	545E-505N	7.0	7.4	6.5	5	10	27	9		
13	545E-510N	7.0	7.4	6.5	5	6	85	ROCK		
14	545E-515N	7.0	7.4	6.5	5	6	85	20	30	
15	545E-520N	7.0	7.4	6.5	5	6	23	18		
16	545E-525N	7.0	7.4	6.5	5	9	17	5		
17	545E-530N	7.0	7.4	6.5	5	5	65	36	ROCK	
18	545E-535N	7.0	7.4	6.5	5	6	6	36	17	
19	545E-540N	7.0	7.4	6.5	5	5	17	34	24	
20	545E-545N	7.0	7.4	6.5	5	7	7	28	14	
21	545E-550N	7.0	7.4	6.5	5	6	6	23	15	
22	545E-555N	7.0	7.4	6.5	5	7	4	84	14	
23	545E-560N	7.0	7.4	6.5	5	7	6	22	14	
24	545E-565N	7.0	7.4	6.5	5	14	24	13	22	
25	547.5E-492.5N	7.0	7.4	6.5	5		103	61		
26	547.5E-497.5N	7.0	7.4	6.5	5		110	31		
27	548.75E-495N	7.0	7.4	6.5	5		27			
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTOR pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	550E-450N	7.0	7.4	6.5	5	7	7	6	7	
2	550E-455N	7.0	7.4	6.5	5	7	4	25	13	
3	550E-460N	7.0	7.4	6.5	5	4	5	20	9	
4	550E-465N	7.0	7.4	6.5	5	8	48	24	ROCK	
5	550E-470N	7.0	7.4	6.5	5	8	16	11	ROCK	
6	550E-475N	7.0	7.4	6.5	5	9	25	9	18	
7	550E-480N	7.0	7.4	6.5	5	5	6	8	8	10
8	550E-485N	7.0	7.4	6.5	5	27	31	23	ROCK	
9	550E-490N	7.0	7.4	6.5	5	10	72	42	21	20
10	550E-495N	7.0	7.4	6.5	5	9	48	30	ROCK	
11	550E-500N	7.0	7.4	6.5	5	8	24	20	10	11
12	550E-505N	7.0	7.4	6.5	5	9	62	19	12	
13	550E-510N	7.0	7.4	6.5	5	9	8	21	7	9
14	550E-515N	7.0	7.4	6.5	5	8	61	9	ROCK	
15	550E-520N	7.0	7.4	6.5	5	5	8	26	18	9
16	550E-525N	7.0	7.4	6.5	5	22	8	31	ROCK	
17	550E-530N	7.0	7.4	6.5	5	6	28	61	37	ROCK
18	550E-535N	7.0	7.4	6.5	5	7	7	26	11	
19	550E-540N	7.0	7.4	6.5	5	5	5	29	24	21
20	550E-545N	7.0	7.4	6.5	5	5	5	20	8	
21	550E-550N	7.0	7.4	6.5	5	6	22	39	30	18
22	550E-555N	7.0	7.4	6.5	5	8	8	63	17	
23	550E-560N	7.0	7.4	6.5	5	9	14	11	13	5
24	550E-565N	7.0	7.4	6.5	5	6	11	42	20	
25	552.5E-522.5N	7.0	7.4	6.5	5	7	8	78	14	
26	552.5E-527.5N	7.0	7.4	6.5	5	8	7	76	27	
27	554E-525N	7.0	7.4	6.5	5	5	49	10		
28	554E-527N	7.0	7.4	6.5	5	4	23	11		
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.a. Rogers*

DATE: 10-2-97



CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	555E-450N	7.0	7.4	6.5	5	11	11	7	6	
2	555E-455N	7.0	7.4	6.5	5	8	5	12	6	
3	555E-460N	7.0	7.4	6.5	5	7	6	27	17	
4	555E-465N	7.0	7.4	6.5	5	7	65	9	ROCK	
5	555E-470N	7.0	7.4	6.5	5	9	63	13	ROCK	
6	555E-475N	7.0	7.4	6.5	5	7	15	11	11	
7	555E-480N	7.0	7.4	6.5	5	31	17	12	ROCK	
8	555E-485N	7.0	7.4	6.5	5	36	5	10	ROCK	
9	555E-490N	7.0	7.4	6.5	5	5	9	80	ROCK	
10	555E-495N	7.0	7.4	6.5	5	6	96	33	37	
11	555E-500N	7.0	7.4	6.5	5	9	101	50	42	
12	555E-505N	7.0	7.4	6.5	5	4	7	129	26	
13	555E-510N	7.0	7.4	6.5	5	12	15	15	11	
14	555E-515N	7.0	7.4	6.5	5	11	73	28	15	
15	555E-520N	7.0	7.4	6.5	5	5	17	30	10	
16	555E-522.5N	7.0	7.4	6.5	5	5	74	13		
17	555E-524N	7.0	7.4	6.5	5	33	207	4		
18	555E-525N	7.0	7.4	6.5	5	5	7	7	27	
19	555E-530N	7.0	7.4	6.5	5	7	39	88	64	
20	555E-535N	7.0	7.4	6.5	5	16	23	17	14	
21	555E-540N	7.0	7.4	6.5	5	5	10	45	9	
22	555E-545N	7.0	7.4	6.5	5	10	13	56	7	
23	555E-550N	7.0	7.4	6.5	5	5	9	28	19	
24	555E-555N	7.0	7.4	6.5	5	10	6	47	20	
25	555E-560N	7.0	7.4	6.5	5	7	10	102	31	
26	555E-565N	7.0	7.4	6.5	5	11	36	26	ROCK	
27	556E-525N	7.0	7.4	6.5	5	33	33	8		
28	556E-527N	7.0	7.4	6.5	5	5	13	89		
29	557.5E-522.5N	7.0	7.4	6.5	5	11	7	77	35	
30	557.5E-527.5N	7.0	7.4	6.5	5	7	8	103	42	

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W. A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	560E-450N	7.0	7.4	6.5	5	8	11	12	9	
2	560E-455N	7.0	7.4	6.5	5	7	9	14	6	
3	560E-460N	7.0	7.4	6.5	5	6	9	21	14	
4	560E-465N	7.0	7.4	6.5	5	8	38	6	4	
5	560E-470N	7.0	7.4	6.5	5	10	56	8	ROCK	
6	560E-475N	7.0	7.4	6.5	5	10	11	11	ROCK	
7	560E-480N	7.0	7.4	6.5	5	6	7	6	29	17
8	560E-485N	7.0	7.4	6.5	5	68	35	15	ROCK	
9	560E-490N	7.0	7.4	6.5	5	5	76	49	29	20
10	560E-495N	7.0	7.4	6.5	5	8	150	31	ROCK	
11	560E-500N	7.0	7.4	6.5	5	7	46	37	27	18
12	560E-505N	7.0	7.4	6.5	5	7	61	33	17	
13	560E-510N	7.0	7.4	6.5	5	10	4	87	49	17
14	560E-515N	7.0	7.4	6.5	5	8	49	53	17	
15	560E-520N	7.0	7.4	6.5	5	7	134	76	35	27
16	560E-525N	7.0	7.4	6.5	5	6	63	24	9	
17	560E-530N	7.0	7.4	6.5	5	4	35	40	21	14
18	560E-535N	7.0	7.4	6.5	5	7	10	33	19	
19	560E-540N	7.0	7.4	6.5	5	7	7	29	25	12
20	560E-545N	7.0	7.4	6.5	5	8	6	22	10	
21	560E-550N	7.0	7.4	6.5	5	10	7	114	38	21
22	560E-555N	7.0	7.4	6.5	5	5	6	146	18	
23	560E-560N	7.0	7.4	6.5	5	8	10	9	8	11
24	560E-565N	7.0	7.4	6.5	5	4	99	ROCK		
25	560.5E-546.5N	7.0	7.4	6.5	5	8	66	43		
26	560.5E-547.5N	7.0	7.4	6.5	5	3	8	48		
27	560.5E-548.5N	7.0	7.4	6.5	5	4	4	62		
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

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

pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	562.5E-546.5N	7.0	7.4	6.5	5	7	5	142		
2	562.5E-548.5N	7.0	7.4	6.5	5	3	4	175		
3	562.5E-552.5N	7.0	7.4	6.5	5	6	7	8	8	
4	563.5E-547.5N	7.0	7.4	6.5	5	8	8	27		
5	564E-550N	7.0	7.4	6.5	5	5	6	20		
6	564E-552N	7.0	7.4	6.5	5	9	43	22		
7										
8										
9										
10										
11										
12										
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22										
23										
24										
25										
26										
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W-a. Rogers*

DATE: 10-2-97



CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	565E-450N	7.0	7.4	6.5	5	6	9	7	7	
2	565E-455N	7.0	7.4	6.5	5	5	6	12	4	
3	565E-460N	7.0	7.4	6.5	5	10	15	5	10	
4	565E-465N	7.0	7.4	6.5	5	4	23	10	ROCK	
5	565E-470N	7.0	7.4	6.5	5	4	37	12	13	
6	565E-475N	7.0	7.4	6.5	5	5	32	13	12	
7	565E-480N	7.0	7.4	6.5	5	19	24	10	7	
8	565E-485N	7.0	7.4	6.5	5	9	92	21	ROCK	
9	565E-490N	7.0	7.4	6.5	5	6	31	39	ROCK	
10	565E-495N	7.0	7.4	6.5	5	4	31	13	7	
11	565E-500N	7.0	7.4	6.5	5	5	119	30	16	
12	565E-505N	7.0	7.4	6.5	5	5	6	24	19	
13	565E-510N	7.0	7.4	6.5	5	8	95	28	12	
14	565E-515N	7.0	7.4	6.5	5	4	79	48	19	
15	565E-520N	7.0	7.4	6.5	5	5	17	24	17	
16	565E-525N	7.0	7.4	6.5	5	9	65	19	17	
17	565E-530N	7.0	7.4	6.5	5	8	10	18	12	
18	565E-535N	7.0	7.4	6.5	5	ROCK				
19	565E-540N	7.0	7.4	6.5	5	7	6	40	ROCK	
20	565E-545N	7.0	7.4	6.5	5	11	73	19	7	
21	565E-549N	7.0	7.4	6.5	5	3	42	10		
22	565E-550N	7.0	7.4	6.5	5	5	8	5	6	
23	565E-552.5N	7.0	7.4	6.5	5	13	129	36		
24	565E-555N	7.0	7.4	6.5	5	4	5	29	17	
25	565E-560N	7.0	7.4	6.5	5	5	28	20	ROCK	
26	565E-565N	7.0	7.4	6.5	5	7	97	42	ROCK	
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

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

pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	566E-550N	7.0	7.4	6.5	5	3	4	9		
2	566E-552N	7.0	7.4	6.5	5	2	105	34		
3	566.5E-502.5N	7.0	7.4	6.5	5	5	48	7		
4	566.5E-508N	7.0	7.4	6.5	5	4	40	28		
5	567.5E-482.5N	7.0	7.4	6.5	5		13	7	8	
6	567.5E-487.5N	7.0	7.4	6.5	5		133	12	10	
7	567.5E-492.5N	7.0	7.4	6.5	5		69	17	4	
8	567.5E-497.5N	7.0	7.4	6.5	5		77	14	9	
9	567.5E-501.5N	7.0	7.4	6.5	5	2	47	36		
10	567.5E-502.5N	7.0	7.4	6.5	5	8	2	5	5	
11	567.5E-503.5N	7.0	7.4	6.5	5	4	5	20		
12	567.5E-507N	7.0	7.4	6.5	5	5	2	25		
13	567.5E-507.5N	7.0	7.4	6.5	5	1	10	2	6	
14	567.5E-509N	7.0	7.4	6.5	5	5	94	17		
15	567.5E-547.5N	7.0	7.4	6.5	5	6	10	41	5	
16	567.5E-552.5N	7.0	7.4	6.5	5	5	47	33	13	
17	568.5E-502.5N	7.0	7.4	6.5	5	3	86	37		
18	568.5E-508N	7.0	7.4	6.5	5	7	78	24		
19	569E-495N	7.0	7.4	6.5	5	10	104	18		
20	569E-505N	7.0	7.4	6.5	5	7	4	6		
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

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

pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W-a. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	570E-450N	7.0	7.4	6.5	5	9	9	8	ROCK	
2	570E-455N	7.0	7.4	6.5	5	6	7	12	7	
3	570E-460N	7.0	7.4	6.5	5	9	39	9	ROCK	
4	570E-465N	7.0	7.4	6.5	5	12	39	14	ROCK	
5	570E-470N	7.0	7.4	6.5	5	8	23	13	ROCK	
6	570E-475N	7.0	7.4	6.5	5	6	15	14	ROCK	
7	570E-480N	7.0	7.4	6.5	5	8	15	18	10	6
8	570E-485N	7.0	7.4	6.5	5	9	205	25	7	
9	570E-490N	7.0	7.4	6.5	5	8	32	27	14	12
10	570E-494N	7.0	7.4	6.5	5	4	77	123		
11	570E-495N	7.0	7.4	6.5	5	3	5	7	8	
12	570E-496N	7.0	7.4	6.5	5	6	10	70		
13	570E-500N	7.0	7.4	6.5	5	8	69	25	21	12
14	570E-504N	7.0	7.4	6.5	5	9	15	155		
15	570E-505N	7.0	7.4	6.5	5	3	4	7	4	
16	570E-506N	7.0	7.4	6.5	5	2	13	8		
17	570E-510N	7.0	7.4	6.5	5	6	7	24	14	11
18	570E-515N	7.0	7.4	6.5	5	6	70	18	20	
19	570E-520N	7.0	7.4	6.5	5	8	10	33	14	11
20	570E-525N	7.0	7.4	6.5	5	4	66	16	40	
21	570E-530N	7.0	7.4	6.5	5	7	6	42	12	15
22	570E-535N	7.0	7.4	6.5	5	12	8	72	ROCK	
23	570E-540N	7.0	7.4	6.5	5	10	20	95	9	17
24	570E-545N	7.0	7.4	6.5	5	8	41	31	14	
25	570E-550N	7.0	7.4	6.5	5	6	23	37	24	15
26	570E-555N	7.0	7.4	6.5	5	4	177	25	ROCK	
27	570E-560N	7.0	7.4	6.5	5	9	22	8	6	9
28	570E-565N	7.0	7.4	6.5	5	6	23	47	ROCK	
29										
30										

INSTRUMENTS:

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

RESULTS IN

pCi/g

BACKGROUND

Total-U 4

MDA

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.C. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	571E-495N	7.0	7.4	6.5	5	1	4	18		
2	571E-505N	7.0	7.4	6.5	5	3	73	17		
3	572.5E-482.5N	7.0	7.4	6.5	5		97	26	7	
4	572.5E-487.5N	7.0	7.4	6.5	5		84	123	29	
5	572.5E-492.5N	7.0	7.4	6.5	5		57	180	36	
6	572.5E-497.5N	7.0	7.4	6.5	5		62	33	14	
7	572.5E-502.5N	7.0	7.4	6.5	5		64	122	19	
8	572.5E-507.5N	7.0	7.4	6.5	5		35	57	12	
9	572.5E-512.5N	7.0	7.4	6.5	5		15	25	5	
10	572.5E-517.5N	7.0	7.4	6.5	5		16	22	18	
11	572.5E-522.5N	7.0	7.4	6.5	5		75	27	6	
12	574E-490N	7.0	7.4	6.5	5	4	13	7		
13	574E-498N	7.0	7.4	6.5	5	3	142	14		
14	574E-500N	7.0	7.4	6.5	5	9	203	11		
15										
16										
17										
18										
19										
20										
21										
22										
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24										
25										
26										
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: W. A. Rogers

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	575E-450N	7.0	7.4	6.5	5	12	ROCK			
2	575E-455N	7.0	7.4	6.5	5	8	9	9	15	
3	575E-460N	7.0	7.4	6.5	5	6	8	61	16	
4	575E-465N	7.0	7.4	6.5	5	11	19	9	ROCK	
5	575E-470N	7.0	7.4	6.5	5	36	38	21	ROCK	
6	575E-475N	7.0	7.4	6.5	5	8	134	19	9	
7	575E-480N	7.0	7.4	6.5	5	13	9	66	20	
8	575E-485N	7.0	7.4	6.5	5	4	40	15	ROCK	
9	575E-489N	7.0	7.4	6.5	5	5	12	23		
10	575E-490N	7.0	7.4	6.5	5	6	7	5	10	
11	575E-491N	7.0	7.4	6.5	5	2	153	8		
12	575E-495N	7.0	7.4	6.5	5	5	117	97	40	
13	575E-497.5N	7.0	7.4	6.5	5	17	8	93		
14	575E-500N	7.0	7.4	6.5	5	3	7	5	2	
15	575E-501N	7.0	7.4	6.5	5	58	11	122		
16	575E-505N	7.0	7.4	6.5	5	6	12	ROCK		
17	575E-510N	7.0	7.4	6.5	5	6	107	70	29	
18	575E-515N	7.0	7.4	6.5	5	8	144	15	10	
19	575E-520N	7.0	7.4	6.5	5	8	162	41	12	
20	575E-525N	7.0	7.4	6.5	5	6	3	46	10	
21	575E-530N	7.0	7.4	6.5	5	8	10	85	37	
22	575E-535N	7.0	7.4	6.5	5	6	32	122	64	
23	575E-540N	7.0	7.4	6.5	5	12	12	133	70	
24	575E-542.5N	7.0	7.4	6.5	5	10	3	45		
25	575E-545N	7.0	7.4	6.5	5	8	59	84	23	
26	575E-550N	7.0	7.4	6.5	5	6	23	29	15	
27	575E-555N	7.0	7.4	6.5	5	8	22	14	8	
28	575E-560N	7.0	7.4	6.5	5	4	41	50	25	
29	575E-565N	7.0	7.4	6.5	5	4	31	28	15	
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Rogers*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	576E-490N	7.0	7.4	6.5	5	3	73	5		
2	576E-498N	7.0	7.4	6.5	5	3	98	16		
3	576E-500N	7.0	7.4	6.5	5	5	2	41		
4	576.5E-517.5N	7.0	7.4	6.5	5	5	2	88		
5	577.5E-487.5N	7.0	7.4	6.5	5		22	36	6	
6	577.5E-492.5N	7.0	7.4	6.5	5		150	33	26	
7	577.5E-497.5N	7.0	7.4	6.5	5		132	13	9	
8	577.5E-502.5N	7.0	7.4	6.5	5		10	21	8	
9	577.5E-507.5N	7.0	7.4	6.5	5		13	68	10	
10	577.5E-512.5N	7.0	7.4	6.5	5		132	31	10	
11	577.5E-515N	7.0	7.4	6.5	5	2	4	59		
12	577.5E-516.5N	7.0	7.4	6.5	5	5	89	3		
13	577.5E-517.5N	7.0	7.4	6.5	5	8	8	7	9	
14	577.5E-518.5N	7.0	7.4	6.5	5	4	3	128		
15	577.5E-522.5N	7.0	7.4	6.5	5		62	32	16	
16	577.5E-527.5N	7.0	7.4	6.5	5	7	11	6	12	
17	577.5E-532.5N	7.0	7.4	6.5	5	9	9	177	24	
18	577.5E-541N	7.0	7.4	6.5	5	5	23	106	41	
19	577.5E-545N	7.0	7.4	6.5	5	3	4	37	9	
20	577.5E-550N	7.0	7.4	6.5	5	16	9	38	31	
21	578E-514N	7.0	7.4	6.5	5	8	221	22		
22	578E-516N	7.0	7.4	6.5	5	2	43	30		
23	578.5E-517.5N	7.0	7.4	6.5	5	7	4	26		
24	578.5E-547.5N	7.0	7.4	6.5	5	3	7	49	85	
25	579E-542.5N	7.0	7.4	6.5	5	8	69	174	24	
26	579E-550N	7.0	7.4	6.5	5	6	18	28	11	
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W-a. Rogers*

DATE: 10-2-97



CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	580E-450N	7.0	7.4	6.5	5	14	6	10	ROCK	
2	580E-455N	7.0	7.4	6.5	5	8	16	7	ROCK	
3	580E-460N	7.0	7.4	6.5	5	6	31	18	ROCK	
4	580E-465N	7.0	7.4	6.5	5	24	22	24	ROCK	
5	580E-470N	7.0	7.4	6.5	5	15	16	9	ROCK	
6	580E-475N	7.0	7.4	6.5	5	9	22	10	ROCK	
7	580E-480N	7.0	7.4	6.5	5	7	4	8	25	16
8	580E-485N	7.0	7.4	6.5	5	7	31	10	5	
9	580E-490N	7.0	7.4	6.5	5	20	45	14	17	9
10	580E-495N	7.0	7.4	6.5	5	6	33	ROCK		
11	580E-500N	7.0	7.4	6.5	5	1	12	36	17	9
12	580E-505N	7.0	7.4	6.5	5	6	45	18	ROCK	
13	580E-510N	7.0	7.4	6.5	5	5	120	43	27	17
14	580E-514N	7.0	7.4	6.5	5	2	4	21		
15	580E-515N	7.0	7.4	6.5	5	11	3	4	7	
16	580E-516N	7.0	7.4	6.5	5	7	94	24		
17	580E-520N	7.0	7.4	6.5	5	98	6	43	7	8
18	580E-525N	7.0	7.4	6.5	5	5	11	8	6	
19	580E-530N	7.0	7.4	6.5	5	9	8	9	10	7
20	580E-535N	7.0	7.4	6.5	5	6	63	97	87	
21	580E-540N	7.0	7.4	6.5	5	7	59	7	7	
22	580E-545N	7.0	7.4	6.5	5	5	8	12	6	
23	580E-549N	7.0	7.4	6.5	5	4	6	1	12	
24	580E-550N	7.0	7.4	6.5	5	11	38	13	11	
25	580E-551N	7.0	7.4	6.5	5	9	100	7	18	
26	580E-555N	7.0	7.4	6.5	5	9	12	19	16	
27	580E-560N	7.0	7.4	6.5	5	10	7	23	13	10
28	580E-565N	7.0	7.4	6.5	5	6	11	111	ROCK	
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY:

*W. A. Rogers*

DATE: 10-2-97



CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	581E-515N	7.0	7.4	6.5	5	1	24	115		
2	581E-550N	7.0	7.4	6.5	5	4	8	18	11	
3	582.5E-507.5N	7.0	7.4	6.5	5		56	19	6	
4	582.5E-512.5N	7.0	7.4	6.5	5		17	56	17	
5	582.5E-517.5N	7.0	7.4	6.5	5		26	19	6	
6	582.5E-522.5N	7.0	7.4	6.5	5		19	96	32	
7	582.5E-532.5N	7.0	7.4	6.5	5		8	6	28	
8	582.5E-542.5N	7.0	7.4	6.5	5		6	111	28	
9	582.5E-547.5N	7.0	7.4	6.5	5		6	37	8	
10										
11										
12										
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29										
30										

INSTRUMENTS:

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

RESULTS IN

pCi/g

BACKGROUND

Total-U 4

MDA

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W. G. Boyer*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	585E-450N	7.0	7.4	6.5	5	5	8	6	8	
2	585E-455N	7.0	7.4	6.5	5	8	36	18	16	
3	585E-560N	7.0	7.4	6.5	5	5	24	19	ROCK	
4	585E-565N	7.0	7.4	6.5	5	19	13	12	ROCK	
5	585E-470N	7.0	7.4	6.5	5	10	29	9	13	
6	585E-475N	7.0	7.4	6.5	5	8	44	19	ROCK	
7	585E-480N	7.0	7.4	6.5	5	8	34	9	7	
8	585E-485N	7.0	7.4	6.5	5	6	57	10	10	
9	585E-490N	7.0	7.4	6.5	5	7	90	15	8	
10	585E-495N	7.0	7.4	6.5	5	36	10	8	6	
11	585E-500N	7.0	7.4	6.5	5	4	61	9	13	
12	585E-505N	7.0	7.4	6.5	5	9	30	14	8	
13	585E-510N	7.0	7.4	6.5	5	4	31	10	9	
14	585E-515N	7.0	7.4	6.5	5	7	121	14	5	
15	585E-520N	7.0	7.4	6.5	5	9	216	22	7	
16	585E-525N	7.0	7.4	6.5	5	8	23	84	36	
17	585E-530N	7.0	7.4	6.5	5	9	61	33	13	
18	585E-535N	7.0	7.4	6.5	5	5	197	112	24	
19	585E-540N	7.0	7.4	6.5	5	9	174	94	28	
20	585E-545N	7.0	7.4	6.5	5	7	13	92	19	
21	585E-550N	7.0	7.4	6.5	5	8	28	35	17	
22	585E-555N	7.0	7.4	6.5	5	7	5	28	ROCK	
23	585E-560N	7.0	7.4	6.5	5	6	37	107	ROCK	
24	585E-565N	7.0	7.4	6.5	5	59	12	4	26	
25										
26										
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

CIMMARON SOIL COUNTER X" X 4" X 16" NaI DETECTO pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Royle*

DATE: 10-2-97

CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES

SAMPLE LOCATION : WASTE POND NO.2

DATE: 09/23/97

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	586E-503N	7.0	7.4	6.5	5	5	155	75	21	
2	586E-508N	7.0	7.4	6.5	5	23	32	57	10	
3	586E-512.5N	7.0	7.4	6.5	5	7	32	49	19	
4	586.5E-510N	7.0	7.4	6.5	5	15	63	22	25	
5	587E-500N	7.0	7.4	6.5	5	8	163	46	37	44
6	587E-519N	7.0	7.4	6.5	5	7	14	15	46	
7	587E-527.5N	7.0	7.4	6.5	5	6	14	86	106	
8	587.5E-515N	7.0	7.4	6.5	5	7	105	41	27	
9	587.5E-517.5N	7.0	7.4	6.5	5	10	6	8	7	
10	588E-503N	7.0	7.4	6.5	5	5	3	39	63	
11	588E-508N	7.0	7.4	6.5	5	1	7	20	27	
12	588.5E-510N	7.0	7.4	6.5	5	5	27	5	10	
13	588.5E-512.5N	7.0	7.4	6.5	5	3	15	17	79	
14	588.5E-522.5N	7.0	7.4	6.5	5	5	79	140	71	
15	589E-512.5N	7.0	7.4	6.5	5	8	30	18	7	
16	589E-515N	7.0	7.4	6.5	5	5	8	34	41	
17	589.5E-514N	7.0	7.4	6.5	5	6	6	11	4	
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

INSTRUMENTS:

RESULTS IN

BACKGROUND

MDA

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

pCi/g

Total-U 4

10

BACKGROUND NOT SUBTRACTED

0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY:

*W. a. Began*

DATE: 10-2-97

**CIMARRON CORPORATION  
CIMARRON FACILITY  
PHASE III, SUB-AREA "O"  
FINAL STATUS SURVEY RESULTS  
SOIL SAMPLES**

**SAMPLE LOCATION : WASTE POND NO.2**

**DATE: 09/23/97**

LN #	GRID NUMBER	pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
		0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
		Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	590E-450N	7.0	7.4	6.5	5	7	4	5	7	
2	590E-455N	7.0	7.4	6.5	5	7	9	8	ROCK	
3	590E-460N	7.0	7.4	6.5	5	24	12	7	ROCK	
4	590E-465N	7.0	7.4	6.5	5	39	24	33	34	
5	590E-470N	7.0	7.4	6.5	5	81	22	17	19	
6	590E-475N	7.0	7.4	6.5	5	75	19	16	14	
7	590E-480N	7.0	7.4	6.5	5	4	4	9	18	8
8	590E-485N	7.0	7.4	6.5	5	83	41	28	23	
9	590E-490N	7.0	7.4	6.5	5	4	9	11	8	9
10	590E-495N	7.0	7.4	6.5	5	25	15	7	9	
11	590E-500N	7.0	7.4	6.5	5	11	5	7	5	3
12	590E-505N	7.0	7.4	6.5	5	13	13	19	7	
13	590E-510N	7.0	7.4	6.5	5	7	8	13	6	8
14	590E-514N	7.0	7.4	6.5	5	5	5	8	6	
15	590E-515N	7.0	7.4	6.5	5	8	3	6	9	
16	590E-516N	7.0	7.4	6.5	5	2	5	5	5	
17	590E-520N	7.0	7.4	6.5	5	4	9	5	6	6
18	590E-525N	7.0	7.4	6.5	5	8	124	23	15	
19	590E-530N	7.0	7.4	6.5	5	11	10	9	7	5
20	590E-535N	7.0	7.4	6.5	5	13	15	18	45	
21	590E-540N	7.0	7.4	6.5	5	3	5	9	4	5
22	590E-545N	7.0	7.4	6.5	5	7	6	5	15	
23	590E-550N	7.0	7.4	6.5	5	5	4	9	10	5
24	590E-555N	7.0	7.4	6.5	5	5	15	ROCK		
25	590E-560N	7.0	7.4	6.5	5	4	9	4	ROCK	
26	590E-565N	7.0	7.4	6.5	5	5	8	14	8	
27	591E-515N	7.0	7.4	6.5	5	9	3	1	1	
28										
29										
30										

**INSTRUMENTS:**

**RESULTS IN**

**BACKGROUND**

**MDA**

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

pCi/g

Total-U 4

10

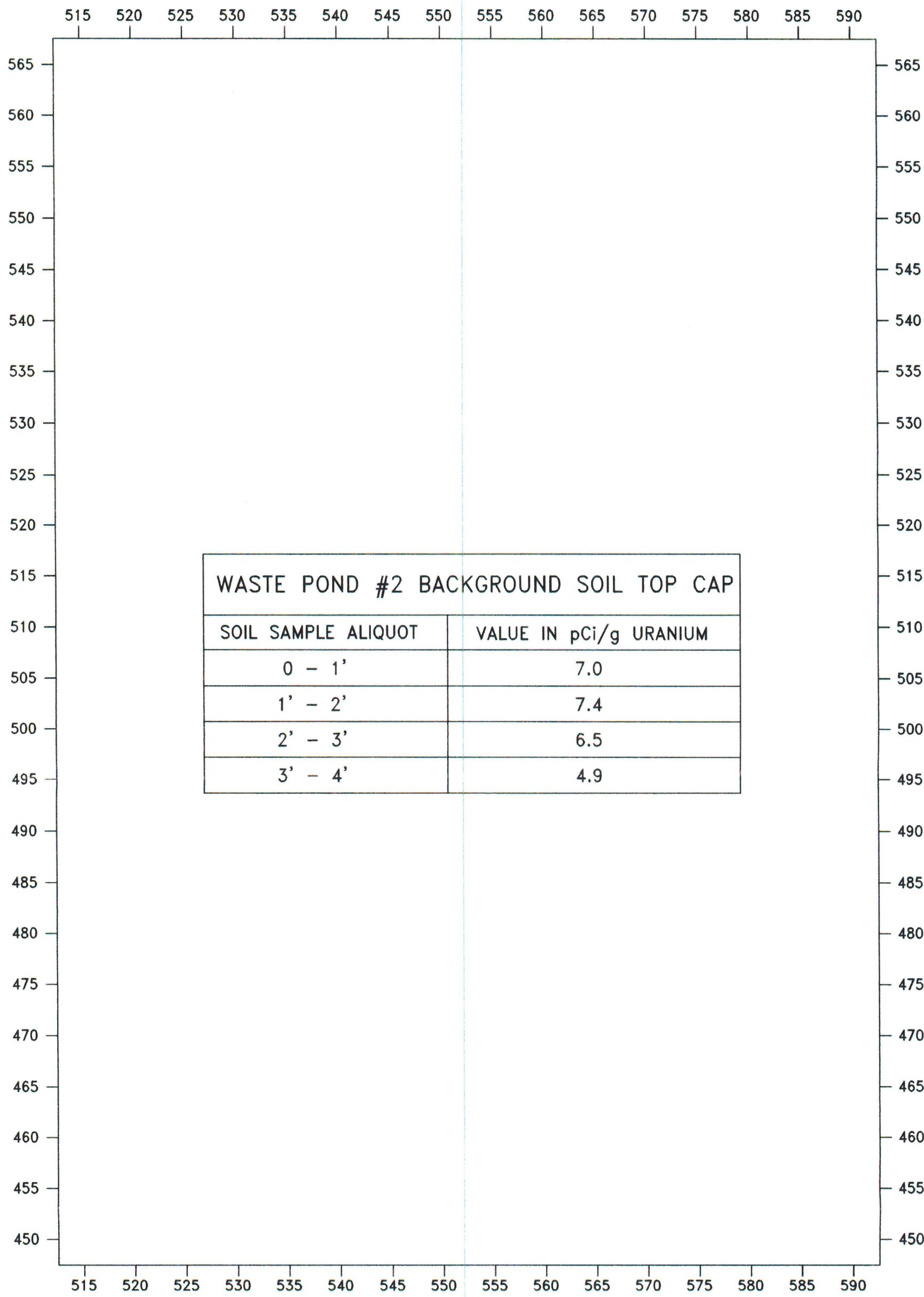
BACKGROUND NOT SUBTRACTED


0-4' IS TOP CAP PLACED ON WASTE POND #2

REVIEWED BY: *W.A. Rozen*

DATE: 10-2-97






URANIUM (pCi/g U)		<b>LEGEND</b>		 <b>CIMARRON CORPORATION</b>	
CIMARRON GAMMA SPEC SOIL COUNTER.		URANIUM 1 - 94 pCi/g U		CIMARRON FACILITY	
SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U, NOT SUBTRACTED.		120 URANIUM 95 - 219 pCi/g U		URANIUM WASTE POND #2 SOIL SAMPLE RESULTS	
		245 URANIUM > 219 pCi/g U		5 Meter x 5 Meter x 1 Foot Grid	
		R HIT ROCK - NO SAMPLE		Average Soil Activity	
REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/16/98
		JOB NO.		DRAWING NO. 97P2AVG-0 to 3	
				SCALE: AS SHOWN	
				REV. 0	



	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	9	16	9	7	8	5	14	6	11	4	7	6	4	6	59	5	565
560	9	11	7	12	7	4	7	9	7	8	5	9	4	10	6	4	560
555	4	7	7	6	7	6	7	8	10	5.1	5	4.1	8	9	7	5	555
550	6.1	10.6	15.1	12	8	5	6	6	5	7.9	5.7	5.9	8.5	7.2	8	5	550
545	6.1	12.4	14.7	8	2	8	7	5	10	7.6	9.9	7.8	7.4	4.2	7	7	545
540	7	52.9	11.9	11.3	6	4	5	5	5	7	7	10	11.2	6.9	9	3	540
535	6	19.7	6.9	7.8	7	8	6	7	16	7	R	12	6.4	6.4	5	13	535
530	5	71.6	110	12	11	7	5	6.3	7.1	4.4	8	7	8	8.8	8.6	11	530
525	5	78	7	7	11	4	9	18.4	13.1	6.8	9	4	6.1	5.3	7.8	7.6	525
520	6	21	49	61	10	7	6	5.3	6	7.5	5	8	7.7	86.5	8.9	4.9	520
515	6	48	4	10	7	6	6	8	11	8	4	6	6.9	4.3	7.3	6.2	515
510	4	20	42	10	9	4	6	9	12	10	7.4	5.8	6	5	8	5.8	510
505	4	25	12	37	40	12	10	9	4	7	4.8	4.6	6	6	8.5	12	505
500	6	8	99	44	24	46	3	8	9	7	5	7.5	19.6	1	5.5	11	500
495	4	16	30	11	14	10.2	15	9	6	8	4	5.2	6.5	6	36	25	495
490	6	7	4	5	10	8	8	10	5	5	6	8	3.6	20	7	4	490
485	7	15	10	15	6	4	12	27	36	68	9	9	4	7	6	83	485
480	7	8	9	4	14	4	6	5	31	6	19	8	13	7	8	4	480
475	6	9	77	6	6	16	27	9	7	10	5	6	8	9	8	75	475
470	5	6	7	21	9	11	7	8	9	10	4	8	36	15	10	81	470
465	4	4	12	6	5	5	6	8	7	8	4	12	11	24	19	39	465
460	9	5	5	6	9	5	13	4	7	6	10	9	6	6	5	24	460
455	7	5	9	10	10	7	7	7	8	7	5	6	8	8	8	7	455
450	9	8	8	8	8	8	6	7	11	8	6	9	12	14	5	7	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	



10                      0                      10  
SCALE IN METERS


URANIUM (pCi/g U)		CIMARRON GAMMA SPEC SOIL COUNTER.		SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U, NOT SUBTRACTED.		<div>LEGEND</div> <div><div>8</div><div>120</div><div>245</div></div> <div>URANIUM 1 - 94 pCi/g U</div> <div>URANIUM 95 - 219 pCi/g U</div> <div>URANIUM &gt; 219 pCi/g U</div> <div>R HIT ROCK - NO SAMPLE</div>		<div> CIMARRON CORPORATION</div> <div>CIMARRON FACILITY URANIUM WASTE POND #2 SOIL SAMPLE RESULTS 5 Meter x 5 Meter x 1 Foot Grid Average Soil Activity Soil Sample Aliquot: 4' - 5'</div>					
REV.	DESCRIPTION					DRWN BY:	CK'D BY:	APP'D BY:	DATE	DRWN BY:	DATE	SCALE:	AS SHOWN
										JE	1/10/98		
0	DRAWING ISSUED.					JE	WR	JL	2/16/98	JOB NO.	DRAWING NO.	97P2AVG-4	REV. 0



	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	11	17	16	29	10	11	24	11	36	99	97	23	31	11	12	8	565
560	8	14	47	15	6	6	6	14	10	10	28	22	41	7	37	9	560
555	5	47	21	42	9	5	4	8	6	6.1	26.1	160.8	22	12	5	15	555
550	36.1	32.3	60.4	18.3	7	6	6	22	9	6.5	35.7	24.4	19.5	30.5	25.3	4	550
545	16.2	22.3	44.2	83.1	9	6	7	5	13	13	56.8	37.1	38.2	10.8	11.3	6	545
540	10.5	17.3	63.8	50.3	43	13	17	5	10	7	6	20	11	50.8	153	5	540
535	7	30.3	67.2	67.1	62	36	6	7	23	10	R	8	29.1	49.4	173.4	15	535
530	R	16.5	90	52.4	49	17	65	25.4	31.1	31.6	10	6	10	8.5	48.5	10	530
525	R	26	22	28	44	8	17	7.9	38.1	49.1	65	67.1	20.4	18.4	21.4	118.4	525
520	7	16	35	30	38	29	23	8	26.7	118.1	17	18.9	100.7	17	141.9	17.4	520
515	R	31	23	29	130	62	85	61	73	49	79	56.4	87.6	45.9	81.4	18.4	515
510	9	59	22	26	86	29	85	8	15	4	89.1	18.2	77.9	87.3	40.6	11.9	510
505	9	41	13	20	89	67	27	62	7	61	7.5	29.2	21.3	38	48.9	11.8	505
500	7	32	31	34.5	71.6	45.5	75.4	24	101	46	102.9	65.5	60.5	26.8	95	5	500
495	7	35	24	34.6	83.2	75.5	104.1	60.2	96	150	41.5	55.8	101.2	60	10	15	495
490	8	16	15	54.4	120.8	55.5	88.8	75.9	9	76	48.5	58.9	68.3	55.3	90	9	490
485	4	20	49	143	14	18	19	31	5	35	48.5	143.4	50.4	29.9	57	41	485
480	7	42	23	9	40	6	19	6	17	7	22.6	25	20	4	34	4	480
475	5	77	56	26	27	31	11	25	15	11	32	15	134	22	44	19	475
470	5	14	32	28	21	40	14	16	63	56	37	23	38	16	29	22	470
465	6	83	16	43	32	18	32	48	65	38	23	39	19	22	13	24	465
460	4	33	45	38	7	9	4	5	6	9	15	39	8	31	24	12	460
455	7	22	16	7	9	6	5	4	5	9	6	7	9	16	36	9	455
450	4	8	8	5	8	5	10	7	11	11	9	9	R	6	8	4	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	



10 0 10  
SCALE IN METERS

URANIUM (pCi/g U) CIMARRON GAMMA SPEC SOIL COUNTER. SITE SOIL BACKGROUND OF APPROX. 4.0 pCi/g U, NOT SUBTRACTED.		<b>LEGEND</b> 6 URANIUM 1 - 94 pCi/g U 120 URANIUM 95 - 219 pCi/g U 245 URANIUM > 219 pCi/g U R HIT ROCK - NO SAMPLE		 <b>CIMARRON CORPORATION</b> <b>CIMARRON FACILITY</b> <b>URANIUM WASTE POND #2 SOIL SAMPLE RESULTS</b> <b>5 Meter x 5 Meter x 1 Foot Grid</b> <b>Average Soil Activity</b> <b>Soil Sample Aliquot: 5' - 6'</b>	
REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/16/98
		DRWN. BY:	DATE	SCALE:	
		JE	1/10/98	AS SHOWN	
		JOB NO.	DRAWING NO.		REV.
			97P2AVG-5		0

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