TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #1

(0 TO 1 METER)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB-AREA "O" WASTE POND #1 (0 - 1M)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
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)²

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)² ÷ (x - 1)]

Standard Deviation: 2.58

2 Std Deviations: 5.16

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

(df) = 1.658

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

(Aμ) = 8.55 pCi/gU TOTAL U

GUIDELINE VALUE: 94 pCi/gU TOTAL U

Acceptable Level: 98.0 pCi/gU TOTAL U

TABLE B - 1

Factors for Comparision 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)	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:		

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

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

PERFORMED BY: Dianna Hackey DATE: 3/11/98

REVIEWED BY: W. Q. 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)²
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)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
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)²

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #1

(1 TO 2 METER)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB-AREA "O" WASTE POND #1 (1 - 2M)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
1	9.7	-5.4	28.9
2	9.3	-5.8	33.4
3	7.3	-7.8	60.5
4	8.3	-6.8	45.9
5	10.7	-4.4	19.1
6	40.6	25.5	651.5
7	8.0	-7.1	50.1
8	9.0	-6.1	36.9
9	23.0	7.9	62.8
10	9.0	-6.1	36.9
11	11.0	-4.1	16.6
12	10.3	-4.8	22.8
13	14.0	-1.1	1.2
14	16.7	1.6	2.6
15	7.3	-7.8	60.5
16	7.3	-7.8	60.5
17	11.0	-4.1	16.6
18	7.7	-7.4	54.4
19	20.7	5.6	31.6
20	5.3	-9.8	95.6
21	7.7	-7.4	54.4
22	6.3	-8.8	77.0
23	7.3	-7.8	60.5
24	15.5	0.4	0.2
25	8.3	-6.8	45.9
26	7.0	-8.1	65.2
27	10.7	-4.4	19.1
28	12.0	-3.1	9.5
29	11.0	-4.1	16.6
30	31.8	16.7	279.7
31	8.3	-6.8	45.9
32	23.6	8.5	72.7
33	7.4	-7.7	58.9
34	12.7	-2.4	5.6
35	7.3	-7.8	60.5
36	11.3	-3.8	14.3
37	9.7	-5.4	28.9
38	7.7	-7.4	54.4
39	9.7	-5.4	28.9
40	5.0	-10.1	101.5
41	11.3	-3.8	14.3
42	46.9	31.8	1012.8
43	18.3	3.2	10.4
44	24.6	9.5	90.7
45	13.3	-1.8	3.2
46	8.7	-6.4	40.6
47	20.9	5.8	33.9
48	11.7	-3.4	11.4
49	6.0	-9.1	82.4
50	9.3	-5.8	33.4
	743.6		6147.2
	443.0		14025.8
	1824.1		23993.8
	Sum(n)		Sum(n-N)²

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)² ÷ (x - 1)]

Standard Deviation: **14.14**
2 Std Deviations: **28.28**
Degree of Freedom(df).= (x) - 1 Data listed on Table B-1
(df) = **1.658**

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

(Aμ) = **17.21** pCi/gU TOTAL U
GUIDELINE VALUE: **N/A** pCi/gU TOTAL U
Acceptable Level: **N/A** pCi/gU TOTAL U

TABLE B - 1

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

For values of Degrees of Freedom not listed:
Interpolate between the listed values.

(df) high value(Z)		is (B)		95%
(df) low value(Y)		is (A)		95%
Desired value(df) (X)	120	is calculated as follow:		

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

The (df) value for (X)	120	1.658	95%

PERFORMED BY: Deanna Huckey DATE: 3/11/98

REVIEWED BY: W.A. Rogers 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)²
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)²

n = pCi/g TOTAL

Number	n	(n-N)	(n-N)²
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)²

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #1

(2 TO 3 METER)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB-AREA "O" WASTE POND #1 (2 - 3M)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
1	12.0	-16.3	264.4
2	33.0	4.7	22.5
3	15.8	-12.5	155.3
4	19.8	-8.5	71.6
5	6.0	-22.3	495.6
6	24.1	-4.2	17.3
7	54.6	26.3	693.7
8	35.3	7.0	49.5
9	13.0	-15.3	232.9
10	4.0	-24.3	588.6
11	58.4	30.1	908.3
12	30.3	2.0	4.2
13	8.0	-20.3	410.5
14	51.4	23.1	535.4
15	43.4	15.1	229.2
16	21.7	-6.6	43.0
17	12.6	-15.7	245.3
18	63.2	34.9	1220.7
19	18.0	-10.3	105.3
20	25.5	-2.8	7.6
21	18.8	-9.5	89.5
22	12.0	-16.3	264.4
23	51.5	23.2	540.0
24	25.9	-2.4	5.6
25	41.6	13.3	177.9
26	18.7	-9.6	91.4
27	54.6	26.3	693.7
28	21.1	-7.2	51.3
29	47.7	19.4	377.9
30	11.2	-17.1	291.1
31	28.8	0.5	0.3
32	28.8	0.5	0.3
33	32.2	3.9	15.5
34	32.8	4.5	20.6
35	58.0	29.7	884.4
36	42.1	13.8	191.5
37	14.5	-13.8	189.4
38	41.6	13.3	177.9
39	6.0	-22.3	495.6
40	22.6	-5.7	32.0
41	41.7	13.4	180.6
42	28.0	-0.3	0.1
43	15.0	-13.3	175.9
44	26.1	-2.2	4.7
45	25.2	-3.1	9.4
46	19.7	-8.6	73.3
47	47.0	18.7	351.1
48	9.5	-18.8	352.0
49	12.0	-16.3	264.4
50			
	1384.8		12302.8
	Sum(n)		Sum(n-N)²

No. of Samples (x) : 49

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : 28.26

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

Standard Deviation: 16.01

2 Std Deviations: 32.02

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

(df) = 1.679

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

(Aμ) = 32.10 pCi/gU TOTAL U

GUIDELINE VALUE: N/A pCi/gU TOTAL U

Acceptable Level: N/A pCi/gU TOTAL U

TABLE B - 1

Factors for Comparision 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%
(df) low value(Y)	40	is (A)	1.684	95%
Desired value(df) (X)	48	is calculated as follow:		

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

The (df) value for (X)	48	1.679	95%

PERFORMED BY: Deanna Huckey 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)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB-AREA "O" WASTE POND #1 (0 - 2M AVG)

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
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)		$Sum(n-N)^2$

No. of Samples (x) : 130

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : 11.36

Standard Deviation (Sd) = SQRT [$(n-N)^2$ ÷ (x - 1)]

Standard Deviation: 7.21

2 Std Deviations: 14.42

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

(df) = 1.658

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

(Aμ) = 12.41 pCi/gU TOTAL U

GUIDELINE VALUE: 69 pCi/gU TOTAL U

Acceptable Level: 73.0 pCi/gU TOTAL U

TABLE B - 1

Factors for Comparision 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)	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:		

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

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

PERFORMED BY: Deanna Hackney DATE: 3/11/98

REVIEWED BY: W.A. 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)²
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)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
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)²

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #1

(0 TO 3 METER AVERAGE)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB-AREA "O" WASTE POND #1 (0 - 3M AVG)

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
1	8.2	-4.6	21.6
2	7.5	-5.3	28.6
3	8.0	-4.8	23.5
4	8.5	-4.3	18.9
5	9.0	-3.8	14.8
6	20.1	7.3	52.7
7	8.7	-4.1	17.2
8	8.0	-4.8	23.5
9	21.2	8.4	69.8
10	8.8	-4.0	16.4
11	11.3	-1.5	2.4
12	9.3	-3.5	12.6
13	11.5	-1.3	1.8
14	20.4	7.6	57.1
15	8.0	-4.8	23.5
16	6.8	-6.0	36.5
17	9.8	-3.0	9.3
18	9.3	-3.5	12.6
19	15.7	2.9	8.2
20	7.0	-5.8	34.2
21	7.8	-5.0	25.4
22	6.0	-6.8	46.8
23	8.0	-4.8	23.5
24	20.4	7.6	57.1
25	7.8	-5.0	25.4
26	7.5	-5.3	28.6
27	8.7	-4.1	17.2
28	9.5	-3.3	11.2
29	10.0	-2.8	8.1
30	31.1	18.3	333.3
31	10.0	-2.8	8.1
32	22.0	9.2	83.8
33	9.1	-3.7	14.0
34	9.0	-3.8	14.8
35	7.8	-5.0	25.4
36	25.5	12.7	160.2
37	18.5	5.7	32.0
38	7.5	-5.3	28.6
39	8.7	-4.1	17.2
40	6.2	-6.6	44.1
41	9.5	-3.3	11.2
42	20.7	7.9	61.7
43	25.9	13.1	170.5
44	24.9	12.1	145.4
45	14.2	1.4	1.8
46	9.6	-3.2	10.5
47	30.3	17.5	304.7
48	9.5	-3.3	11.2
49	6.8	-6.0	36.5
50	12.2	-0.6	0.4
	678.6		3305.5
	369.3		3414.1
	0.0		0.0
	1669.7		8963.0
	Sum(n)		$Sum(n-N)^2$

No. of Samples (x) : 130

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : 12.84

Standard Deviation (Sd) = SQRT [$(n-N)^2$ ÷ (x - 1)]

Standard Deviation: 8.34

2 Std Deviations: 16.67

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

(df) = 1.658

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

(Aμ) = 14.06 pCi/gU TOTAL U

GUIDELINE VALUE: 38 pCi/gU TOTAL U

Acceptable Level: 42.0 pCi/gU TOTAL U

TABLE B - 1

Factors for Comparision 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)	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:		

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

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

PERFORMED BY: Deanna Huckey DATE: 3/11/98

REVIEWED BY: W. A. 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)²
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)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
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)²

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

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

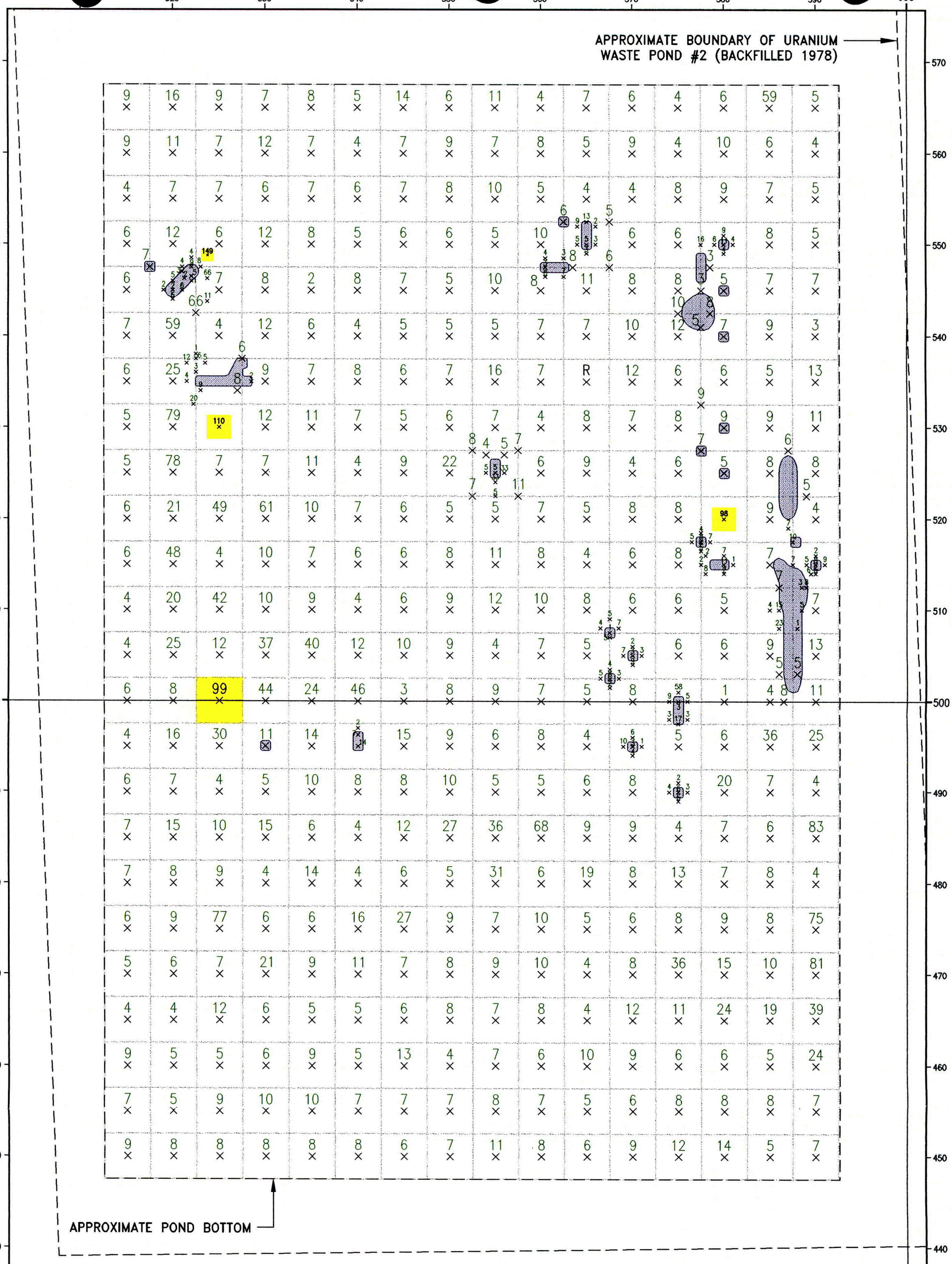
REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE
0	DRAWING ISSUED.	JE	WR	JL	2/16/98

CIMARRON CORPORATION

CIMARRON FACILITY
PHASE III – SUB-AREA O
URANIUM WASTE POND #2
FINAL STATUS SURVEY RESULTS – SOIL
SOIL SAMPLE ALIQUOT: 0 – 4'

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN
JOB NO.	DRAWING NO. 97POP2SS–0 to 3	REV. 0

...\UPOND2\97POP2SB



NORTH

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
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

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

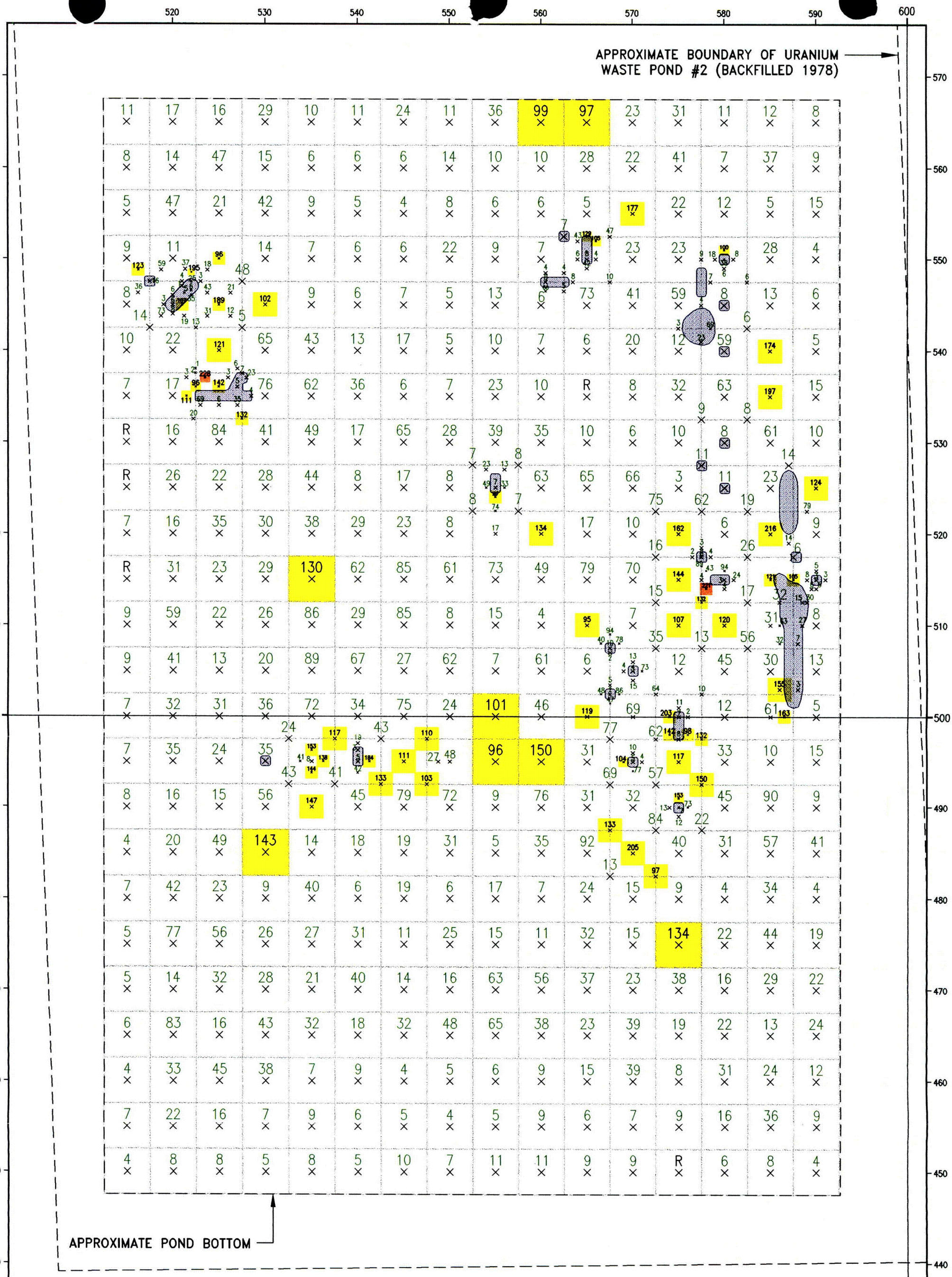
CIMARRON CORPORATION

CIMARRON FACILITY
PHASE III – SUB-AREA O
URANIUM WASTE POND #2
FINAL STATUS SURVEY RESULTS – SOIL
SOIL SAMPLE ALIQUOT: 4' – 5'

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97POP2SS-4	0

...\UPOND2\97POP2SB



NORTH

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

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

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

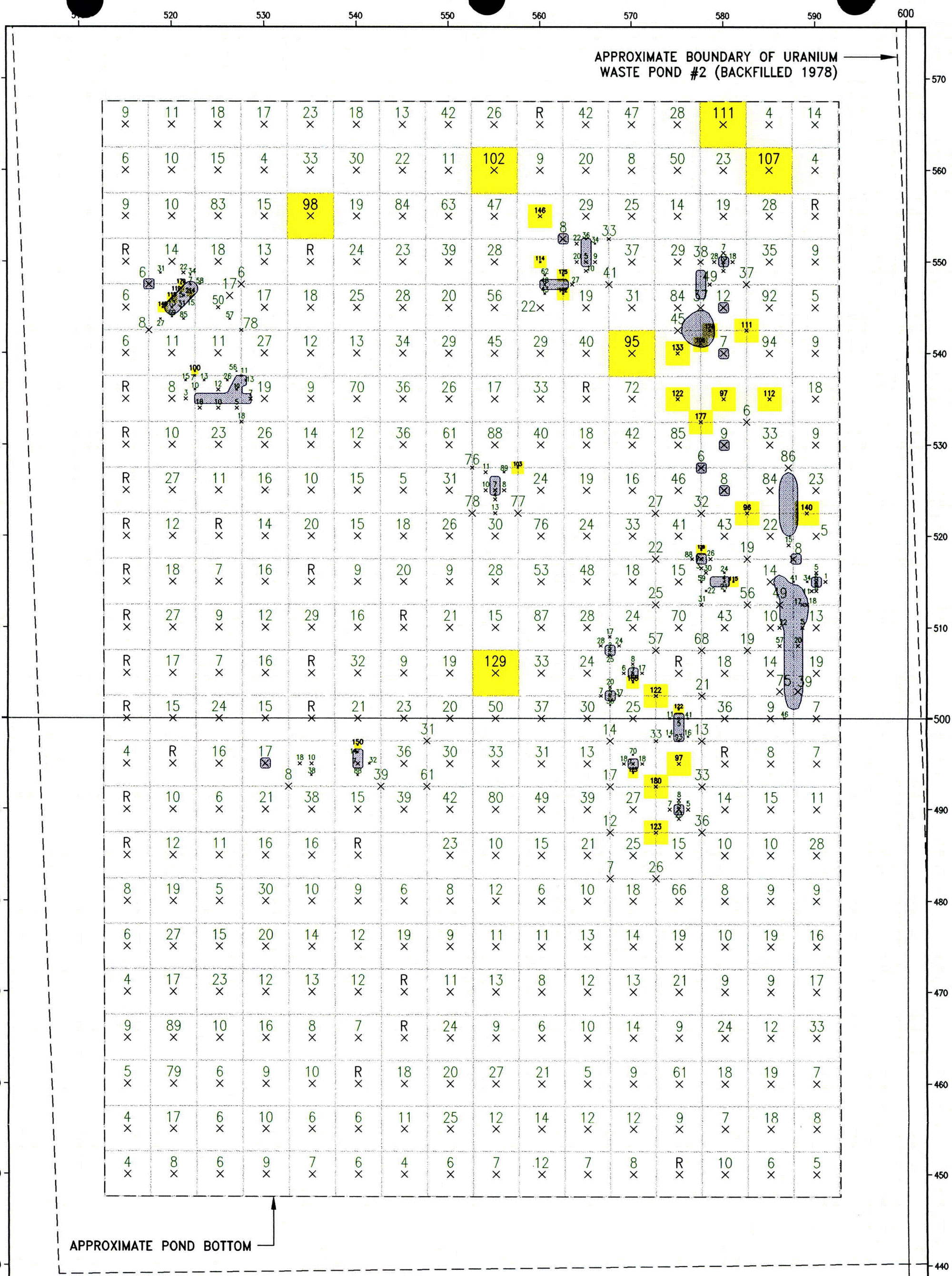
CIMARRON CORPORATION

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

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97POP2SS–5	0

...\UPOND2\97POP2SB



NORTH

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

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

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

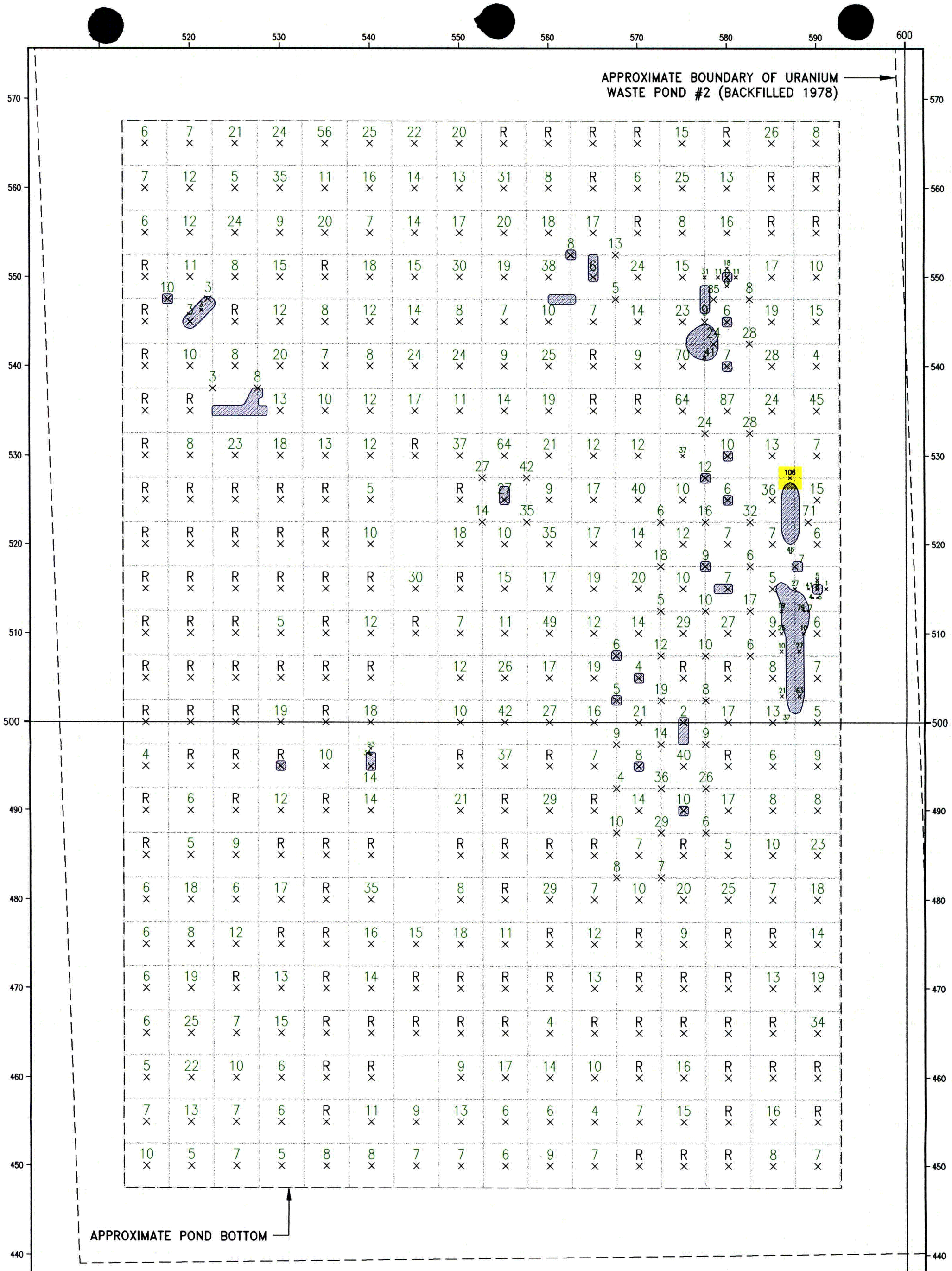
CIMARRON CORPORATION

CIMARRON FACILITY
PHASE III – SUB-AREA O
URANIUM WASTE POND #2
FINAL STATUS SURVEY RESULTS – SOIL
SOIL SAMPLE ALIQUOT: 6' – 7'

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97POP2SS–6	0

...\UPOND2\97POP2SB



NORTH

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

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

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

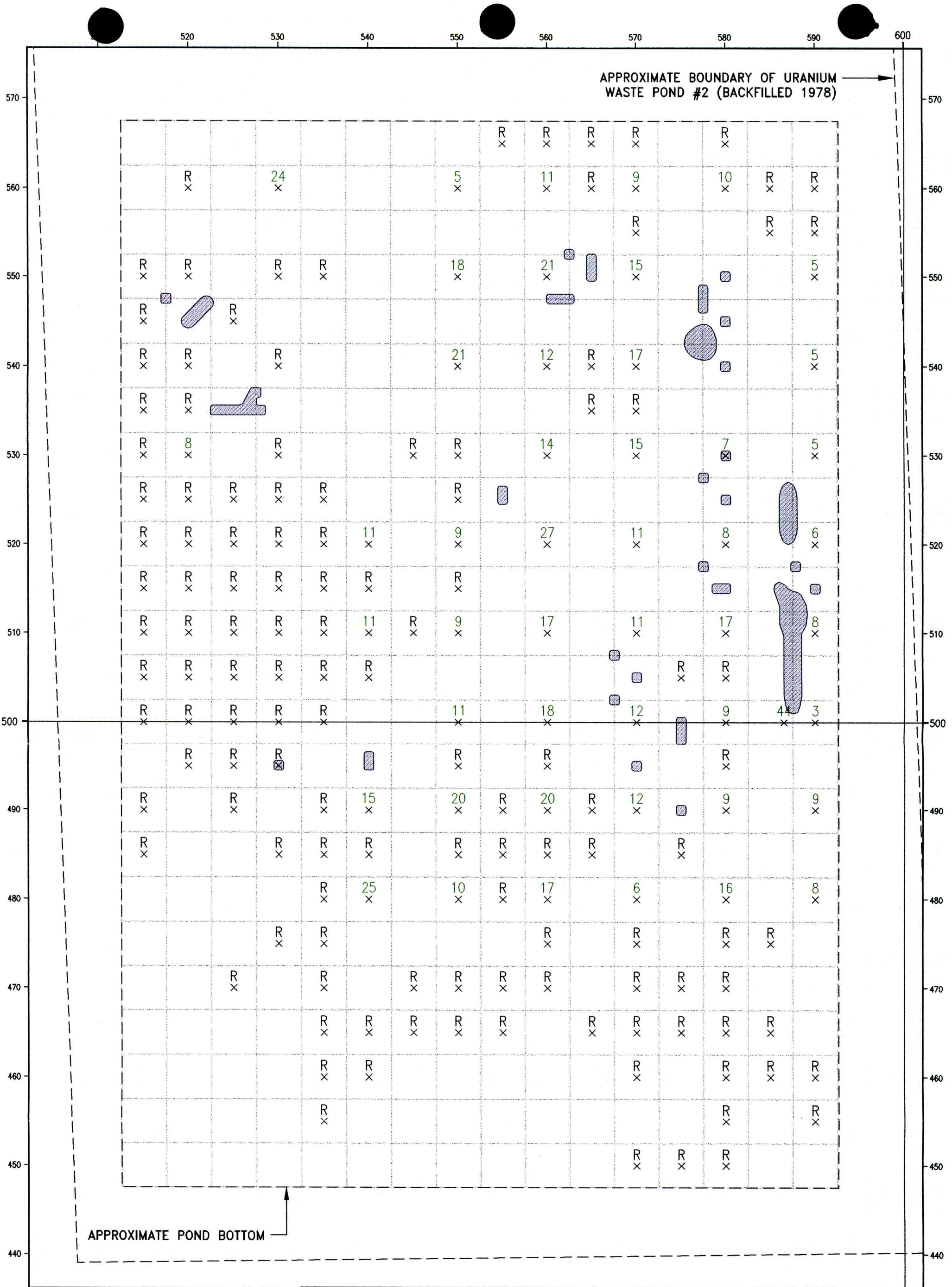
CIMARRON CORPORATION

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

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97POP2SS-7	0

...\UPOND2\97POP2SB



NORTH

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

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

REV.	DESCRIPTION	DRWN BY:	CK'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: 8' – 9'

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97POP2SS–8	0

...\UPOND2\97POP2SB

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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		BACKGROUND	MDA
CIMARRON SOIL COUNTER X"X4"X16" NaI DETECTOR	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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	518.75-548.75N	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										
14										
15										
16										
17										
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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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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. Bogue DATE: 10-2-97

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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:	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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. A. Rogers DATE: 10-2-97

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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. Boyce DATE: 10-2-97

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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 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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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 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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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										
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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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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:	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.C. Rogers DATE: 10-2-97

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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										
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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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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. G. Rogers DATE: 10-2-97

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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										
13										
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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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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.G. Rogers DATE: 10-2-97

FILE: BKSSFORM

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

		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	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. Bogan DATE: 10-2-97

FILE: BKSSFORM

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

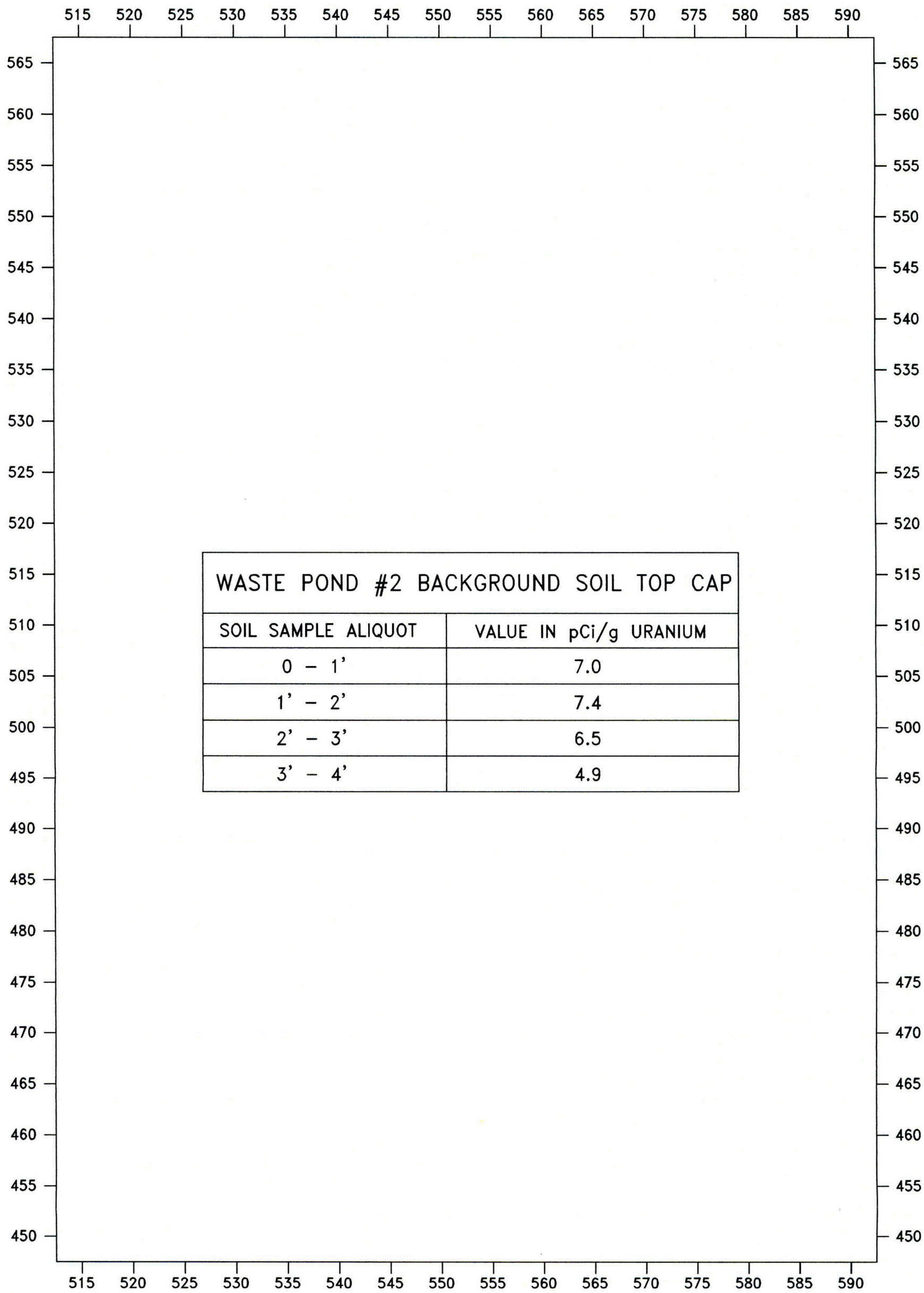
		pCi/g								
		0-1 METER			1-2 METERS			2-3 METERS		
LN	GRID	0-1'	1'-2'	2'-3'	3'-4'	4'-5'	5'-6'	6'-7'	7'-8'	8'-9'
#	NUMBER	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U	Total-U
1	590E-450N	7.0	7.4	6.5	5	7	4	5	7	
2	590E-455N	7.0	7.4	6.5	5	7	9	8	ROCK	
3	590E-460N	7.0	7.4	6.5	5	24	12	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. Rogers DATE: 10-2-97

FILE: BKSSFORM



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

NORTH

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

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 1 Foot Grid
Average Soil Activity
Soil Sample Aliquot: 0' – 4'

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97P2AVG-0 to 3	0

...\UPOND2\AVERAGES\97P2U0-3

	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	

NORTH

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.

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

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

CIMARRON CORPORATION

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'

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97P2AVG-4	0

...\UPOND2\AVERAGES\97P2U4-5

	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	

NORTH

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.

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

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 1 Foot Grid
Average Soil Activity
Soil Sample Aliquot: 5' – 6'

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97P2AVG-5	0

...\UPOND2\AVGERAGES\97P2U5-6

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	9	11	18	17	23	18	13	42	26	R	42	47	28	111	4	14	565
560	6	10	15	4	33	30	22	11	102	9	20	8	50	23	107	4	560
555	9	10	83	15	98	19	84	63	47	128.8	28.3	26	14	19	28	R	555
550	6	22.7	21.5	12.1	R	24	23	39	28	94.5	32.3	37	31.3	23.1	35.3	9	550
545	6.3	66.2	46.9	23.3	18	25	28	20	56	36.8	29.9	32.3	67.9	41.8	87.5	5	545
540	6.3	15.9	27.7	31.4	12	13	34	29	45	29	40	95	114.8	36.6	96.1	9	540
535	R	7.8	12.4	16.6	9	70	36	26	17	33	R	72	128.9	95.6	98.8	18	535
530	R	10	22.4	25	14	12	36	62.9	88.4	47.9	18	42	86.6	29.3	36.3	9	530
525	R	27	11	16	10	15	5	42.5	38.9	40.5	19	17.4	36.9	21.8	85.8	37.6	525
520	R	12	R	14	20	15	18	32.5	36.5	76.1	24	30.9	39.9	46.6	29.6	22.3	520
515	R	18	7	16	R	9	20	9	28	53	48	19.4	23.3	39	24.5	12.4	515
510	R	27	9	12	29	16	R	21	15	87	26.5	27.9	57.6	43.3	29	13.4	510
505	R	17	7	16	R	32	9	19	129	33	21	48.3	67	24.8	22.3	21.5	505
500	R	15	24	15	R	21	24	21.4	50	37	26.3	36.9	52.7	31.3	22.5	7	500
495	4	R	16	15.9	18.4	57.4	38.9	34	33	31	13.6	57.1	87	23	8	7	495
490	R	10	6	19.4	34.3	18	41.8	44.4	80	49	32.9	55	51.6	19.1	15	11	490
485	R	12	11	16	16	R		23	10	15	18.1	33.5	32.5	13.3	10	28	485
480	8	19	5	30	10	9	6	8	12	6	9.6	17.6	61	8	9	9	480
475	6	27	15	20	14	12	19	9	11	11	13	14	19	10	19	16	475
470	4	17	23	12	13	12	R	11	13	8	12	13	21	9	9	17	470
465	9	89	10	16	8	7	R	24	9	6	10	14	9	24	12	33	465
460	5	79	6	9	10	R	18	20	27	21	5	9	61	18	19	7	460
455	4	17	6	10	6	6	11	25	12	14	12	12	9	7	18	8	455
450	4	8	6	9	7	6	4	6	7	12	7	8	R	10	6	5	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

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

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 1 Foot Grid
Average Soil Activity
Soil Sample Aliquot: 6' – 7'

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97P2AVG-6	0

...\UPOND2\AVERAGES\97P2U6-7

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	6	7	21	24	56	25	22	20	R	R	R	R	15	R	26	8	565
560	7	12	5	35	11	16	14	13	31	8	R	6	25	13	R	R	560
555	6	12	24	9	20	7	14	17	20	16.8	15.4	13	8	16	R	R	555
550		9.9	8	15	R	18	15	30	19	34.3	7	20.3	19	20.4	15.9	10	550
545	10	3.9	R	12	8	12	14	8	7	10	6.8	12.9	19.5	17.3	18.8	15	545
540		9.1	7.4	18.5	7	8	24	24	9	25	R	9	66.4	12.8	28	4	540
535	R	3	5.5	12.4	10	12	17	11	14	19	R	R	59	71.8	24.5	45	535
530	R	8	23	18	13	12	R	35.8	56.6	23.6	12	12	32.3	14.3	26.5	7	530
525	R	R	R	R	R	5		20.5	28.3	16.4	17	35.8	10.5	11.3	44.3	22	525
520	R	R	R	R	R	10		17.5	13.6	35	17	13.5	12.1	11.4	12.4	14.3	520
515	R	R	R	R	R	R	30	R	15	17	19	17.9	10.3	8.8	9.8	13.6	515
510	R	R	R	5	R	12	R	7	11	49	11.3	11.6	19.1	18.9	15	13.7	510
505	R	R	R	R	R	R		12	26	17	15.6	7.3	12.3	8	11.7	14	505
500	R	R	R	19	R	18		10	42	27	13.8	16.4	7.3	14.9	21	5	500
495	4	R	R	R	10	34.3		R	37	R	6.9	11.9	30.6	17.5	6	9	495
490	R	6	R	12	R	14		21	R	29	7	16.9	17.1	16.8	8	8	490
485	R	5	9	R	R	R		R	R	R	9	10.3	14	5.1	10	23	485
480	6	18	6	17	R	35		8	R	29	7.1	9.4	18.4	25	7	18	480
475	6	8	12	R	R	16	15	18	11	R	12	R	9	R	R	14	475
470	6	19	R	13	R	14	R	R	R	R	13	R	R	R	13	19	470
465	6	25	7	15	R	R	R	R	R	4	R	R	R	R	R	34	465
460	5	22	10	6	R	R		9	17	14	10	R	16	R	R	R	460
455	7	13	7	6	R	11	9	13	6	6	4	7	15	R	16	R	455
450	10	5	7	5	8	8	7	7	6	9	7	R	R	R	8	7	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

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

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 1 Foot Grid
Average Soil Activity
Soil Sample Aliquot: 7' – 8'

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97P2AVG-7	0

...\UPOND2\AVERAGES\97P2U7-8

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565									R	R	R	R		R			565
560		R		24				5		11	R	9		10	R	R	560
555															R	R	555
550		R		R	R			18		21		15				5	550
545			R														545
540		R		R				21		12	R	17				5	540
535	R										R	R					535
530	R	8		R			R	R		14		15		7		5	530
525	R	R	R	R	R												525
520	R	R	R	R	R	11		9		27		11		8		6	520
515	R	R	R	R	R	R		R									515
510	R	R	R	R	R	11	R	9		17		11		17		8	510
505	R	R	R	R	R	R											505
500	R	R	R	R	R			11		18		12		9	44	3	500
495		R	R	R				R		R							495
490	R		R		R	15		20	R	20		12		9		9	490
485	R			R	R	R		R	R	R							485
480					R	25		10	R	17		6		16		8	480
475				R	R					R		R		R	R		475
470			R		R		R	R	R	R		R	R	R			470
465					R	R	R	R	R		R	R	R	R	R		465
460					R	R						R		R	R	R	460
455					R									R		R	455
450												R	R	R			450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

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

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 1 Foot Grid
Average Soil Activity
Soil Sample Aliquot: 8' – 9'

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97P2AVG-8	0

...\UPOND2\AVERAGES\97P2U8-9

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	565
560	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	560
555	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	555
550	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	550
545	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	545
540	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	540
535	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	535
530	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	530
525	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	525
520	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	520
515	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	515
510	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	510
505	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	505
500	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	500
495	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	495
490	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	490
485	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	485
480	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	480
475	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	475
470	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	470
465	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	465
460	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	460
455	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	455
450	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

LEGEND

6 — URANIUM 1 – 94 pCi/g U

120 — URANIUM 95 – 219 pCi/g U

245 — URANIUM > 219 pCi/g U

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 – SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 3 Foot Grid
Average Soil Activity
0 to 3' Soil Depth

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97AVP2-0	0

...\UPOND2\MTR_AVGS\97P2MTR1

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	8.3	12.6	10.0	13.6	7.6	7.0	14.3	7.3	17.3	36.0	36.3	11.3	13.3	7.3	25.3	6.0	565
560	7.3	10.0	19.6	10.6	6.0	5.0	6.0	9.3	7.3	7.6	12.6	12.0	16.6	7.3	16.0	6.0	560
555	4.6	19.6	11.0	17.6	7.0	5.3	5.3	7.0	7.0	5.4	12.0	56.6	11.6	8.6	5.6	8.3	555
550	15.7	15.9	26.8	11.7	6.6	5.3	5.6	11.0	6.3	6.4	15.4	11.7	11.0	14.2	12.7	4.6	550
545	9.1	13.2	21.3	32.0	5.3	6.3	6.3	5.0	9.3	8.5	23.9	16.6	16.8	6.6	7.7	6.0	545
540	7.5	25.0	26.9	22.2	18.0	7.3	9.0	5.0	6.6	6.3	6.0	11.6	9.0	20.9	55.6	4.3	540
535	6.0	18.3	26.3	26.6	24.6	16.3	5.6	6.3	14.6	7.3	5.0	8.3	13.5	20.2	61.1	11.0	535
530	5.0	31.0	68.3	23.1	21.6	9.6	25.0	12.2	14.4	13.6	7.6	6.0	7.6	7.4	20.7	8.6	530
525	5.0	36.3	11.3	13.3	20.0	5.6	10.3	10.4	18.7	20.3	26.3	25.3	10.5	9.5	11.4	43.6	525
520	6.0	14.0	29.6	32.0	17.6	13.6	11.3	6.1	12.5	43.5	9.0	10.6	37.8	36.1	51.9	9.1	520
515	5.5	28.0	10.6	14.6	47.3	24.3	32.0	24.6	29.6	20.6	29.3	22.4	33.1	18.4	31.2	9.8	515
510	6.0	28.0	23.0	13.6	33.3	12.6	32.0	7.3	10.6	6.3	33.8	9.6	29.6	32.4	17.8	7.5	510
505	6.0	23.6	10.0	20.6	44.6	28.0	14.0	25.3	5.3	24.3	5.7	12.9	10.7	16.3	20.8	9.6	505
500	6.0	15.0	45.0	27.8	33.5	32.1	27.8	12.3	38.3	19.3	37.6	26.0	28.3	10.9	35.1	7.0	500
495	5.3	18.6	19.6	16.8	34.0	30.2	41.3	24.7	35.6	54.3	16.8	22.0	37.5	23.6	17.0	15.0	495
490	6.3	9.3	8.0	21.4	45.2	22.8	33.9	30.3	6.3	28.6	19.8	23.9	25.6	26.7	34.0	6.0	490
485	5.3	13.3	21.3	54.3	8.3	9.0	12.0	21.0	15.3	36.0	20.8	52.4	19.8	13.9	22.6	43.0	485
480	6.3	18.3	12.3	6.0	19.6	5.0	10.0	5.3	17.6	6.0	15.5	12.6	12.6	5.3	15.6	4.3	480
475	5.3	30.3	46.0	12.3	12.6	17.3	14.3	13.0	9.0	8.6	14.0	8.6	49.0	12.0	19.0	33.0	475
470	5.0	8.3	14.6	18.0	11.6	18.6	8.6	9.6	25.6	23.6	15.3	12.0	26.3	12.0	14.6	36.0	470
465	5.0	30.6	11.0	18.0	14.0	9.3	14.3	20.3	25.6	17.0	10.6	18.6	11.6	17.0	12.3	22.6	465
460	6.0	14.3	18.3	16.3	7.0	6.3	7.3	4.6	6.0	6.6	10.0	17.6	6.3	14.0	11.3	13.6	460
455	6.3	10.6	10.0	7.3	8.0	6.0	5.6	5.3	6.0	7.0	5.3	6.0	7.3	9.6	16.3	7.0	455
450	6.0	7.0	7.0	6.0	7.0	6.0	7.0	6.3	9.0	8.0	6.6	7.6	8.5	8.3	6.0	5.3	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

LEGEND

6 — URANIUM 1 - 94 pCi/g U

120 — URANIUM 95 - 219 pCi/g U

245 — URANIUM > 219 pCi/g U

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 - SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 3 Foot Grid
Average Soil Activity
3' to 6' Soil Depth

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97AVP2-1	0

...\UPOND2\MTR_AVGS\97P2MTR2

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	7.5	9.0	19.5	20.5	39.5	21.5	17.5	31.0	26.0	0	42.0	47.0	21.5	111.0	15.0	11.0	565
560	6.5	11.0	10.0	21.0	22.0	18.0	18.0	9.7	66.5	9.3	20.0	7.7	37.5	15.3	107.0	4.0	560
555	7.5	11.0	53.5	12.0	59.0	13.0	49.0	40.0	33.5	72.8	21.9	19.5	11.0	17.5	28.0	0	555
550	6.0	16.3	14.8	13.6	0	18.3	19.0	29.0	23.5	49.9	19.7	24.1	25.2	21.8	25.6	8.0	550
545	8.2	35.1	46.9	17.7	13.0	18.5	21.0	14.0	31.5	23.4	18.4	22.6	43.7	29.6	53.2	10.0	545
540	6.3	12.5	17.6	25.0	9.5	9.3	29.0	24.7	27.0	22.0	40.0	40.3	90.6	24.7	62.1	6.0	540
535	0	5.4	9.0	14.5	9.5	41.0	26.5	18.5	15.5	26.0	0	72.0	94.0	83.7	61.7	31.5	535
530	0	8.7	22.7	21.5	13.5	11.0	36.0	49.4	72.5	28.5	15.0	23.0	59.5	16.9	31.4	7.0	530
525	0	27.0	11.0	16.0	10.0	10.0	5.0	31.5	33.6	28.5	18.0	26.6	23.7	16.6	65.1	29.8	525
520	0	12.0	0	14.0	20.0	12.0	18.0	19.7	25.1	46.0	20.5	18.5	26.0	22.0	21.0	14.2	520
515	0	18.0	7.0	16.0	0	9.0	25.0	9.0	21.5	35.0	33.5	18.7	16.8	23.9	17.2	13.0	515
510	0	27.0	9.0	8.5	29.0	13.0	0	12.3	13.0	51.0	18.9	16.8	38.4	26.4	22.0	11.7	510
505	0	17.0	7.0	16.0	0	32.0	9.0	15.5	77.5	25.0	18.3	27.8	39.7	16.4	17.0	17.8	505
500	0	15.0	24.0	17.0	0	19.5	24.0	14.1	46.0	27.3	20.1	21.8	30.0	18.4	29.2	5.0	500
495	4.0	0	16.0	15.9	14.2	45.9	38.9	34.0	35.0	31.0	10.3	34.5	58.8	20.3	7.0	8.0	495
490	0	8.0	6.0	15.7	34.3	15.7	41.8	28.5	80.0	32.7	20.0	28.0	34.4	15.0	11.5	9.3	490
485	0	8.5	10.0	16.0	16.0	0	0	23.0	10.0	15.0	13.6	21.9	23.3	9.2	10.0	25.5	485
480	7.0	15.3	5.5	19.3	10.0	23.0	6.0	8.7	12.0	17.3	8.4	11.0	39.7	16.3	8.0	11.7	480
475	6.0	17.5	13.5	20.0	14.0	14.0	17.0	13.5	11.0	11.0	12.5	14.0	14.0	10.0	19.0	15.0	475
470	5.0	18.0	23.0	12.5	13.0	13.0	0	11.0	13.0	8.0	12.5	13.0	21.0	9.0	11.0	18.0	470
465	7.5	57.0	8.5	15.5	8.0	7.0	0	24.0	9.0	5.0	10.0	14.0	4.5	24.0	12.0	33.5	465
460	5.0	50.5	8.0	7.5	10.0	0	18.0	14.5	22.0	17.5	7.5	9.0	38.5	18.0	19.0	7.0	460
455	5.5	15.0	6.5	8.0	6.0	8.5	10.0	19.0	9.0	10.0	8.0	9.5	12.0	7.0	17.0	8.0	455
450	7.0	6.5	6.5	7.0	7.5	7.0	5.5	6.5	6.5	10.5	7.0	8.0	0	10.0	7.0	6.0	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

LEGEND

- 6 — URANIUM 1 – 94 pCi/g U
- 120 — URANIUM 95 – 219 pCi/g U
- 245 — URANIUM > 219 pCi/g U

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 – SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 3 Foot Grid
Average Soil Activity
6' to 9' Soil Depth

DRWN. BY	DATE	SCALE:
JE	1/13/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97AVP2-2	0

...\UPOND2\MTR_AVGS\97P2MTR3

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	7.7	9.8	8.5	10.3	7.3	7.0	10.7	7.2	12.2	21.5	21.7	9.2	10.2	7.2	16.2	6.5	565
560	7.2	8.5	13.3	8.8	6.5	6.0	6.5	8.2	7.2	7.3	9.8	9.5	11.8	7.2	11.5	6.5	560
555	5.8	13.3	9.0	12.3	7.0	6.2	6.2	7.0	7.0	6.2	9.5	31.8	9.3	7.8	6.3	7.7	555
550	11.4	11.5	16.9	9.4	6.8	6.2	6.3	9.0	6.7	6.7	11.2	9.4	9.0	10.6	9.9	5.8	550
545	8.0	10.1	14.1	19.5	6.2	6.7	6.7	6.0	8.2	7.8	15.4	11.8	11.9	6.8	7.4	6.5	545
540	7.2	16.0	16.9	14.6	12.5	7.2	8.0	6.0	6.8	6.7	6.5	9.3	8.0	13.9	31.3	5.7	540
535	6.5	12.7	16.7	16.8	15.8	11.7	6.3	6.7	10.8	7.2	6.0	7.7	10.2	13.6	34.1	9.0	535
530	6.0	19.0	37.7	15.1	14.3	8.3	16.0	9.6	10.7	10.3	7.3	6.5	7.3	7.2	13.8	7.8	530
525	6.0	21.7	9.2	10.2	13.5	6.3	8.7	8.7	12.9	13.6	16.7	16.2	8.7	8.3	9.2	25.3	525
520	6.5	10.5	18.3	19.5	12.3	10.3	9.2	6.5	9.8	25.3	8.0	8.8	22.4	21.6	29.5	8.0	520
515	6.2	17.5	8.8	10.8	27.2	15.7	19.5	15.8	18.3	13.8	18.2	14.7	20.1	12.7	19.1	8.4	515
510	6.5	17.5	15.0	10.3	20.2	9.8	19.5	7.2	8.8	6.7	20.4	8.3	18.3	19.7	12.4	7.3	510
505	6.5	15.3	8.5	13.8	25.8	17.5	10.5	16.2	6.2	15.7	6.4	10.0	8.9	11.7	13.9	8.3	505
500	6.5	11.0	26.0	17.4	20.3	19.6	17.4	9.7	22.7	13.2	22.3	16.5	17.7	9.0	21.1	7.0	500
495	6.2	12.8	13.3	11.9	20.5	18.6	24.2	15.9	21.3	30.7	11.9	14.5	22.3	15.3	12.0	11.0	495
490	6.7	8.2	7.5	14.2	26.1	14.9	20.5	18.6	6.7	17.8	13.4	15.5	16.3	16.9	20.5	6.5	490
485	6.2	10.2	14.2	30.7	7.7	8.0	9.5	14.0	11.2	21.5	13.9	29.7	13.4	10.5	14.8	25.0	485
480	6.7	12.7	9.7	6.5	13.3	6.0	8.5	6.2	12.3	6.5	11.3	9.8	9.8	6.2	11.3	5.7	480
475	6.2	18.7	26.5	9.7	9.8	12.2	10.7	10.0	8.0	7.8	10.5	7.8	28.0	9.5	13.0	20.0	475
470	6.0	7.7	10.8	12.5	9.3	12.8	7.8	8.3	16.3	15.3	11.2	9.5	16.7	9.5	10.8	21.5	470
465	6.0	18.8	9.0	12.5	10.5	8.2	10.7	13.7	16.3	12.0	8.8	12.8	9.3	12.0	9.7	14.8	465
460	6.5	10.7	12.7	11.7	7.0	6.7	7.2	5.8	6.5	6.8	8.5	12.3	6.7	10.5	9.2	10.3	460
455	6.7	8.8	8.5	7.2	7.5	6.5	6.3	6.2	6.5	7.0	6.2	6.5	7.2	8.3	11.7	7.0	455
450	6.5	7.0	7.0	6.5	7.0	6.5	7.0	6.7	8.0	7.5	6.8	7.3	7.7	7.7	6.5	6.2	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

LEGEND

6 × URANIUM 1 - 69 pCi/g U

120 ⊗ URANIUM > 69 pCi/g U

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 - SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 6 Foot Grid
Average Soil Activity
0 to 6' Soil Depth

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97AVP2-3	0

...\UPOND2\MTR_AVGS\97P2MTR0-2

	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	
565	7.6	9.5	12.2	13.7	18.0	11.8	12.9	15.1	16.8	21.5	28.4	21.8	13.9	41.8	15.8	8.0	565
560	6.9	9.3	12.2	12.9	11.7	10.0	10.3	8.7	26.9	8.0	13.2	8.9	20.4	9.9	43.3	5.7	560
555	6.4	12.5	23.8	12.2	24.3	8.4	20.4	18.0	15.8	28.4	13.6	27.7	9.9	11.0	13.5	7.7	555
550	9.6	13.1	16.2	10.8	6.8	10.2	10.5	15.7	12.3	21.1	14.0	14.3	14.4	14.3	15.1	6.5	550
545	8.1	18.4	25.1	18.9	8.4	10.6	11.4	8.7	15.9	13.0	16.4	15.4	22.5	14.4	22.6	7.7	545
540	6.9	14.8	17.1	18.0	11.5	7.8	15.0	12.2	13.5	11.8	17.7	19.7	35.5	17.5	41.6	5.8	540
535	6.5	10.2	14.1	16.0	13.7	21.4	13.0	10.6	12.4	13.4	6.0	29.1	38.1	37.0	43.3	24.7	535
530	6.0	15.6	32.7	17.2	14.0	9.2	22.7	22.9	31.3	16.4	9.9	12.0	24.7	10.4	19.7	7.5	530
525	6.0	23.4	9.8	12.1	12.3	7.5	7.4	16.3	19.8	18.6	17.1	19.6	13.7	11.0	27.8	26.8	525
520	6.5	11.0	18.3	17.7	14.9	10.9	12.1	10.9	14.9	32.2	12.2	12.0	23.6	21.7	26.6	10.1	520
515	6.2	17.7	8.2	12.5	27.2	13.4	21.3	13.5	19.4	20.9	23.3	16.0	19.0	16.4	18.5	9.9	515
510	6.5	20.7	13.0	9.7	23.1	10.9	19.5	8.9	10.2	21.4	19.9	11.2	25.0	21.9	15.6	8.7	510
505	6.5	15.9	8.0	14.5	25.8	22.3	10.0	15.9	29.9	18.8	10.3	15.9	19.1	13.2	14.9	11.4	505
500	6.5	12.3	25.3	17.3	20.3	19.5	19.6	11.1	30.4	17.9	21.6	18.2	21.8	12.1	23.8	6.3	500
495	5.4	12.8	14.2	13.2	18.4	27.7	29.1	21.9	25.9	30.8	11.4	21.2	34.4	17.0	10.3	10.0	495
490	6.7	8.1	7.0	14.7	28.8	15.2	27.6	21.9	31.1	22.8	15.6	19.6	22.3	16.2	17.5	7.4	490
485	6.2	9.6	12.8	25.8	10.4	8.0	9.5	17.0	10.8	19.3	13.8	27.1	16.7	10.0	13.2	25.2	485
480	6.8	13.5	8.3	10.8	12.2	11.7	7.7	7.0	12.2	10.1	10.3	10.2	19.8	9.5	10.2	7.7	480
475	6.1	18.3	22.2	13.1	11.2	12.8	12.8	11.2	9.0	8.9	11.2	9.9	23.3	9.7	15.0	18.3	475
470	5.7	11.1	14.9	12.5	10.5	12.9	7.8	9.2	15.2	12.9	11.6	10.7	18.1	9.3	10.9	20.3	470
465	6.5	31.5	8.8	13.5	9.7	7.8	10.7	17.1	13.9	9.7	9.2	13.2	7.7	16.0	10.4	21.0	465
460	6.0	23.9	11.1	10.3	8.0	6.7	10.8	8.7	11.7	10.4	8.2	11.2	17.3	13.0	12.4	9.2	460
455	6.3	10.9	7.8	7.4	7.0	7.2	7.5	10.4	7.3	8.0	6.8	7.5	8.8	7.9	13.4	7.3	455
450	6.7	6.8	6.8	6.7	7.2	6.7	6.5	6.6	7.5	8.5	6.9	7.5	7.7	8.4	6.7	6.1	450
	515	520	525	530	535	540	545	550	555	560	565	570	575	580	585	590	

NORTH

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.

LEGEND

6 × URANIUM 1 - 69 pCi/g U

120 × URANIUM > 69 pCi/g U

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

CIMARRON CORPORATION

CIMARRON FACILITY
URANIUM WASTE POND #2 - SOIL SAMPLE RESULTS
5 Meter x 5 Meter x 9 Foot Grid
Average Soil Activity
0 to 9' Soil Depth

DRWN. BY	DATE	SCALE:
JE	1/10/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	97AVP2-4	0

...\UPOND2\MTR_AVGS\97P2MTR0-3

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	515 E - **450** N	7.0	6.0	7.0	6.5	6.7
2	515 E - **455** N	7.0	6.3	5.5	6.7	6.3
3	515 E - **460** N	7.0	6.0	5.0	6.5	6.0
4	515 E - **465** N	7.0	5.0	7.5	6.0	6.5
5	515 E - **470** N	7.0	5.0	5.0	6.0	5.7
6	515 E - **475** N	7.0	5.3	6.0	6.2	6.1
7	515 E - **480** N	7.0	6.3	7.0	6.7	6.8
8	515 E - **485** N	7.0	5.3	0.0	6.2	6.2
9	515 E - **490** N	7.0	6.3	0.0	6.7	6.7
10	515 E - **495** N	7.0	5.3	4.0	6.2	5.4
11	515 E - **500** N	7.0	6.0	0.0	6.5	6.5
12	515 E - **505** N	7.0	6.0	0.0	6.5	6.5
13	515 E - **510** N	7.0	6.0	0.0	6.5	6.5
14	515 E - **515** N	7.0	5.5	0.0	6.2	6.2
15	515 E - **520** N	7.0	6.0	0.0	6.5	6.5
16	515 E - **525** N	7.0	5.0	0.0	6.0	6.0
17	515 E - **530** N	7.0	5.0	0.0	6.0	6.0
18	515 E - **535** N	7.0	6.0	0.0	6.5	6.5
19	515 E - **540** N	7.0	7.5	6.3	7.2	6.9
20	515 E - **545** N	7.0	9.1	8.2	8.0	8.1
21	515 E - **550** N	7.0	15.7	6.0	11.4	9.6
22	515 E - **555** N	7.0	4.6	7.5	5.8	6.4
23	515 E - **560** N	7.0	7.3	6.5	7.2	6.9
24	515 E - **565** N	7.0	8.3	7.5	7.7	7.6
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**154.3**	**89.0**	**161.2**	**158.2**
AVERAGE		**7.0**	**6.4**	**6.4**	**6.7**	**6.6**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. A. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	520 E - 450 N	7.0	7.0	6.5	7.0	6.8
2	520 E - 455 N	7.0	10.6	15.0	8.8	10.9
3	520 E - 460 N	7.0	14.3	50.5	10.7	23.9
4	520 E - 465 N	7.0	30.6	57.0	18.8	31.5
5	520 E - 470 N	7.0	8.3	18.0	7.7	11.1
6	520 E - 475 N	7.0	30.3	17.5	18.7	18.3
7	520 E - 480 N	7.0	18.3	15.3	12.7	13.5
8	520 E - 485 N	7.0	13.3	8.5	10.2	9.6
9	520 E - 490 N	7.0	9.3	8.0	8.2	8.1
10	520 E - 495 N	7.0	18.6	0.0	12.8	12.8
11	520 E - 500 N	7.0	15.0	15.0	11.0	12.3
12	520 E - 505 N	7.0	23.6	17.0	15.3	15.9
13	520 E - 510 N	7.0	28.0	27.0	17.5	20.7
14	520 E - 515 N	7.0	28.0	18.0	17.5	17.7
15	520 E - 520 N	7.0	14.0	12.0	10.5	11.0
16	520 E - 525 N	7.0	36.3	27.0	21.7	23.4
17	520 E - 530 N	7.0	31.0	8.7	19.0	15.6
18	520 E - 535 N	7.0	18.3	5.4	12.7	10.2
19	520 E - 540 N	7.0	25.0	12.5	16.0	14.8
20	520 E - 545 N	7.0	13.2	35.1	10.1	18.4
21	520 E - 550 N	7.0	15.9	16.3	11.5	13.1
22	520 E - 555 N	7.0	19.6	11.0	13.3	12.5
23	520 E - 560 N	7.0	10.0	11.0	8.5	9.3
24	520 E - 565 N	7.0	12.6	9.0	9.8	9.5
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**451.2**	**421.2**	**309.6**	**351.1**
AVERAGE		**7.0**	**18.8**	**18.3**	**12.9**	**14.6**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File:PD2AVG

REVIEWED BY W.a. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	525 E - **450** N	7.0	7.0	6.5	7.0	6.8
2	525 E - **455** N	7.0	10.0	6.5	8.5	7.8
3	525 E - **460** N	7.0	18.3	8.0	12.7	11.1
4	525 E - **465** N	7.0	11.0	8.5	9.0	8.8
5	525 E - **470** N	7.0	14.6	23.0	10.8	14.9
6	525 E - **475** N	7.0	46.0	13.5	26.5	22.2
7	525 E - **480** N	7.0	12.3	5.5	9.7	8.3
8	525 E - **485** N	7.0	21.3	10.0	14.2	12.8
9	525 E - **490** N	7.0	8.0	6.0	7.5	7.0
10	525 E - **495** N	7.0	19.6	16.0	13.3	14.2
11	525 E - **500** N	7.0	45.0	24.0	26.0	25.1
12	525 E - **505** N	7.0	10.0	7.0	8.5	8.0
13	525 E - **510** N	7.0	23.0	9.0	15.0	13.0
14	525 E - **515** N	7.0	10.6	7.0	8.8	8.2
15	525 E - **520** N	7.0	29.6	0.0	18.3	18.3
16	525 E - **525** N	7.0	11.3	11.0	9.2	9.8
17	525 E - **530** N	7.0	68.3	22.7	37.7	32.
18	525 E - **535** N	7.0	26.3	9.0	16.7	14.
19	525 E - **540** N	7.0	26.9	17.6	16.9	17.
20	525 E - **545** N	7.0	21.3	46.9	14.1	25.
21	525 E - **550** N	7.0	26.8	14.8	16.9	16.
22	525 E - **555** N	7.0	11.0	53.5	9.0	23.
23	525 E - **560** N	7.0	19.6	10.0	13.3	12.
24	525 E - **565** N	7.0	10.0	19.5	8.5	12.
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**507.6**	**355.4**	**337.8**	**349.8**
AVERAGE		**7.0**	**21.2**	**15.5**	**14.1**	**14.6**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. a. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	530 E - **450** N	7.0	6.0	7.0	6.5	6.7
2	530 E - **455** N	7.0	7.3	8.0	7.2	7.4
3	530 E - **460** N	7.0	16.3	7.5	11.7	10.3
4	530 E - **465** N	7.0	18.0	15.5	12.5	13.5
5	530 E - **470** N	7.0	18.0	12.5	12.5	12.5
6	530 E - **475** N	7.0	12.3	20.0	9.7	13.1
7	530 E - **480** N	7.0	6.0	19.3	6.5	10.8
8	530 E - **485** N	7.0	54.3	16.0	30.7	25.8
9	530 E - **490** N	7.0	21.4	15.7	14.2	14.7
10	530 E - **495** N	7.0	16.8	15.9	11.9	13.2
11	530 E - **500** N	7.0	27.8	17.0	17.4	17.3
12	530 E - **505** N	7.0	20.6	16.0	13.8	14.5
13	530 E - **510** N	7.0	13.6	8.5	10.3	9.7
14	530 E - **515** N	7.0	14.6	16.0	10.8	12.5
15	530 E - **520** N	7.0	32.0	14.0	19.5	17.7
16	530 E - **525** N	7.0	13.3	16.0	10.2	12.1
17	530 E - **530** N	7.0	23.1	21.5	15.1	17.2
18	530 E - **535** N	7.0	26.6	14.5	16.8	16.0
19	530 E - **540** N	7.0	22.2	25.0	14.6	18.0
20	530 E - **545** N	7.0	32.0	17.7	19.5	18.9
21	530 E - **550** N	7.0	11.7	13.6	9.4	10.8
22	530 E - **555** N	7.0	17.6	12.0	12.3	12.2
23	530 E - **560** N	7.0	10.6	21.0	8.8	12.9
24	530 E - **565** N	7.0	13.6	20.5	10.3	13.7
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**455.8**	**370.6**	**311.9**	**331.5**
AVERAGE		**7.0**	**19.0**	**15.4**	**13.0**	**13.8**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. a. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet	3-6 Feet	6-9 Feet	0-6 Feet Avg.	0-9 Feet Avg.
		U	U	U	U	U
#		U	U	U	U	U
1	535 E - **450** N	7.0	7.0	7.5	7.0	7.2
2	535 E - **455** N	7.0	8.0	6.0	7.5	7.0
3	535 E - **460** N	7.0	7.0	10.0	7.0	8.0
4	535 E - **465** N	7.0	14.0	8.0	10.5	9.7
5	535 E - **470** N	7.0	11.6	13.0	9.3	10.5
6	535 E - **475** N	7.0	12.6	14.0	9.8	11.2
7	535 E - **480** N	7.0	19.6	10.0	13.3	12.2
8	535 E - **485** N	7.0	8.3	16.0	7.7	10.4
9	535 E - **490** N	7.0	45.2	34.3	26.1	28.8
10	535 E - **495** N	7.0	34.0	14.2	20.5	18.4
11	535 E - **500** N	7.0	33.5	0.0	20.3	20.3
12	535 E - **505** N	7.0	44.6	0.0	25.8	25.8
13	535 E - **510** N	7.0	33.3	29.0	20.2	23.1
14	535 E - **515** N	7.0	47.3	0.0	27.2	27.2
15	535 E - **520** N	7.0	17.6	20.0	12.3	14.9
16	535 E - **525** N	7.0	20.0	10.0	13.5	12.3
17	535 E - **530** N	7.0	21.6	13.5	14.3	14.0
18	535 E - **535** N	7.0	24.6	9.5	15.8	13.7
19	535 E - **540** N	7.0	18.0	9.5	12.5	11.5
20	535 E - **545** N	7.0	5.3	13.0	6.2	8.4
21	535 E - **550** N	7.0	6.6	0.0	6.8	6.8
22	535 E - **555** N	7.0	7.0	59.0	7.0	24.3
23	535 E - **560** N	7.0	6.0	22.0	6.5	11.7
24	535 E - **565** N	7.0	7.6	39.5	7.3	18.0
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**460.4**	**358.0**	**314.2**	**355.5**
AVERAGE		**7.0**	**19.2**	**17.9**	**13.1**	**14.8**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. a. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	540 E - **450** N	7.0	6.0	7.0	6.5	6.7
2	540 E - **455** N	7.0	6.0	8.5	6.5	7.2
3	540 E - **460** N	7.0	6.3	0.0	6.7	6.7
4	540 E - **465** N	7.0	9.3	7.0	8.2	7.8
5	540 E - **470** N	7.0	18.6	13.0	12.8	12.9
6	540 E - **475** N	7.0	17.3	14.0	12.2	12.8
7	540 E - **480** N	7.0	5.0	23.0	6.0	11.7
8	540 E - **485** N	7.0	9.0	0.0	8.0	8.0
9	540 E - **490** N	7.0	22.8	15.7	14.9	15.2
10	540 E - **495** N	7.0	30.2	45.9	18.6	27.7
11	540 E - **500** N	7.0	32.1	19.5	19.6	19.5
12	540 E - **505** N	7.0	28.0	32.0	17.5	22.3
13	540 E - **510** N	7.0	12.6	13.0	9.8	10.9
14	540 E - **515** N	7.0	24.3	9.0	15.7	13.4
15	540 E - **520** N	7.0	13.6	12.0	10.3	10.9
16	540 E - **525** N	7.0	5.6	10.0	6.3	7.5
17	540 E - **530** N	7.0	9.6	11.0	8.3	9.2
18	540 E - **535** N	7.0	16.3	41.0	11.7	21.4
19	540 E - **540** N	7.0	7.3	9.3	7.2	7.8
20	540 E - **545** N	7.0	6.3	18.5	6.7	10.6
21	540 E - **550** N	7.0	5.3	18.3	6.2	10.2
22	540 E - **555** N	7.0	5.3	13.0	6.2	8.4
23	540 E - **560** N	7.0	5.0	18.0	6.0	10.0
24	540 E - **565** N	7.0	7.0	21.5	7.0	11.8
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**308.8**	**380.1**	**238.4**	**290.5**
AVERAG		**7.0**	**12.9**	**17.3**	**9.9**	**12.1**

		Background	**MDA**
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W.G. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	545 E - **450** N	7.0	7.0	5.5	7.0	6.5
2	545 E - **455** N	7.0	5.6	10.0	6.3	7.5
3	545 E - **460** N	7.0	7.3	18.0	7.2	10.8
4	545 E - **465** N	7.0	14.3	0.0	10.7	10.7
5	545 E - **470** N	7.0	8.6	0.0	7.8	7.8
6	545 E - **475** N	7.0	14.3	17.0	10.7	12.8
7	545 E - **480** N	7.0	10.0	6.0	8.5	7.7
8	545 E - **485** N	7.0	12.0	0.0	9.5	9.5
9	545 E - **490** N	7.0	33.9	41.8	20.5	27.6
10	545 E - **495** N	7.0	41.3	38.9	24.2	29.1
11	545 E - **500** N	7.0	27.8	24.0	17.4	19.6
12	545 E - **505** N	7.0	14.0	9.0	10.5	10.0
13	545 E - **510** N	7.0	32.0	0.0	19.5	19.5
14	545 E - **515** N	7.0	32.0	25.0	19.5	21.3
15	545 E - **520** N	7.0	11.3	18.0	9.2	12.1
16	545 E - **525** N	7.0	10.3	5.0	8.7	7.4
17	545 E - **530** N	7.0	25.0	36.0	16.0	22.7
18	545 E - **535** N	7.0	5.6	26.5	6.3	13.0
19	545 E - **540** N	7.0	9.0	29.0	8.0	15.0
20	545 E - **545** N	7.0	6.3	21.0	6.7	11.4
21	545 E - **550** N	7.0	5.6	19.0	6.3	10.5
22	545 E - **555** N	7.0	5.3	49.0	6.2	20.4
23	545 E - **560** N	7.0	6.0	18.0	6.5	10.3
24	545 E - **565** N	7.0	14.3	17.5	10.7	12.9
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**358.6**	**434.2**	**263.3**	**336.1**
AVERAGE		**7.0**	**14.9**	**21.7**	**11.0**	**14.0**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: BKSSFORM

REVIEWED BY W. A. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	550 E - **450** N	7.0	6.3	6.5	6.7	6.6
2	550 E - **455** N	7.0	5.3	19.0	6.2	10.4
3	550 E - **460** N	7.0	4.6	14.5	5.8	8.7
4	550 E - **465** N	7.0	20.3	24.0	13.7	17.1
5	550 E - **470** N	7.0	9.6	11.0	8.3	9.2
6	550 E - **475** N	7.0	13.0	13.5	10.0	11.2
7	550 E - **480** N	7.0	5.3	8.7	6.2	7.0
8	550 E - **485** N	7.0	21.0	23.0	14.0	17.0
9	550 E - **490** N	7.0	30.3	28.5	18.6	21.9
10	550 E - **495** N	7.0	24.7	34.0	15.9	21.9
11	550 E - **500** N	7.0	12.3	14.1	9.7	11.1
12	550 E - **505** N	7.0	25.3	15.5	16.2	15.9
13	550 E - **510** N	7.0	7.3	12.3	7.2	8.9
14	550 E - **515** N	7.0	24.6	9.0	15.8	13.5
15	550 E - **520** N	7.0	6.1	19.7	6.5	10.9
16	550 E - **525** N	7.0	10.4	31.5	8.7	16.3
17	550 E - **530** N	7.0	12.2	49.4	9.6	22.9
18	550 E - **535** N	7.0	6.3	18.5	6.7	10.6
19	550 E - **540** N	7.0	5.0	24.7	6.0	12.2
20	550 E - **545** N	7.0	5.0	14.0	6.0	8.7
21	550 E - **550** N	7.0	11.0	29.0	9.0	15.7
22	550 E - **555** N	7.0	7.0	40.0	7.0	18.0
23	550 E - **560** N	7.0	9.3	9.7	8.2	8.7
24	550 E - **565** N	7.0	7.3	31.0	7.2	15.1
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**289.3**	**501.0**	**228.7**	**319.4**
AVERAGE		**7.0**	**12.1**	**20.9**	**9.5**	**13.3**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File:PD2AVG

REVIEWED BY W. A. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	555 E - **450** N	7.0	9.0	6.5	8.0	7.5
2	555 E - **455** N	7.0	6.0	9.0	6.5	7.3
3	555 E - **460** N	7.0	6.0	22.0	6.5	11.7
4	555 E - **465** N	7.0	25.6	9.0	16.3	13.9
5	555 E - **470** N	7.0	25.6	13.0	16.3	15.2
6	555 E - **475** N	7.0	9.0	11.0	8.0	9.0
7	555 E - **480** N	7.0	17.6	12.0	12.3	12.2
8	555 E - **485** N	7.0	15.3	10.0	11.2	10.8
9	555 E - **490** N	7.0	6.3	80.0	6.7	31.1
10	555 E - **495** N	7.0	35.6	35.0	21.3	25.9
11	555 E - **500** N	7.0	38.3	46.0	22.7	30.4
12	555 E - **505** N	7.0	5.3	77.5	6.2	29.9
13	555 E - **510** N	7.0	10.6	13.0	8.8	10.2
14	555 E - **515** N	7.0	29.6	21.5	18.3	19.4
15	555 E - **520** N	7.0	12.5	25.1	9.8	14.9
16	555 E - **525** N	7.0	18.7	33.6	12.9	19.8
17	555 E - **530** N	7.0	14.4	72.5	10.7	31.3
18	555 E - **535** N	7.0	14.6	15.5	10.8	12.4
19	555 E - **540** N	7.0	6.6	27.0	6.8	13.5
20	555 E - **545** N	7.0	9.3	31.5	8.2	15.9
21	555 E - **550** N	7.0	6.3	23.5	6.7	12.3
22	555 E - **555** N	7.0	7.0	33.5	7.0	15.8
23	555 E - **560** N	7.0	7.3	66.5	7.2	26.9
24	555 E - **565** N	7.0	17.3	26.0	12.2	16.8
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**353.9**	**720.2**	**261.0**	**414.0**
AVERAGE		**7.0**	**14.7**	**30.0**	**10.9**	**17.3**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W.C. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	560 E - **450** N	7.0	8.0	10.5	7.5	8.5
2	560 E - **455** N	7.0	7.0	10.0	7.0	8.0
3	560 E - **460** N	7.0	6.6	17.5	6.8	10.4
4	560 E - **465** N	7.0	17.0	5.0	12.0	9.7
5	560 E - **470** N	7.0	23.6	8.0	15.3	12.9
6	560 E - **475** N	7.0	8.6	11.0	7.8	8.9
7	560 E - **480** N	7.0	6.0	17.3	6.5	10.1
8	560 E - **485** N	7.0	36.0	15.0	21.5	19.3
9	560 E - **490** N	7.0	28.6	32.7	17.8	22.8
10	560 E - **495** N	7.0	54.3	31.0	30.7	30.8
11	560 E - **500** N	7.0	19.3	27.3	13.2	17.9
12	560 E - **505** N	7.0	24.3	25.0	15.7	18.8
13	560 E - **510** N	7.0	6.3	51.0	6.7	21.4
14	560 E - **515** N	7.0	20.6	35.0	13.8	20.9
15	560 E - **520** N	7.0	43.5	46.0	25.3	32.2
16	560 E - **525** N	7.0	20.3	28.5	13.6	18.6
17	560 E - **530** N	7.0	13.6	28.5	10.3	16.4
18	560 E - **535** N	7.0	7.3	26.0	7.2	13.4
19	560 E - **540** N	7.0	6.3	22.0	6.7	11.8
20	560 E - **545** N	7.0	8.5	23.4	7.8	13.0
21	560 E - **550** N	7.0	6.4	49.9	6.7	21.1
22	560 E - **555** N	7.0	5.4	72.8	6.2	28.4
23	560 E - **560** N	7.0	7.6	9.3	7.3	8.0
24	560 E - **565** N	7.0	36.0	0.0	21.5	21.5
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**421.1**	**602.8**	**294.6**	**404.5**
AVERAGE		**7.0**	**17.5**	**26.2**	**12.3**	**16.9**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. A. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	565 E - **450** N	7.0	6.6	7.0	6.8	6.9
2	565 E - **455** N	7.0	5.3	8.0	6.2	6.8
3	565 E - **460** N	7.0	10.0	7.5	8.5	8.2
4	565 E - **465** N	7.0	10.6	10.0	8.8	9.2
5	565 E - **470** N	7.0	15.3	12.5	11.2	11.6
6	565 E - **475** N	7.0	14.0	12.5	10.5	11.2
7	565 E - **480** N	7.0	15.5	8.4	11.3	10.3
8	565 E - **485** N	7.0	20.8	13.6	13.9	13.8
9	565 E - **490** N	7.0	19.8	20.0	13.4	15.6
10	565 E - **495** N	7.0	16.8	10.3	11.9	11.4
11	565 E - **500** N	7.0	37.6	20.1	22.3	21.6
12	565 E - **505** N	7.0	5.7	18.3	6.4	10.3
13	565 E - **510** N	7.0	33.8	18.9	20.4	19.9
14	565 E - **515** N	7.0	29.3	33.5	18.2	23.3
15	565 E - **520** N	7.0	9.0	20.5	8.0	12.2
16	565 E - **525** N	7.0	26.3	18.0	16.7	17.1
17	565 E - **530** N	7.0	7.6	15.0	7.3	9.9
18	565 E - **535** N	7.0	5.0	0.0	6.0	6.0
19	565 E - **540** N	7.0	6.0	40.0	6.5	17.7
20	565 E - **545** N	7.0	23.9	18.4	15.4	16.4
21	565 E - **550** N	7.0	15.4	19.7	11.2	14.0
22	565 E - **555** N	7.0	12.0	21.9	9.5	13.6
23	565 E - **560** N	7.0	12.6	20.0	9.8	13.2
24	565 E - **565** N	7.0	36.3	42.0	21.7	28.4
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**395.2**	**415.7**	**281.6**	**328.3**
AVERAGE		**7.0**	**17.2**	**18.1**	**11.7**	**13.7**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W.a. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	570 E - **450** N	7.0	7.6	8.0	7.3	7.5
2	570 E - **455** N	7.0	6.0	9.5	6.5	7.5
3	570 E - **460** N	7.0	17.6	9.0	12.3	11.2
4	570 E - **465** N	7.0	18.6	14.0	12.8	13.2
5	570 E - **470** N	7.0	12.0	13.0	9.5	10.7
6	570 E - **475** N	7.0	8.6	14.0	7.8	9.9
7	570 E - **480** N	7.0	12.6	11.0	9.8	10.2
8	570 E - **485** N	7.0	52.4	21.9	29.7	27.1
9	570 E - **490** N	7.0	23.9	28.0	15.5	19.6
10	570 E - **495** N	7.0	22.0	34.5	14.5	21.2
11	570 E - **500** N	7.0	26.0	21.8	16.5	18.2
12	570 E - **505** N	7.0	12.9	27.8	10.0	15.9
13	570 E - **510** N	7.0	9.6	16.8	8.3	11.2
14	570 E - **515** N	7.0	22.4	18.7	14.7	16.0
15	570 E - **520** N	7.0	10.6	18.5	8.8	12.0
16	570 E - **525** N	7.0	25.3	26.6	16.2	19.6
17	570 E - **530** N	7.0	6.0	23.0	6.5	12.0
18	570 E - **535** N	7.0	8.3	72.0	7.7	29.1
19	570 E - **540** N	7.0	11.6	40.3	9.3	19.7
20	570 E - **545** N	7.0	16.6	22.6	11.8	15.4
21	570 E - **550** N	7.0	11.7	24.1	9.4	14.3
22	570 E - **555** N	7.0	56.6	19.5	31.8	27.7
23	570 E - **560** N	7.0	12.0	7.7	9.5	8.9
24	570 E - **565** N	7.0	11.3	47.0	9.2	21.8
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**422.4**	**549.2**	**295.2**	**379.9**
AVERAGE		**7.0**	**17.6**	**22.9**	**12.3**	**15.8**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. C. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	575 E - **450** N	7.0	8.5	0.0	7.7	7.7
2	575 E - **455** N	7.0	7.3	12.0	7.2	8.8
3	575 E - **460** N	7.0	6.3	38.5	6.7	17.3
4	575 E - **465** N	7.0	11.6	4.5	9.3	7.7
5	575 E - **470** N	7.0	26.3	21.0	16.7	18.1
6	575 E - **475** N	7.0	49.0	14.0	28.0	23.3
7	575 E - **480** N	7.0	12.6	39.7	9.8	19.8
8	575 E - **485** N	7.0	19.8	23.3	13.4	16.7
9	575 E - **490** N	7.0	25.6	34.4	16.3	22.3
10	575 E - **495** N	7.0	37.5	58.8	22.3	34.4
11	575 E - **500** N	7.0	28.3	30.0	17.7	21.8
12	575 E - **505** N	7.0	10.7	39.7	8.9	19.1
13	575 E - **510** N	7.0	29.6	38.4	18.3	25.0
14	575 E - **515** N	7.0	33.1	16.8	20.1	19.0
15	575 E - **520** N	7.0	37.8	26.0	22.4	23.6
16	575 E - **525** N	7.0	10.5	23.7	8.7	13.7
17	575 E - **530** N	7.0	7.6	59.5	7.3	24.7
18	575 E - **535** N	7.0	13.5	94.0	10.2	38.1
19	575 E - **540** N	7.0	9.0	90.6	8.0	35.5
20	575 E - **545** N	7.0	16.8	43.7	11.9	22.5
21	575 E - **550** N	7.0	11.0	25.2	9.0	14.4
22	575 E - **555** N	7.0	11.6	11.0	9.3	9.9
23	575 E - **560** N	7.0	16.6	37.5	11.8	20.4
24	575 E - **565** N	7.0	13.3	21.5	10.2	13.9
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**454.0**	**803.5**	**311.0**	**477.7**
AVERAGE		**7.0**	**18.9**	**34.9**	**13.0**	**19.9**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. a. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	580 E - **450** N	7.0	8.3	10.0	7.7	8.4
2	580 E - **455** N	7.0	9.6	7.0	8.3	7.9
3	580 E - **460** N	7.0	14.0	18.0	10.5	13.0
4	580 E - **465** N	7.0	17.0	24.0	12.0	16.0
5	580 E - **470** N	7.0	12.0	9.0	9.5	9.3
6	580 E - **475** N	7.0	12.0	10.0	9.5	9.7
7	580 E - **480** N	7.0	5.3	16.3	6.2	9.5
8	580 E - **485** N	7.0	13.9	9.2	10.5	10.0
9	580 E - **490** N	7.0	26.7	15.0	16.9	16.2
10	580 E - **495** N	7.0	23.6	20.3	15.3	17.0
11	580 E - **500** N	7.0	10.9	18.4	9.0	12.1
12	580 E - **505** N	7.0	16.3	16.4	11.7	13.2
13	580 E - **510** N	7.0	32.4	26.4	19.7	21.9
14	580 E - **515** N	7.0	18.4	23.9	12.7	16.4
15	580 E - **520** N	7.0	36.1	22.0	21.6	21.7
16	580 E - **525** N	7.0	9.5	16.6	8.3	11.0
17	580 E - **530** N	7.0	7.4	16.9	7.2	10.4
18	580 E - **535** N	7.0	20.2	83.7	13.6	37.0
19	580 E - **540** N	7.0	20.9	24.7	13.9	17.5
20	580 E - **545** N	7.0	6.6	29.6	6.8	14.4
21	580 E - **550** N	7.0	14.2	21.8	10.6	14.3
22	580 E - **555** N	7.0	8.6	17.5	7.8	11.0
23	580 E - **560** N	7.0	7.3	15.3	7.2	9.9
24	580 E - **565** N	7.0	7.3	111.0	7.2	41.8
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**358.6**	**582.8**	**263.3**	**369.8**
AVERAGE		**7.0**	**14.9**	**24.3**	**11.0**	**15.4**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. a. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	585 E - **450** N	7.0	6.0	7.0	6.5	6.7
2	585 E - **455** N	7.0	16.3	17.0	11.7	13.4
3	585 E - **460** N	7.0	11.3	19.0	9.2	12.4
4	585 E - **465** N	7.0	12.3	12.0	9.7	10.4
5	585 E - **470** N	7.0	14.6	11.0	10.8	10.9
6	585 E - **475** N	7.0	19.0	19.0	13.0	15.0
7	585 E - **480** N	7.0	15.6	8.0	11.3	10.2
8	585 E - **485** N	7.0	22.6	10.0	14.8	13.2
9	585 E - **490** N	7.0	34.0	11.5	20.5	17.5
10	585 E - **495** N	7.0	17.0	7.0	12.0	10.3
11	585 E - **500** N	7.0	35.1	29.2	21.1	23.8
12	585 E - **505** N	7.0	20.8	17.0	13.9	14.9
13	585 E - **510** N	7.0	17.8	22.0	12.4	15.6
14	585 E - **515** N	7.0	31.2	17.2	19.1	18.5
15	585 E - **520** N	7.0	51.9	21.0	29.5	26.6
16	585 E - **525** N	7.0	11.4	65.1	9.2	27.8
17	585 E - **530** N	7.0	20.7	31.4	13.8	19.7
18	585 E - **535** N	7.0	61.1	61.7	34.1	43.3
19	585 E - **540** N	7.0	55.6	62.1	31.3	41.6
20	585 E - **545** N	7.0	7.7	53.2	7.4	22.6
21	585 E - **550** N	7.0	12.7	25.6	9.9	15.1
22	585 E - **555** N	7.0	5.6	28.0	6.3	13.5
23	585 E - **560** N	7.0	16.0	107.0	11.5	43.3
24	585 E - **565** N	7.0	25.3	15.0	16.2	15.8
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**541.6**	**676.7**	**354.8**	**462.1**
AVERAGE		**7.0**	**22.6**	**28.2**	**14.8**	**19.3**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W. A. Rogers DATE: 12-9-97

CIMARRON FACILITY
PHASE III, SUB-AREA "O"
WASTE POND NO. 2
5 METER X 5 METER GRID SOIL SAMPLE AVERAGES

LN #		0-3 Feet U	3-6 Feet U	6-9 Feet U	0-6 Feet Avg. U	0-9 Feet Avg. U
1	590 E - **450** N	7.0	5.3	6.0	6.2	6.1
2	590 E - **455** N	7.0	7.0	8.0	7.0	7.3
3	590 E - **460** N	7.0	13.6	7.0	10.3	9.2
4	590 E - **465** N	7.0	22.6	33.5	14.8	21.0
5	590 E - **470** N	7.0	36.0	18.0	21.5	20.3
6	590 E - **475** N	7.0	33.0	15.0	20.0	18.3
7	590 E - **480** N	7.0	4.3	11.7	5.7	7.7
8	590 E - **485** N	7.0	43.0	25.5	25.0	25.2
9	590 E - **490** N	7.0	6.0	9.3	6.5	7.4
10	590 E - **495** N	7.0	15.0	8.0	11.0	10.0
11	590 E - **500** N	7.0	7.0	5.0	7.0	6.3
12	590 E - **505** N	7.0	9.6	17.8	8.3	11.4
13	590 E - **510** N	7.0	7.5	11.7	7.3	8.7
14	590 E - **515** N	7.0	9.8	13.0	8.4	9.9
15	590 E - **520** N	7.0	9.1	14.2	8.0	10.1
16	590 E - **525** N	7.0	43.6	29.8	25.3	26.8
17	590 E - **530** N	7.0	8.6	7.0	7.8	7.5
18	590 E - **535** N	7.0	11.0	31.5	9.0	24.7
19	590 E - **540** N	7.0	4.3	6.0	5.7	5.8
20	590 E - **545** N	7.0	6.0	10.0	6.5	7.7
21	590 E - **550** N	7.0	4.6	8.0	5.8	6.5
22	590 E - **555** N	7.0	8.3	0.0	7.7	7.7
23	590 E - **560** N	7.0	6.0	4.0	6.5	5.7
24	590 E - **565** N	7.0	6.0	11.0	6.5	8.0
25						
26						
27						
28						
29						
30						
TOTAL		**168.0**	**327.0**	**311.0**	**247.5**	**279.4**
AVERAGE		**7.0**	**13.6**	**13.5**	**10.3**	**11.6**

		Background	MDA
INSTRUMENTS:			
CIMARRON SOIL COUNTER			
4X4"X16" NaI DETECTOR	**Total U**	**4**	**10**

File: PD2AVG

REVIEWED BY W.a. Rogers DATE: 12-9-97

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #2

(0 TO 3 FEET)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 3 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
1	8.4	1.5	2.1
2	7.1	0.2	0.0
3	4.4	-2.5	6.5
4	9.7	2.8	7.6
5	7.4	0.5	0.2
6	4.7	-2.2	5.0
7	8.1	1.2	1.3
8	8.8	1.9	3.4
9	7.1	0.2	0.0
10	6.9	-0.0	0.0
11	8.5	1.6	2.4
12	5.1	-1.8	3.4
13	6.8	-0.1	0.0
14	8.1	1.2	1.3
15	7.3	0.4	0.1
16	4.8	-2.1	4.6
17	6.4	-0.5	0.3
18	5.4	-1.5	2.4
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
	125		40.8
	Sum(n)		Sum(n-N)²

No. of Samples (x) : **18**

COUNT TIME: 15 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : **6.94**

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

Standard Deviation: **1.55**

2 Std Deviations: **3.10**

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

(df) = **1.740**

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

(Aμ) = **7.58** pCi/gU TOTAL U

GUIDELINE VALUE: **94** pCi/gU TOTAL U

Acceptable Level: **97.0** pCi/gU TOTAL U

(94 PLUS BACKGROUND)

TABLE B - 1

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

For values of Degrees of Freedom not listed:
Interpolate between the listed values.

(df) high value(Z)		is (B)		95%
(df) low value(Y)		is (A)		95%
Desired value(df) (X)		is calculated as follow:		

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

The (df) value for (X)	17	1.740	95%

PERFORMED BY: C. Powell DATE: 2-3-98

REVIEWED BY: W. A. Rogers DATE: 2-3-98

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #2

(3 TO 6 FEET)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (3 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
1	6.0	-10.3	106.1
2	6.3	-10.0	100.1
3	6.0	-10.3	106.1
4	5.0	-11.3	127.8
5	5.0	-11.3	127.8
6	5.3	-11.0	121.1
7	6.3	-10.0	100.1
8	5.3	-11.0	121.1
9	6.3	-10.0	100.1
10	5.3	-11.0	121.1
11	6.0	-10.3	106.1
12	6.0	-10.3	106.1
13	6.0	-10.3	106.1
14	5.5	-10.8	116.7
15	6.0	-10.3	106.1
16	5.0	-11.3	127.8
17	5.0	-11.3	127.8
18	6.0	-10.3	106.1
19	7.5	-8.8	77.5
20	9.1	-7.2	51.9
21	15.7	-0.6	0.4
22	4.6	-11.7	137.0
23	7.3	-9.0	81.1
24	8.3	-8.0	64.0
25	7.0	-9.3	86.5
26	10.6	-5.7	32.5
27	14.3	-2.0	4.0
28	30.6	14.3	204.4
29	8.3	-8.0	64.0
30	30.3	14.0	195.9
31	18.3	2.0	4.0
32	13.3	-3.0	9.0
33	9.3	-7.0	49.0
34	18.6	2.3	5.3
35	15.0	-1.3	1.7
36	23.6	7.3	53.2
37	28.0	11.7	136.8
38	28.0	11.7	136.8
39	14.0	-2.3	5.3
40	36.3	20.0	399.9
41	31.0	14.7	216.0
42	18.3	2.0	4.0
43	25.0	8.7	75.6
44	13.2	-3.1	9.6
45	15.9	-0.4	0.2
46	19.6	3.3	10.9
47	10.0	-6.3	39.7
48	12.6	-3.7	13.7
49	7.0	-9.3	86.5
50	10.0	-6.3	39.7
	982.5		8254.9
	790.2		6605.9
	705.3		4710.4
	795.5		6381.3
	926.2		8020.6
	842.5		3866.7
	595.2		8829.4
	6260.3		50999.5
	Sum(n)		Sum(n-N)²

No. of Samples (x) : 384

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : 16.30

Standard Deviation (Sd) = SQRT [$(n-N)^2$ ÷ (x - 1)]

Standard Deviation: 11.54

2 Std Deviations: 23.08

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

(df) = 1.650

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

(Aμ) = 17.27 pCi/gU TOTAL U

GUIDELINE VALUE: N/A pCi/gU TOTAL U

Acceptable Level: N/A pCi/gU TOTAL U

TABLE B - 1

Factors for Comparision 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)	400	is (B)	1.649	95%
(df) low value(Y)	120	is (A)	1.658	95%
Desired value(df) (X)	383	is calculated as follow:		

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

The (df) value for (X)	383	1.650	95%

PERFORMED BY: Deanna Huckey DATE: 2-6-98

REVIEWED BY: W. O. Rogers DATE: 2-6-98

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (3 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
51	18.3	16.68	278.15
52	11.0	9.38	87.94
53	14.6	12.98	168.42
54	46.0	44.38	1969.39
55	12.3	10.68	114.02
56	21.3	19.68	387.22
57	8.0	6.38	40.68
58	19.6	17.98	323.20
59	45.0	43.38	1881.64
60	10.0	8.38	70.19
61	23.0	21.38	457.01
62	10.6	8.98	80.60
63	29.6	27.98	782.76
64	11.3	9.68	93.66
65	68.3	66.68	4445.94
66	26.3	24.68	609.00
67	26.9	25.28	638.97
68	21.3	19.68	387.22
69	26.8	25.18	633.92
70	11.0	9.38	87.94
71	19.6	17.98	323.20
72	10.0	8.38	70.19
73	6.0	4.38	19.17
74	7.3	5.68	32.24
75	16.3	14.68	215.44
76	18.0	16.38	268.23
77	18.0	16.38	268.23
78	12.3	10.68	114.02
79	6.0	4.38	19.17
80	54.3	52.68	2774.96
81	21.4	19.78	391.16
82	16.8	15.18	230.37
83	27.8	26.18	685.28
84	20.6	18.98	360.16
85	13.6	11.98	143.47
86	14.6	12.98	168.42
87	32.0	30.38	922.81
88	13.3	11.68	136.37
89	23.1	21.48	461.30
90	26.6	24.98	623.89
91	22.2	20.58	423.45
92	32.0	30.38	922.81
93	11.7	10.08	101.56
94	17.6	15.98	255.29
95	10.6	8.98	80.60
96	13.6	11.98	143.47
97	7.0	5.38	28.92
98	8.0	6.38	40.68
99	7.0	5.38	28.92
100	14.0	12.38	153.21
	982.5		23944.9
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
101	11.6	9.98	99.56
102	12.6	10.98	120.51
103	19.6	17.98	323.20
104	8.3	6.68	44.59
105	45.2	43.58	1899.03
106	34.0	32.38	1048.33
107	33.5	31.88	1016.20
108	44.6	42.98	1847.10
109	33.3	31.68	1003.49
110	47.3	45.68	2086.47
111	17.6	15.98	255.29
112	20.0	18.38	337.75
113	21.6	19.98	399.12
114	24.6	22.98	527.98
115	18.0	16.38	268.23
116	5.3	3.68	13.53
117	6.6	4.98	24.78
118	7.0	5.38	28.92
119	6.0	4.38	19.17
120	7.6	5.98	35.73
121	6.0	4.38	19.17
122	6.0	4.38	19.17
123	6.3	4.68	21.88
124	9.3	7.68	58.95
125	18.6	16.98	288.25
126	17.3	15.68	245.80
127	5.0	3.38	11.41
128	9.0	7.38	54.43
129	22.8	21.18	448.50
130	30.2	28.58	816.69
131	32.1	30.48	928.90
132	28.0	26.38	695.79
133	12.6	10.98	120.51
134	24.3	22.68	514.29
135	13.6	11.98	143.47
136	5.6	3.98	15.82
137	9.6	7.98	63.65
138	16.3	14.68	215.44
139	7.3	5.68	32.24
140	6.3	4.68	21.88
141	5.3	3.68	13.53
142	5.3	3.68	13.53
143	5.0	3.38	11.41
144	7.0	5.38	28.92
145	7.0	5.38	28.92
146	5.6	3.98	15.82
147	7.3	5.68	32.24
148	14.3	12.68	160.73
149	8.6	6.98	48.69
150	14.3	12.68	160.73
	790.2		16649.7
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (3 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
151	10.0	8.38	70.19
152	12.0	10.38	107.70
153	33.9	32.28	1041.86
154	41.3	39.68	1574.33
155	27.8	26.18	685.28
156	14.0	12.38	153.21
157	32.0	30.38	922.81
158	32.0	30.38	922.81
159	11.3	9.68	93.66
160	10.3	8.68	75.31
161	25.0	23.38	546.52
162	5.6	3.98	15.82
163	9.0	7.38	54.43
164	6.3	4.68	21.88
165	5.6	3.98	15.82
166	5.3	3.68	13.53
167	6.0	4.38	19.17
168	14.3	12.68	160.73
169	6.3	4.68	21.88
170	5.3	3.68	13.53
171	4.6	2.98	8.87
172	20.3	18.68	348.86
173	9.6	7.98	63.65
174	13.0	11.38	129.46
175	5.3	3.68	13.53
176	21.0	19.38	375.50
177	30.3	28.68	822.42
178	24.7	23.08	532.59
179	12.3	10.68	114.02
180	25.3	23.68	560.64
181	7.3	5.68	32.24
182	24.6	22.98	527.98
183	6.1	4.48	20.05
184	10.4	8.78	77.05
185	12.2	10.58	111.89
186	6.3	4.68	21.88
187	5.0	3.38	11.41
188	5.0	3.38	11.41
189	11.0	9.38	87.94
190	7.0	5.38	28.92
191	9.3	7.68	58.95
192	7.3	5.68	32.24
193	9.0	7.38	54.43
194	6.0	4.38	19.17
195	6.0	4.38	19.17
196	25.6	23.98	574.94
197	25.6	23.98	574.94
198	9.0	7.38	54.43
199	17.6	15.98	255.29
200	15.3	13.68	187.08
	705.3		12261.4
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL

Number	n	(n-N)	(n-N)²
201	6.3	4.68	21.88
202	35.6	33.98	1154.50
203	38.3	36.68	1345.27
204	5.3	3.68	13.53
205	10.6	8.98	80.60
206	29.6	27.98	782.76
207	12.5	10.88	118.33
208	18.7	17.08	291.65
209	14.4	12.78	163.27
210	14.6	12.98	168.42
211	6.6	4.98	24.78
212	9.3	7.68	58.95
213	6.3	4.68	21.88
214	7.0	5.38	28.92
215	7.3	5.68	32.24
216	17.3	15.68	245.80
217	8.0	6.38	40.68
218	7.0	5.38	28.92
219	6.6	4.98	24.78
220	17.0	15.38	236.48
221	23.6	21.98	483.03
222	8.6	6.98	48.69
223	6.0	4.38	19.17
224	36.0	34.38	1181.84
225	28.6	26.98	727.81
226	54.3	52.68	2774.96
227	19.3	17.68	312.51
228	24.3	22.68	514.29
229	6.3	4.68	21.88
230	20.6	18.98	360.16
231	43.5	41.88	1753.76
232	20.3	18.68	348.86
233	13.6	11.98	143.47
234	7.3	5.68	32.24
235	6.3	4.68	21.88
236	8.5	6.88	47.31
237	6.4	4.78	22.83
238	5.4	3.78	14.27
239	7.6	5.98	35.73
240	36.0	34.38	1181.84
241	6.6	4.98	24.78
242	5.3	3.68	13.53
243	10.0	8.38	70.19
244	10.6	8.98	80.60
245	15.3	13.68	187.08
246	14.0	12.38	153.21
247	15.5	13.88	192.60
248	20.8	19.18	367.79
249	19.8	18.18	330.43
250	16.8	15.18	230.37
	795.5		16580.7
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (3 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
251	37.6	35.98	1294.41
252	5.7	4.08	16.63
253	33.8	32.18	1035.41
254	29.3	27.68	766.06
255	9.0	7.38	54.43
256	26.3	24.68	609.00
257	7.6	5.98	35.73
258	5.0	3.38	11.41
259	6.0	4.38	19.17
260	23.9	22.28	496.30
261	15.4	13.78	189.83
262	12.0	10.38	107.70
263	12.6	10.98	120.51
264	36.3	34.68	1202.55
265	7.6	5.98	35.73
266	6.0	4.38	19.17
267	17.6	15.98	255.29
268	18.6	16.98	288.25
269	12.0	10.38	107.70
270	8.6	6.98	48.69
271	12.6	10.98	120.51
272	52.4	50.78	2578.39
273	23.9	22.28	496.30
274	22.0	20.38	415.26
275	26.0	24.38	594.28
276	12.9	11.28	127.19
277	9.6	7.98	63.65
278	22.4	20.78	431.72
279	10.6	8.98	80.60
280	25.3	23.68	560.64
281	6.0	4.38	19.17
282	8.3	6.68	44.59
283	11.6	9.98	99.56
284	16.6	14.98	224.34
285	11.7	10.08	101.56
286	56.6	54.98	3022.57
287	12.0	10.38	107.70
288	11.3	9.68	93.66
289	8.5	6.88	47.31
290	7.3	5.68	32.24
291	6.3	4.68	21.88
292	11.6	9.98	99.56
293	26.3	24.68	609.00
294	49.0	47.38	2244.66
295	12.6	10.98	120.51
296	19.8	18.18	330.43
297	25.6	23.98	574.94
298	37.5	35.88	1287.22
299	28.3	26.68	711.71
300	10.7	9.08	82.41
	926.2		22057.5
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
301	29.6	27.98	782.76
302	33.1	31.48	990.86
303	37.8	36.18	1308.84
304	10.5	8.88	78.82
305	7.6	5.98	35.73
306	13.5	11.88	141.08
307	9.0	7.38	54.43
308	16.8	15.18	230.37
309	11.0	9.38	87.94
310	11.6	9.98	99.56
311	16.6	14.98	224.34
312	13.3	11.68	136.37
313	8.3	6.68	44.59
314	9.6	7.98	63.65
315	14.0	12.38	153.21
316	17.0	15.38	236.48
317	12.0	10.38	107.70
318	12.0	10.38	107.70
319	5.3	3.68	13.53
320	13.9	12.28	150.75
321	26.7	25.08	628.90
322	23.6	21.98	483.03
323	10.9	9.28	86.08
324	16.3	14.68	215.44
325	32.4	30.78	947.28
326	18.4	16.78	281.50
327	36.1	34.48	1188.72
328	9.5	7.88	62.06
329	7.4	5.78	33.38
330	20.2	18.58	345.14
331	20.9	19.28	371.64
332	6.6	4.98	24.78
333	14.2	12.58	158.20
334	8.6	6.98	48.69
335	7.3	5.68	32.24
336	7.3	5.68	32.24
337	6.0	4.38	19.17
338	16.3	14.68	215.44
339	11.3	9.68	93.66
340	12.3	10.68	114.02
341	14.6	12.98	168.42
342	19.0	17.38	301.99
343	15.6	13.98	195.38
344	22.6	20.98	440.07
345	34.0	32.38	1048.33
346	17.0	15.38	236.48
347	35.1	33.48	1120.77
348	20.8	19.18	367.79
349	17.8	16.18	261.72
350	31.2	29.58	874.85
	842.5		15446.1
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (3 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
351	51.9	50.28	2527.86
352	11.4	9.78	95.61
353	20.7	19.08	363.96
354	61.1	59.48	3537.62
355	55.6	53.98	2913.61
356	7.7	6.08	36.94
357	12.7	11.08	122.72
358	5.6	3.98	15.82
359	16.0	14.38	206.72
360	25.3	23.68	560.64
361	5.3	3.68	13.53
362	7.0	5.38	28.92
363	13.6	11.98	143.47
364	22.6	20.98	440.07
365	36.0	34.38	1181.84
366	33.0	31.38	984.57
367	4.3	2.68	7.17
368	43.0	41.38	1712.13
369	6.0	4.38	19.17
370	15.0	13.38	178.97
371	7.0	5.38	28.92
372	9.6	7.98	63.65
373	7.5	5.88	34.55
374	9.8	8.18	66.88
375	9.1	7.48	55.92
376	43.6	41.98	1762.14
377	8.6	6.98	48.69
378	11.0	9.38	87.94
379	4.3	2.68	7.17
380	6.0	4.38	19.17
381	4.6	2.98	8.87
382	8.3	6.68	44.59
383	6.0	4.38	19.17
384	6.0	4.38	19.17
385			
386			
387			
388			
389			
390			
391			
392			
393			
394			
395			
396			
397			
398			
399			
400			
	595.2		**********
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
401			
402			
403			
404			
405			
406			
407			
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446			
447			
448			
449			
450			
	Sum(n)		Sum(n-N)²

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #2

(6 TO 9 FEET)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (6 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	$(n-N)^2$
1	7.0	-14.2	200.3
2	5.5	-15.7	245.0
3	5.0	-16.2	260.9
4	7.5	-13.7	186.4
5	5.0	-16.2	260.9
6	6.0	-15.2	229.6
7	7.0	-14.2	200.3
8	4.0	-17.2	294.3
9	6.3	-14.9	220.6
10	8.2	-13.0	167.8
11	6.0	-15.2	229.6
12	7.5	-13.7	186.4
13	6.5	-14.7	214.7
14	7.5	-13.7	186.4
15	6.5	-14.7	214.7
16	15.0	-6.2	37.9
17	50.5	29.3	861.2
18	57.0	35.8	1284.9
19	18.0	-3.2	9.9
20	17.5	-3.7	13.4
21	15.3	-5.9	34.3
22	8.5	-12.7	160.1
23	8.0	-13.2	173.0
24	15.0	-6.2	37.9
25	17.0	-4.2	17.3
26	27.0	5.8	34.2
27	18.0	-3.2	9.9
28	12.0	-9.2	83.8
29	27.0	5.8	34.2
30	8.7	-12.5	155.1
31	5.4	-15.8	248.2
32	12.5	-8.7	74.9
33	35.1	13.9	194.5
34	16.3	-4.9	23.6
35	11.0	-10.2	103.1
36	11.0	-10.2	103.1
37	9.0	-12.2	147.7
38	6.5	-14.7	214.7
39	6.5	-14.7	214.7
40	8.0	-13.2	173.0
41	8.5	-12.7	160.1
42	23.0	1.8	3.4
43	13.5	-7.7	58.6
44	5.5	-15.7	245.0
45	10.0	-11.2	124.4
46	6.0	-15.2	229.6
47	16.0	-5.2	26.6
48	24.0	2.8	8.1
49	7.0	-14.2	200.3
50	9.0	-12.2	147.7
	807.2		5339.6
	1011.9		7626.7
	1219.3		16877.9
	1119.7		8949.9
	1390.2		20719.7
	1263.7		28825.8
	107.3		1306.6
	7573.1		98593.0
	Sum(n)		Sum(n-N)²

No. of Samples (x) : **358**

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)
Sample Mean (N) : **21.15**

Standard Deviation (Sd) = SQRT [$(n-N)^2$ ÷ (x - 1)]

Standard Deviation: **16.62**
2 Std Deviations: **33.24**
Degree of Freedom(df) = (x) - 1 Data listed on Table B-1
(df) = **1.650**

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

(Aμ) = **22.60** pCi/gU TOTAL U
GUIDELINE VALUE: **N/A** pCi/gU TOTAL U
Acceptable Level: **N/A** pCi/gU TOTAL U

TABLE B - 1

Factors for Comparision 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)	400	is (B)	1.649	95%
(df) low value(Y)	120	is (A)	1.658	95%
Desired value(df) (X)	357	is calculated as follow:		

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

The (df) value for (X)	357	1.650	95%

PERFORMED BY: Deanna Huckey DATE: 2-6-98

REVIEWED BY: W. A. Rogers DATE: 2-6-98

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (6 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
51	7.0	-12.72	161.84
52	11.0	-8.72	76.07
53	22.7	2.98	8.87
54	9.0	-10.72	114.95
55	17.6	-2.12	4.50
56	46.9	27.18	738.66
57	14.8	-4.92	24.22
58	53.5	33.78	1140.98
59	10.0	-9.72	94.51
60	19.5	-0.22	0.05
61	7.0	-12.72	161.84
62	8.0	-11.72	137.40
63	7.5	-12.22	149.37
64	15.5	-4.22	17.82
65	12.5	-7.22	52.15
66	20.0	0.28	0.08
67	19.3	-0.42	0.18
68	16.0	-3.72	13.85
69	15.7	-4.02	16.17
70	15.9	-3.82	14.60
71	17.0	-2.72	7.41
72	16.0	-3.72	13.85
73	8.5	-11.22	125.92
74	16.0	-3.72	13.85
75	14.0	-5.72	32.74
76	16.0	-3.72	13.85
77	21.5	1.78	3.16
78	14.5	-5.22	27.27
79	25.0	5.28	27.86
80	17.7	-2.02	4.09
81	13.6	-6.12	37.47
82	12.0	-7.72	59.62
83	21.0	1.28	1.63
84	20.5	0.78	0.61
85	7.5	-12.22	149.37
86	6.0	-13.72	188.28
87	10.0	-9.72	94.51
88	8.0	-11.72	137.40
89	13.0	-6.72	45.18
90	14.0	-5.72	32.74
91	10.0	-9.72	94.51
92	16.0	-3.72	13.85
93	34.3	14.58	212.53
94	14.2	-5.52	30.49
95	29.0	9.28	86.09
96	20.0	0.28	0.08
97	10.0	-9.72	94.51
98	13.5	-6.22	38.71
99	9.5	-10.22	104.48
100	9.5	-10.22	104.48
	807.2		4724.6
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
101	13.0	-6.72	45.18
102	59.0	39.28	1542.79
103	22.0	2.28	5.19
104	39.5	19.78	391.18
105	7.0	-12.72	161.84
106	8.5	-11.22	125.92
107	7.0	-12.72	161.84
108	13.0	-6.72	45.18
109	14.0	-5.72	32.74
110	23.0	3.28	10.75
111	15.7	-4.02	16.17
112	45.9	26.18	685.31
113	19.5	-0.22	0.05
114	32.0	12.28	150.76
115	13.0	-6.72	45.18
116	9.0	-10.72	114.95
117	12.0	-7.72	59.62
118	10.0	-9.72	94.51
119	11.0	-8.72	76.07
120	41.0	21.28	452.77
121	9.3	-10.42	108.61
122	18.5	-1.22	1.49
123	18.3	-1.42	2.02
124	13.0	-6.72	45.18
125	18.0	-1.72	2.96
126	21.5	1.78	3.16
127	5.5	-14.22	202.25
128	10.0	-9.72	94.51
129	18.0	-1.72	2.96
130	17.0	-2.72	7.41
131	6.0	-13.72	188.28
132	41.8	22.08	487.46
133	38.9	19.18	367.81
134	24.0	4.28	18.30
135	9.0	-10.72	114.95
136	25.0	5.28	27.86
137	18.0	-1.72	2.96
138	5.0	-14.72	216.73
139	36.0	16.28	264.99
140	26.5	6.78	45.95
141	29.0	9.28	86.09
142	21.0	1.28	1.63
143	19.0	-0.72	0.52
144	49.0	29.28	857.22
145	18.0	-1.72	2.96
146	17.5	-2.22	4.94
147	6.5	-13.22	174.81
148	19.0	-0.72	0.52
149	14.5	-5.22	27.27
150	24.0	4.28	18.30
	1011.9		7598.1
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (6 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
151	11.0	-8.72	76.07
152	13.5	-6.22	38.71
153	8.7	-11.02	121.48
154	23.0	3.28	10.75
155	28.5	8.78	77.06
156	34.0	14.28	203.87
157	14.1	-5.62	31.60
158	15.5	-4.22	17.82
159	12.3	-7.42	55.08
160	9.0	-10.72	114.95
161	19.7	-0.02	0.00
162	31.5	11.78	138.73
163	49.4	29.68	880.81
164	18.5	-1.22	1.49
165	24.7	4.98	24.78
166	14.0	-5.72	32.74
167	29.0	9.28	86.09
168	40.0	20.28	411.21
169	9.7	-10.02	100.43
170	31.0	11.28	127.20
171	6.5	-13.22	174.81
172	9.0	-10.72	114.95
173	22.0	2.28	5.19
174	9.0	-10.72	114.95
175	13.0	-6.72	45.18
176	11.0	-8.72	76.07
177	12.0	-7.72	59.62
178	10.0	-9.72	94.51
179	80.0	60.28	3633.48
180	35.0	15.28	233.43
181	46.0	26.28	690.55
182	77.5	57.78	3338.34
183	13.0	-6.72	45.18
184	21.5	1.78	3.16
185	25.1	5.38	28.93
186	33.6	13.88	192.61
187	72.5	52.78	2785.56
188	15.5	-4.22	17.82
189	27.0	7.28	52.97
190	31.5	11.78	138.73
191	23.5	3.78	14.28
192	33.5	13.78	189.84
193	66.5	46.78	2188.22
194	26.0	6.28	39.42
195	10.5	-9.22	85.04
196	10.0	-9.72	94.51
197	17.5	-2.22	4.94
198	5.0	-14.72	216.73
199	8.0	-11.72	137.40
200	11.0	-8.72	76.07
	1219.3		17443.4
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL

Number	n	(n-N)	(n-N)²
201	17.3	-2.42	5.86
202	15.0	-4.72	22.29
203	32.7	12.98	168.44
204	31.0	11.28	127.20
205	27.3	7.58	57.43
206	25.0	5.28	27.86
207	51.0	31.28	978.34
208	35.0	15.28	233.43
209	46.0	26.28	690.55
210	28.5	8.78	77.06
211	28.5	8.78	77.06
212	26.0	6.28	39.42
213	22.0	2.28	5.19
214	23.4	3.68	13.53
215	49.9	30.18	910.73
216	72.8	53.08	2817.31
217	9.3	-10.42	108.61
218	7.0	-12.72	161.84
219	8.0	-11.72	137.40
220	7.5	-12.22	149.37
221	10.0	-9.72	94.51
222	12.5	-7.22	52.15
223	12.5	-7.22	52.15
224	8.4	-11.32	128.18
225	13.6	-6.12	37.47
226	20.0	0.28	0.08
227	10.3	-9.42	88.77
228	20.1	0.38	0.14
229	18.3	-1.42	2.02
230	18.9	-0.82	0.68
231	33.5	13.78	189.84
232	20.5	0.78	0.61
233	18.0	-1.72	2.96
234	15.0	-4.72	22.29
235	40.0	20.28	411.21
236	18.4	-1.32	1.75
237	19.7	-0.02	0.00
238	21.9	2.18	4.75
239	20.0	0.28	0.08
240	42.0	22.28	496.33
241	8.0	-11.72	137.40
242	9.5	-10.22	104.48
243	9.0	-10.72	114.95
244	14.0	-5.72	32.74
245	13.0	-6.72	45.18
246	14.0	-5.72	32.74
247	11.0	-8.72	76.07
248	21.9	2.18	4.75
249	28.0	8.28	68.53
250	34.5	14.78	218.40
	1119.7		9230.1
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (6 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
251	21.8	2.08	4.32
252	27.8	8.08	65.26
253	16.8	-2.92	8.54
254	18.7	-1.02	1.04
255	18.5	-1.22	1.49
256	26.6	6.88	47.31
257	23.0	3.28	10.75
258	72.0	52.28	2733.03
259	40.3	20.58	423.47
260	22.6	2.88	8.29
261	24.1	4.38	19.17
262	19.5	-0.22	0.05
263	7.7	-12.02	144.52
264	47.0	27.28	744.11
265	12.0	-7.72	59.62
266	38.5	18.78	352.63
267	4.5	-15.22	231.70
268	21.0	1.28	1.63
269	14.0	-5.72	32.74
270	39.7	19.98	399.14
271	23.3	3.58	12.80
272	34.4	14.68	215.45
273	58.8	39.08	1527.12
274	30.0	10.28	105.65
275	39.7	19.98	399.14
276	38.4	18.68	348.88
277	16.8	-2.92	8.54
278	26.0	6.28	39.42
279	23.7	3.98	15.83
280	59.5	39.78	1582.32
281	94.0	74.28	5517.28
282	90.6	70.88	5023.75
283	43.7	23.98	574.96
284	25.2	5.48	30.01
285	11.0	-8.72	76.07
286	37.5	17.78	316.07
287	21.5	1.78	3.16
288	10.0	-9.72	94.51
289	7.0	-12.72	161.84
290	18.0	-1.72	2.96
291	24.0	4.28	18.30
292	9.0	-10.72	114.95
293	10.0	-9.72	94.51
294	16.3	-3.42	11.71
295	9.2	-10.52	110.70
296	15.0	-4.72	22.29
297	20.3	0.58	0.33
298	18.4	-1.32	1.75
299	16.4	-3.32	11.03
300	26.4	6.68	44.60
	1390.2		21774.7
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
301	23.9	4.18	17.46
302	22.0	2.28	5.19
303	16.6	-3.12	9.74
304	16.9	-2.82	7.96
305	83.7	63.98	4093.23
306	24.7	4.98	24.78
307	29.6	9.88	97.58
308	21.8	2.08	4.32
309	17.5	-2.22	4.94
310	15.3	-4.42	19.55
311	111.0	91.28	8331.74
312	7.0	-12.72	161.84
313	17.0	-2.72	7.41
314	19.0	-0.72	0.52
315	12.0	-7.72	59.62
316	11.0	-8.72	76.07
317	19.0	-0.72	0.52
318	8.0	-11.72	137.40
319	10.0	-9.72	94.51
320	11.5	-8.22	67.59
321	7.0	-12.72	161.84
322	29.2	9.48	89.84
323	17.0	-2.72	7.41
324	22.0	2.28	5.19
325	17.2	-2.52	6.36
326	21.0	1.28	1.63
327	65.1	45.38	2059.20
328	31.4	11.68	136.38
329	61.7	41.98	1762.18
330	62.1	42.38	1795.93
331	53.2	33.48	1120.80
332	25.6	5.88	34.56
333	28.0	8.28	68.53
334	107.0	87.28	7617.52
335	15.0	-4.72	22.29
336	6.0	-13.72	188.28
337	8.0	-11.72	137.40
338	7.0	-12.72	161.84
339	33.5	13.78	189.84
340	18.0	-1.72	2.96
341	15.0	-4.72	22.29
342	11.7	-8.02	64.35
343	25.5	5.78	33.39
344	9.3	-10.42	108.61
345	8.0	-11.72	137.40
346	5.0	-14.72	216.73
347	17.8	-1.92	3.69
348	11.7	-8.02	64.35
349	13.0	-6.72	45.18
350	14.2	-5.52	30.49
	1263.7		29518.4
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (6 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
351	29.8	8.65	74.75
352	7.0	-14.15	200.33
353	31.5	10.35	107.04
354	6.0	-15.15	229.64
355	10.0	-11.15	124.41
356	8.0	-13.15	173.03
357	4.0	-17.15	294.26
358	11.0	-10.15	103.10
359			
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361			
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395			
396			
397			
398			
399			
400			
	107.3		1306.564
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
401			
402			
403			
404			
405			
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447			
448			
449			
450			
	Sum(n)		Sum(n-N)²

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #2

(0 TO 6 FEET)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
1	6.5	-5.2	26.7
2	6.7	-5.0	24.7
3	6.5	-5.2	26.7
4	6.0	-5.7	32.1
5	6.0	-5.7	32.1
6	6.2	-5.5	29.9
7	6.7	-5.0	24.7
8	6.2	-5.5	29.9
9	6.7	-5.0	24.7
10	6.2	-5.5	29.9
11	6.5	-5.2	26.7
12	6.5	-5.2	26.7
13	6.5	-5.2	26.7
14	6.2	-5.5	29.9
15	6.5	-5.2	26.7
16	6.0	-5.7	32.1
17	6.0	-5.7	32.1
18	6.5	-5.2	26.7
19	7.2	-4.5	19.9
20	8.0	-3.7	13.4
21	11.4	-0.3	0.1
22	5.8	-5.9	34.4
23	7.2	-4.5	19.9
24	7.7	-4.0	15.7
25	7.0	-4.7	21.8
26	8.8	-2.9	8.2
27	10.7	-1.0	0.9
28	18.8	7.1	50.9
29	7.7	-4.0	15.7
30	18.7	7.0	49.5
31	12.7	1.0	1.1
32	10.2	-1.5	2.2
33	8.2	-3.5	12.0
34	12.8	1.1	1.3
35	11.0	-0.7	0.4
36	15.3	3.6	13.2
37	17.5	5.8	34.0
38	17.5	5.8	34.0
39	10.5	-1.2	1.4
40	21.7	10.0	100.7
41	19.0	7.3	53.8
42	12.7	1.0	1.1
43	16.0	4.3	18.8
44	10.1	-1.6	2.5
45	11.5	-0.2	0.0
46	13.3	1.6	2.7
47	8.5	-3.2	10.0
48	9.8	-1.9	3.5
49	7.0	-4.7	21.8
50	8.5	-3.2	10.0
	666.8		2064.7
	571.0		1651.9
	560.0		1362.4
	618.1		1868.6
	608.0		1493.5
	650.8		2382.0
	318.0		846.7
	4479.9		12753.4
	Sum(n)		Sum(n-N)²

No. of Samples (x) : **384**

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : **11.67**

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

Standard Deviation: **5.77**

2 Std Deviations: **11.54**

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

(df) = **1.650**

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

(Aμ) = **12.15** pCi/gU TOTAL U

GUIDELINE VALUE: **69** pCi/gU TOTAL U

Acceptable Level: **73.0** pCi/gU TOTAL U

(69 PLUS 4 BACKGROUND)

TABLE B - 1

Factors for Comparision 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)	400	is (B)	1.649	95%
(df) low value(Y)	120	is (A)	1.658	95%
Desired value(df) (X)	383	is calculated as follow:		

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

The (df) value for (X)	383	1.650	95%

PERFORMED BY: E. Powell DATE: 2-4-98

REVIEWED BY: W. A. Rogers DATE: 2-4-98

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
51	12.7	1.03	1.07
52	9.0	-2.67	7.11
53	10.8	-0.87	0.75
54	26.5	14.83	220.04
55	9.7	-1.97	3.87
56	14.2	2.53	6.42
57	7.5	-4.17	17.36
58	13.3	1.63	2.67
59	26.0	14.33	205.45
60	8.5	-3.17	10.03
61	15.0	3.33	11.11
62	8.8	-2.87	8.22
63	18.3	6.63	44.00
64	9.2	-2.47	6.08
65	37.7	26.03	677.75
66	16.7	5.03	25.34
67	16.9	5.23	27.39
68	14.1	2.43	5.92
69	16.9	5.23	27.39
70	9.0	-2.67	7.11
71	13.3	1.63	2.67
72	8.5	-3.17	10.03
73	6.5	-5.17	26.69
74	7.2	-4.47	19.95
75	11.7	0.03	0.00
76	12.5	0.83	0.69
77	12.5	0.83	0.69
78	9.7	-1.97	3.87
79	6.5	-5.17	26.69
80	30.7	19.03	362.28
81	14.2	2.53	6.42
82	11.9	0.23	0.05
83	17.4	5.73	32.87
84	13.8	2.13	4.55
85	10.3	-1.37	1.87
86	10.8	-0.87	0.75
87	19.5	7.83	61.37
88	10.2	-1.47	2.15
89	15.1	3.43	11.79
90	16.8	5.13	26.35
91	14.6	2.93	8.61
92	19.5	7.83	61.37
93	9.4	-2.27	5.14
94	12.3	0.63	0.40
95	8.8	-2.87	8.22
96	10.3	-1.37	1.87
97	7.0	-4.67	21.78
98	7.5	-4.17	17.36
99	7.0	-4.67	21.78
100	10.5	-1.17	1.36
	666.8		2064.7
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
101	9.3	-2.37	5.60
102	9.8	-1.87	3.48
103	13.3	1.63	2.67
104	7.7	-3.97	15.73
105	26.1	14.43	208.33
106	20.5	8.83	78.03
107	20.3	8.63	74.54
108	25.8	14.13	199.76
109	20.2	8.53	72.82
110	27.2	15.53	241.29
111	12.3	0.63	0.40
112	13.5	1.83	3.36
113	14.3	2.63	6.94
114	15.8	4.13	17.09
115	12.5	0.83	0.69
116	6.2	-5.47	29.88
117	6.8	-4.87	23.68
118	7.0	-4.67	21.78
119	6.5	-5.17	26.69
120	7.3	-4.37	19.07
121	6.5	-5.17	26.69
122	6.5	-5.17	26.69
123	6.7	-4.97	24.67
124	8.2	-3.47	12.02
125	12.8	1.13	1.29
126	12.2	0.53	0.28
127	6.0	-5.67	32.11
128	8.0	-3.67	13.44
129	14.9	3.23	10.46
130	18.6	6.93	48.07
131	19.6	7.93	62.94
132	17.5	5.83	34.03
133	9.8	-1.87	3.48
134	15.7	4.03	16.27
135	10.3	-1.37	1.87
136	6.3	-5.37	28.80
137	8.3	-3.37	11.33
138	11.7	0.03	0.00
139	7.2	-4.47	19.95
140	6.7	-4.97	24.67
141	6.2	-5.47	29.88
142	6.2	-5.47	29.88
143	6.0	-5.67	32.11
144	7.0	-4.67	21.78
145	7.0	-4.67	21.78
146	6.3	-5.37	28.80
147	7.2	-4.47	19.95
148	10.7	-0.97	0.93
149	7.8	-3.87	14.95
150	10.7	-0.97	0.93
	571.0		1651.9
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
151	8.5	-3.17	10.03
152	9.5	-2.17	4.69
153	20.5	8.83	78.03
154	24.2	12.53	157.09
155	17.4	5.73	32.87
156	10.5	-1.17	1.36
157	19.5	7.83	61.37
158	19.5	7.83	61.37
159	9.2	-2.47	6.08
160	8.7	-2.97	8.80
161	16.0	4.33	18.78
162	6.3	-5.37	28.80
163	8.0	-3.67	13.44
164	6.7	-4.97	24.67
165	6.3	-5.37	28.80
166	6.2	-5.47	29.88
167	6.5	-5.17	26.69
168	10.7	-0.97	0.93
169	8.0	-3.67	13.44
170	6.5	-5.17	26.69
171	6.5	-5.17	26.69
172	16.3	4.63	21.47
173	16.3	4.63	21.47
174	8.0	-3.67	13.44
175	12.3	0.63	0.40
176	11.2	-0.47	0.22
177	6.7	-4.97	24.67
178	21.3	9.63	92.81
179	22.7	11.03	121.74
180	6.2	-5.47	29.88
181	8.8	-2.87	8.22
182	18.3	6.63	44.00
183	9.8	-1.87	3.48
184	12.9	1.23	1.52
185	10.7	-0.97	0.93
186	10.8	-0.87	0.75
187	6.8	-4.87	23.68
188	8.2	-3.47	12.02
189	6.7	-4.97	24.67
190	7.0	-4.67	21.78
191	7.2	-4.47	19.95
192	12.2	0.53	0.28
193	7.5	-4.17	17.36
194	7.0	-4.67	21.78
195	6.8	-4.87	23.68
196	12.0	0.33	0.11
197	15.3	3.63	13.20
198	7.8	-3.87	14.95
199	6.5	-5.17	26.69
200	21.5	9.83	96.70
	560.0		1362.4
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
201	17.8	6.13	37.62
202	30.7	19.03	362.28
203	13.2	1.53	2.35
204	15.7	4.03	16.27
205	6.7	-4.97	24.67
206	13.8	2.13	4.55
207	25.3	13.63	185.87
208	13.6	1.93	3.74
209	10.3	-1.37	1.87
210	7.2	-4.47	19.95
211	6.7	-4.97	24.67
212	7.8	-3.87	14.95
213	6.7	-4.97	24.67
214	6.2	-5.47	29.88
215	7.3	-4.37	19.07
216	21.5	9.83	96.70
217	6.8	-4.87	23.68
218	6.2	-5.47	29.88
219	8.5	-3.17	10.03
220	8.8	-2.87	8.22
221	11.2	-0.47	0.22
222	10.5	-1.17	1.36
223	11.3	-0.37	0.13
224	13.9	2.23	4.99
225	13.4	1.73	3.01
226	11.9	0.23	0.05
227	22.3	10.63	113.07
228	6.4	-5.27	27.74
229	20.4	8.73	76.28
230	18.2	6.53	42.69
231	8.0	-3.67	13.44
232	16.7	5.03	25.34
233	7.3	-4.37	19.07
234	6.0	-5.67	32.11
235	6.5	-5.17	26.69
236	15.4	3.73	13.94
237	11.2	-0.47	0.22
238	9.5	-2.17	4.69
239	9.8	-1.87	3.48
240	21.7	10.03	100.67
241	7.3	-4.37	19.07
242	6.5	-5.17	26.69
243	12.3	0.63	0.40
244	12.8	1.13	1.29
245	9.5	-2.17	4.69
246	7.8	-3.87	14.95
247	9.8	-1.87	3.48
248	29.7	18.03	325.21
249	15.5	3.83	14.70
250	14.5	2.83	8.03
	618.1		1868.6
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
251	16.5	4.83	23.36
252	10.0	-1.67	2.78
253	8.3	-3.37	11.33
254	14.7	3.03	9.20
255	8.8	-2.87	8.22
256	16.2	4.53	20.55
257	6.5	-5.17	26.69
258	7.7	-3.97	15.73
259	9.3	-2.37	5.60
260	11.8	0.13	0.02
261	9.4	-2.27	5.14
262	31.8	20.13	405.36
263	9.5	-2.17	4.69
264	9.2	-2.47	6.08
265	7.7	-3.97	15.73
266	7.2	-4.47	19.95
267	6.7	-4.97	24.67
268	9.3	-2.37	5.60
269	16.7	5.03	25.34
270	28.0	16.33	266.79
271	9.8	-1.87	3.48
272	13.4	1.73	3.01
273	16.3	4.63	21.47
274	22.3	10.63	113.07
275	17.7	6.03	36.40
276	8.9	-2.77	7.65
277	18.3	6.63	44.00
278	20.1	8.43	71.13
279	22.4	10.73	115.21
280	8.7	-2.97	8.80
281	7.3	-4.37	19.07
282	10.2	-1.47	2.15
283	8.0	-3.67	13.44
284	11.9	0.23	0.05
285	9.0	-2.67	7.11
286	9.3	-2.37	5.60
287	11.8	0.13	0.02
288	10.2	-1.47	2.15
289	7.7	-3.97	15.73
290	8.3	-3.37	11.33
291	10.5	-1.17	1.36
292	12.0	0.33	0.11
293	9.5	-2.17	4.69
294	9.5	-2.17	4.69
295	6.2	-5.47	29.88
296	10.5	-1.17	1.36
297	16.9	5.23	27.39
298	15.3	3.63	13.20
299	9.0	-2.67	7.11
300	11.7	0.03	0.00
	608.0		1493.5
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
301	19.7	8.03	64.54
302	12.7	1.03	1.07
303	21.6	9.93	98.68
304	8.3	-3.37	11.33
305	7.2	-4.47	19.95
306	13.6	1.93	3.74
307	13.9	2.23	4.99
308	6.8	-4.87	23.68
309	10.6	-1.07	1.14
310	7.8	-3.87	14.95
311	7.2	-4.47	19.95
312	7.2	-4.47	19.95
313	6.5	-5.17	26.69
314	11.7	0.03	0.00
315	9.2	-2.47	6.08
316	9.7	-1.97	3.87
317	10.8	-0.87	0.75
318	13.0	1.33	1.78
319	11.3	-0.37	0.13
320	14.8	3.13	9.82
321	20.5	8.83	78.03
322	12.0	0.33	0.11
323	21.1	9.43	88.99
324	13.9	2.23	4.99
325	12.4	0.73	0.54
326	19.1	7.43	55.26
327	29.5	17.83	318.04
328	9.2	-2.47	6.08
329	13.8	2.13	4.55
330	34.1	22.43	503.27
331	31.3	19.63	385.48
332	7.4	-4.27	18.20
333	9.9	-1.77	3.12
334	6.3	-5.37	28.80
335	11.5	-0.17	0.03
336	16.2	4.53	20.55
337	6.2	-5.47	29.88
338	7.0	-4.67	21.78
339	10.3	-1.37	1.87
340	14.8	3.13	9.82
341	21.5	9.83	96.70
342	20.0	8.33	69.45
343	5.7	-5.97	35.60
344	25.0	13.33	177.78
345	6.5	-5.17	26.69
346	11.0	-0.67	0.44
347	7.0	-4.67	21.78
348	8.3	-3.37	11.33
349	7.3	-4.37	19.07
350	8.4	-3.27	10.67
	650.8		2382.0
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 6 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
351	8.0	-3.67	13.44
352	25.3	13.63	185.87
353	7.8	-3.87	14.95
354	9.0	-2.67	7.11
355	5.7	-5.97	35.60
356	6.5	-5.17	26.69
357	5.8	-5.87	34.41
358	7.7	-3.97	15.73
359	6.5	-5.17	26.69
360	6.5	-5.17	26.69
361	6.7	-4.97	24.67
362	6.2	-5.47	29.88
363	5.8	-5.87	34.41
364	13.7	2.03	4.14
365	8.3	-3.37	11.33
366	10.0	-1.67	2.78
367	6.2	-5.47	29.88
368	14.0	2.33	5.45
369	18.6	6.93	48.07
370	15.9	4.23	17.92
371	9.7	-1.97	3.87
372	16.2	4.53	20.55
373	7.2	-4.47	19.95
374	15.8	4.13	17.09
375	6.5	-5.17	26.69
376	8.7	-2.97	8.80
377	9.6	-2.07	4.27
378	6.7	-4.97	24.67
379	6.0	-5.67	32.11
380	6.0	-5.67	32.11
381	9.0	-2.67	7.11
382	7.0	-4.67	21.78
383	8.2	-3.47	12.02
384	7.2	-4.47	19.95
385			
386			
387			
388			
389			
390			
391			
392			
393			
394			
395			
396			
397			
398			
399			
400			
	318		846.677
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
401			
402			
403			
404			
405			
406			
407			
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449			
450			
	Sum(n)		Sum(n-N)²

TRUE MEAN ACTIVITY VS.

GUIDELINE VALUE AT 95% CONFIDENCE

PHASE III SUB-AREA "O" WASTE POND #2

(0 TO 9 FEET)

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
1	6.7	-7.9	62.5
2	6.3	-8.3	69.0
3	6.0	-8.6	74.1
4	6.5	-8.1	65.7
5	5.7	-8.9	79.3
6	6.1	-8.5	72.3
7	6.8	-7.8	60.9
8	6.2	-8.4	70.7
9	6.7	-7.9	62.5
10	5.4	-9.2	84.7
11	6.5	-8.1	65.7
12	6.5	-8.1	65.7
13	6.5	-8.1	65.7
14	6.2	-8.4	70.7
15	6.5	-8.1	65.7
16	6.0	-8.6	74.1
17	6.0	-8.6	74.1
18	6.5	-8.1	65.7
19	6.9	-7.7	59.4
20	8.1	-6.5	42.3
21	9.6	-5.0	25.1
22	6.4	-8.2	67.3
23	6.9	-7.7	59.4
24	7.6	-7.0	49.1
25	6.8	-7.8	60.9
26	10.9	-3.7	13.7
27	23.9	9.3	86.4
28	31.5	16.9	285.4
29	11.1	-3.5	12.3
30	18.3	3.7	13.6
31	13.5	-1.1	1.2
32	9.6	-5.0	25.1
33	8.1	-6.5	42.3
34	12.8	-1.8	3.3
35	12.3	-2.3	5.3
36	15.9	1.3	1.7
37	20.7	6.1	37.1
38	17.7	3.1	9.6
39	11.0	-3.6	13.0
40	23.4	8.8	77.3
41	15.6	1.0	1.0
42	10.2	-4.4	19.4
43	14.8	0.2	0.0
44	18.4	3.8	14.4
45	13.1	-1.5	2.3
46	12.5	-2.1	4.4
47	9.3	-5.3	28.2
48	9.5	-5.1	26.1
49	6.8	-7.8	60.9
50	7.8	-6.8	46.3
	698.7		1563.1
	670.2		1925.0
	687.1		1512.5
	836.3		2951.6
	820.5		2219.3
	823.1		3293.7
	548.6		4080.3
	5608.6		19988.4
	Sum(n)		Sum(n-N)²

No. of Samples (x) : **384**

COUNT TIME: 5 MINUTES

Sample Mean (N) = Sum(n) ÷ (x)

Sample Mean (N) : **14.61**

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

Standard Deviation: **7.22**

2 Std Deviations: **14.45**

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

(df) = **1.650**

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

(Aμ) = **15.21** pCi/gU TOTAL U

GUIDELINE VALUE: **43** pCi/gU TOTAL U

Acceptable Level: **47.0** pCi/gU TOTAL U

TABLE B - 1

Factors for Comparision 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)	400	is (B)	1.649	95%
(df) low value(Y)	120	is (A)	1.658	95%
Desired value(df) (X)	383	is calculated as follow:		

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

The (df) value for (X)	383	1.650	95%

PERFORMED BY: R. Powell DATE: 2-3-98

REVIEWED BY: W. A. Rogers DATE: 2-3-98

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
51	11.1	-3.51	12.29
52	8.8	-5.81	33.71
53	14.9	0.29	0.09
54	22.2	7.59	57.67
55	8.3	-6.31	39.76
56	12.8	-1.81	3.26
57	7.0	-7.61	57.85
58	14.2	-0.41	0.16
59	25.3	10.69	114.37
60	8.0	-6.61	43.64
61	13.0	-1.61	2.58
62	8.2	-6.41	41.03
63	18.3	3.69	13.65
64	9.8	-4.81	23.10
65	32.7	18.09	327.40
66	14.1	-0.51	0.26
67	17.1	2.49	6.22
68	25.1	10.49	110.13
69	16.2	1.59	2.54
70	23.8	9.19	84.53
71	12.2	-2.41	5.79
72	12.2	-2.41	5.79
73	6.7	-7.91	62.50
74	7.4	-7.21	51.92
75	10.3	-4.31	18.54
76	13.5	-1.11	1.22
77	12.5	-2.11	4.43
78	13.1	-1.51	2.27
79	10.8	-3.81	14.48
80	25.8	11.19	125.31
81	14.7	0.09	0.01
82	13.2	-1.41	1.98
83	17.3	2.69	7.26
84	14.5	-0.11	0.01
85	9.7	-4.91	24.07
86	12.5	-2.11	4.43
87	17.7	3.09	9.57
88	12.1	-2.51	6.28
89	17.2	2.59	6.73
90	16.0	1.39	1.94
91	18.0	3.39	11.52
92	18.9	4.29	18.44
93	10.8	-3.81	14.48
94	12.2	-2.41	5.79
95	12.9	-1.71	2.91
96	13.7	-0.91	0.82
97	7.2	-7.41	54.84
98	7.0	-7.61	57.85
99	8.0	-6.61	43.64
100	9.7	-4.91	24.07
	698.7		1563.1
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
101	10.5	-4.11	16.86
102	11.2	-3.41	11.60
103	12.2	-2.41	5.79
104	10.4	-4.21	17.69
105	28.8	14.19	201.48
106	18.4	3.79	14.40
107	20.3	5.69	32.42
108	25.8	11.19	125.31
109	23.1	8.49	72.15
110	27.2	12.59	158.62
111	14.9	0.29	0.09
112	12.3	-2.31	5.32
113	14.0	-0.61	0.37
114	13.7	-0.91	0.82
115	11.5	-3.11	9.65
116	8.4	-6.21	38.51
117	6.8	-7.81	60.93
118	24.3	9.69	93.98
119	11.7	-2.91	8.44
120	18.0	3.39	11.52
121	6.7	-7.91	62.50
122	7.2	-7.41	54.84
123	6.7	-7.91	62.50
124	7.8	-6.81	46.32
125	12.9	-1.71	2.91
126	12.8	-1.81	3.26
127	11.7	-2.91	8.44
128	8.0	-6.61	43.64
129	15.2	0.59	0.35
130	27.7	13.09	171.46
131	19.5	4.89	23.95
132	22.3	7.69	59.20
133	10.9	-3.71	13.73
134	13.4	-1.21	1.45
135	10.9	-3.71	13.73
136	7.5	-7.11	50.49
137	9.2	-5.41	29.22
138	21.4	6.79	46.16
139	7.8	-6.81	46.32
140	10.6	-4.01	16.05
141	10.2	-4.41	19.41
142	8.4	-6.21	38.51
143	10.0	-4.61	21.21
144	11.8	-2.81	7.87
145	6.5	-8.11	65.70
146	7.5	-7.11	50.49
147	10.8	-3.81	14.48
148	10.7	-3.91	15.25
149	7.8	-6.81	46.32
150	12.8	-1.81	3.26
	670.2		1925.0
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
151	7.7	-6.91	47.69
152	9.5	-5.11	26.07
153	27.6	12.99	168.85
154	29.1	14.49	210.08
155	19.6	4.99	24.94
156	10.0	-4.61	21.21
157	19.5	4.89	23.95
158	21.3	6.69	44.81
159	12.1	-2.51	6.28
160	7.4	-7.21	51.92
161	22.7	8.09	65.52
162	13.0	-1.61	2.58
163	15.0	0.39	0.16
164	11.4	-3.21	10.28
165	10.5	-4.11	16.86
166	20.4	5.79	33.57
167	10.3	-4.31	18.54
168	12.9	-1.71	2.91
169	6.6	-8.01	64.09
170	10.4	-4.21	17.69
171	8.7	-5.91	34.88
172	17.1	2.49	6.22
173	9.2	-5.41	29.22
174	11.2	-3.41	11.60
175	7.0	-7.61	57.85
176	17.0	2.39	5.73
177	21.9	7.29	53.21
178	21.9	7.29	53.21
179	11.1	-3.51	12.29
180	15.9	1.29	1.68
181	8.9	-5.71	32.56
182	13.5	-1.11	1.22
183	10.9	-3.71	13.73
184	16.3	1.69	2.87
185	22.9	8.29	68.79
186	10.6	-4.01	16.05
187	12.2	-2.41	5.79
188	8.7	-5.91	34.88
189	15.7	1.09	1.20
190	18.0	3.39	11.52
191	8.7	-5.91	34.88
192	15.1	0.49	0.24
193	7.5	-7.11	50.49
194	7.3	-7.31	53.37
195	11.7	-2.91	8.44
196	13.9	-0.71	0.50
197	15.2	0.59	0.35
198	9.0	-5.61	31.42
199	12.2	-2.41	5.79
200	10.8	-3.81	14.48
	687.1		1512.5
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
201	31.1	16.49	272.06
202	25.9	11.29	127.56
203	30.4	15.79	249.46
204	29.9	15.29	233.91
205	10.2	-4.41	19.41
206	19.4	4.79	22.99
207	14.9	0.29	0.09
208	19.8	5.19	26.98
209	31.3	16.69	278.70
210	12.4	-2.21	4.87
211	13.5	-1.11	1.22
212	15.9	1.29	1.68
213	12.3	-2.31	5.32
214	15.8	1.19	1.43
215	26.9	12.29	151.15
216	16.8	2.19	4.81
217	8.5	-6.11	37.28
218	8.0	-6.61	43.64
219	10.4	-4.21	17.69
220	9.7	-4.91	24.07
221	12.9	-1.71	2.91
222	8.9	-5.71	32.56
223	10.1	-4.51	20.30
224	19.3	4.69	22.04
225	22.8	8.19	67.15
226	30.8	16.19	262.25
227	17.9	3.29	10.85
228	18.8	4.19	17.59
229	21.4	6.79	46.16
230	20.9	6.29	39.62
231	32.2	17.59	309.56
232	18.6	3.99	15.95
233	16.4	1.79	3.22
234	13.4	-1.21	1.45
235	11.8	-2.81	7.87
236	13.0	-1.61	2.58
237	21.1	6.49	42.18
238	28.4	13.79	190.28
239	8.0	-6.61	43.64
240	21.5	6.89	47.53
241	6.9	-7.71	59.38
242	6.8	-7.81	60.93
243	8.2	-6.41	41.03
244	9.2	-5.41	29.22
245	11.6	-3.01	9.03
246	11.2	-3.41	11.60
247	10.3	-4.31	18.54
248	13.8	-0.81	0.65
249	15.6	0.99	0.99
250	11.4	-3.21	10.28
	836.3		2951.6
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
251	21.6	6.99	48.92
252	10.3	-4.31	18.54
253	19.9	5.29	28.03
254	23.3	8.69	75.59
255	12.2	-2.41	5.79
256	17.1	2.49	6.22
257	9.9	-4.71	22.14
258	6.0	-8.61	74.06
259	17.7	3.09	9.57
260	16.4	1.79	3.22
261	14.0	-0.61	0.37
262	13.6	-1.01	1.01
263	13.2	-1.41	1.98
264	28.4	13.79	190.28
265	7.5	-7.11	50.49
266	7.5	-7.11	50.49
267	11.2	-3.41	11.60
268	13.2	-1.41	1.98
269	10.7	-3.91	15.25
270	9.9	-4.71	22.14
271	10.2	-4.41	19.41
272	27.1	12.49	156.11
273	19.6	4.99	24.94
274	21.2	6.59	43.48
275	18.2	3.59	12.92
276	15.9	1.29	1.68
277	11.2	-3.41	11.60
278	16.0	1.39	1.94
279	12.0	-2.61	6.79
280	19.6	4.99	24.94
281	12.0	-2.61	6.79
282	29.1	14.49	210.08
283	19.7	5.09	25.95
284	15.4	0.79	0.63
285	14.3	-0.31	0.09
286	27.7	13.09	171.46
287	8.9	-5.71	32.56
288	21.8	7.19	51.76
289	7.7	-6.91	47.69
290	8.8	-5.81	33.71
291	17.3	2.69	7.26
292	7.7	-6.91	47.69
293	18.1	3.49	12.21
294	23.3	8.69	75.59
295	19.8	5.19	26.98
296	16.7	2.09	4.39
297	22.3	7.69	59.20
298	34.4	19.79	391.81
299	21.8	7.19	51.76
300	19.1	4.49	20.20
	820.5		2219.3
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
301	25.0	10.39	108.04
302	19.0	4.39	19.31
303	23.6	8.99	80.90
304	13.7	-0.91	0.82
305	24.7	10.09	101.89
306	38.1	23.49	551.98
307	35.5	20.89	436.57
308	22.5	7.89	62.32
309	14.4	-0.21	0.04
310	9.9	-4.71	22.14
311	20.4	5.79	33.57
312	13.9	-0.71	0.50
313	8.4	-6.21	38.51
314	7.9	-6.71	44.97
315	13.0	-1.61	2.58
316	16.0	1.39	1.94
317	9.3	-5.31	28.15
318	9.7	-4.91	24.07
319	9.5	-5.11	26.07
320	10.0	-4.61	21.21
321	16.2	1.59	2.54
322	17.0	2.39	5.73
323	12.1	-2.51	6.28
324	13.2	-1.41	1.98
325	21.9	7.29	53.21
326	16.4	1.79	3.22
327	21.7	7.09	50.33
328	11.0	-3.61	13.00
329	10.4	-4.21	17.69
330	37.0	22.39	501.50
331	17.5	2.89	8.38
332	14.4	-0.21	0.04
333	14.3	-0.31	0.09
334	11.0	-3.61	13.00
335	9.9	-4.71	22.14
336	41.8	27.19	739.53
337	6.7	-7.91	62.50
338	13.4	-1.21	1.45
339	12.4	-2.21	4.87
340	10.4	-4.21	17.69
341	10.9	-3.71	13.73
342	15.0	0.39	0.16
343	10.2	-4.41	19.41
344	13.2	-1.41	1.98
345	17.5	2.89	8.38
346	10.3	-4.31	18.54
347	23.8	9.19	84.53
348	14.9	0.29	0.09
349	15.6	0.99	0.99
350	18.5	3.89	15.17
	823.1		3293.7
	Sum(n)		Sum(n-N)²

CIMARRON CORPORATION - CIMARRON FACILITY
TRUE MEAN ACTIVITY VS. GUIDELINE VALUE AT 95% CONFIDENCE
PHASE III SUB - AREA " O " WASTE POND # 2 (0 TO 9 FEET)

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
351	26.6	11.99	143.86
352	27.8	13.19	174.09
353	19.7	5.09	25.95
354	43.3	28.69	823.36
355	41.6	26.99	728.69
356	22.6	7.99	63.91
357	15.1	0.49	0.24
358	13.5	-1.11	1.22
359	43.3	28.69	823.36
360	15.8	1.19	1.43
361	6.1	-8.51	72.35
362	7.3	-7.31	53.37
363	9.2	-5.41	29.22
364	21.0	6.39	40.89
365	20.3	5.69	32.42
366	18.3	3.69	13.65
367	7.7	-6.91	47.69
368	25.2	10.59	112.24
369	7.4	-7.21	51.92
370	10.0	-4.61	21.21
371	6.3	-8.31	68.99
372	11.4	-3.21	10.28
373	8.7	-5.91	34.88
374	9.9	-4.71	22.14
375	10.1	-4.51	20.30
376	26.8	12.19	148.70
377	7.5	-7.11	50.49
378	24.7	10.09	101.89
379	5.8	-8.81	77.54
380	7.7	-6.91	47.69
381	6.5	-8.11	65.70
382	7.7	-6.91	47.69
383	5.7	-8.91	79.31
384	8.0	-6.61	43.64
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400			
	548.6		4080.323
	Sum(n)		Sum(n-N)²

n = pCi/g TOTAL U

Number	n	(n-N)	(n-N)²
401			
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	Sum(n)		Sum(n-N)²