Table 73. Uranium concentrations in alluvial ground water samples upgradient of the Homestake Site, Grants, New Mexico, March 1976 to November 1998

Well ID	DD	ND	P	P1	P2	P3	P4	Q	R	All wells	914	916	920	921	922	950	All Wells
1st sampling date	03-Jun-76	12-Jan-83	30-Mar-76	21-Sep-92	21-Sep-92	23-Apr-98	24-Apr-98	30-Mar-76	30-Mar-76	30-Mar-76	10-Jan-83	21-Feb-94	03-Nov-81	28-Feb-94	03-Nov-81	28-Feb-94	03-Nov-81
Most recent sampling date	01-Apr-98	05-Aug-98	12-Nov-98	28-Oct-98	28-Oct-98	23-Apr-98	24-Apr-98	04-Mar-98	06-May-98	12-Nov-98	12-May-98	12-May-98	12-May-98	12-May-98	12-May-98	25-Jan-96	12-May-98
Total number of measurments	56	13	132	32	31	1	1	100	110	476	6	5	18	5	6	3	43
Number of independent measurements	50	13	97	26	25	1	1	77	76	366	6	5	17	5	6	3	42
Percent nondect of total number of measurements	0.00%	7.69%	7.58%	0.00%	6.45%	0.00%	0.00%	12.00%	30.00%	12.20%	66.67%	20.00%	5.56%	0.00%	16.67%	0.00%	16.30%
Minimum	0.03392	0.00424	<0.00848	0.00848	0.005	0.024	0.022	<0.00848	0.003392	0.003392	0.001	0.007	<0.00848	0.148	0.003	0.06	0.001
Median	0.1272	0.056	0.0417	0.03	0.0275	0.024	0.022	0.0407	0.01688	0.03623	0.00462	0.008	0.09328	0.182	0.0081	0.093	0.0483
Mean	0.13	0.0562277	0.05149801	0.0292036	0.0274864	0.024	0.022	0.0460669	0.02369703	0.05166	0.00359	0.00746	0.09204659	0.174	0.00940667	0.1063333	0.0683
Maximum	0.20352	0.11872	0.7208	0.0416	0.0494	0.024	0.022	0.31376	0.11024	0.7208	0.005	0.009	0.185	0.192	0.019	0.166	0.192
Percent greater than or equal to the NRC site standard (0.04mg/L)	96.00%	69.23%	54.64%	7.69%	12.00%	0.00%	0.00%	51.95%	18.42%	46.20%	0.00%	0.00%	82.35%	100.00%	0.00%	100.00%	52.38%

Table 74. Uranium Near Upgradient Background Data Set (data not corrected for non-detects or duplicates)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
DD	03-Jun-76	Uranium	Homestake	None	0.07632
DD	27-Aug-76	Uranium	Homestake	None	0.10176
DD	15-Sep-81	Uranium	Homestake	None	0.11872
DD	24-Mar-82	Uranium	Homestake	None	0.16112
DD	26-May-82	Uranium	Homestake	None	0.14416
DD	18-Nov-82	Uranium	Homestake	None	0.09328
DD	18-Nov-82	Uranium	Homestake	None	0.09328
DD	04-Mar-83	Uranium	Homestake	None	0.10176
DD	28-Jun-83	Uranium	Homestake	None	0.1272
DD	28-Jun-83	Uranium	NM EID	None	0.18
DD	14-Sep-83	Uranium	Homestake	None	0.09328
DD	19-Dec-83	Uranium	Homestake	None	0.111936
DD	07-Mar-84	Uranium	Homestake	None	0.125504
DD	09-May-84	Uranium	Homestake	None	0.11024
DD	09-May-84	Uranium	Controls for Env	None	0.018
DD	12-Sep-84	Uranium	Homestake	None	0.11194
DD	12-Dec-84	Uranium	Homestake	None	0.09328
DD	13-Mar-85	Uranium	Homestake	None	0.1272
DD	06-Jun-85	Uranium	Homestake	None	0.11872
DD	04-Sep-85	Uranium	Homestake	None	0.13568
DD	16-Dec-85	Uranium	Homestake	None	0.1272
DD	20-Mar-86	Uranium	Homestake	None	0.11872
DD	30-Jun-86	Uranium	Homestake	None	0.11024
DD	15-Sep-86	Uranium	Homestake	None	0.13568
DD	09-Dec-86	Uranium	Homestake	None	0.11024
DD	19-Mar-87	Uranium	Homestake	None	0.11024
DD	24-Jun-87	Uranium	Homestake	None	0.03392
DD	15-Sep-87	Uranium	Homestake	None	0.14416
DD	08-Dec-87	Uranium	Homestake	None	0.11872
DD	24-Feb-88	Uranium	Homestake	None	0.10176
DD	09-Jun-88	Uranium	Homestake	None	0.14416
DD	11-Oct-88	Uranium	Homestake	None	0.14416
DD	08-Dec-88	Uranium	Homestake	None	0.10176
DD	13-Dec-88	Uranium	Homestake	None	0.09328
DD	13-Dec-88	Uranium	Barringer Lab	None	0.229
DD	11-Jan-89	Uranium	Homestake	None	0.07632
DD	11-Jan-89	Uranium	Barringer Lab	None	0.204
DD	15-Feb-89	Uranium	Homestake	None	0.1272
DD	15-Feb-89	Uranium	Barringer Lab	None	0.245
DD	29-Mar-89	Uranium	Homestake	None	0.0848
DD	13-Jun-89	Uranium	Homestake	None	0.05936
DD	15-Nov-89	Uranium	Homestake	None	0.03392
DD	13-Mar-90	Uranium	Homestake	None	0.13568
DD	12-Sep-90	Uranium	Homestake	None	0.17808
DD	27-Feb-91	Uranium	Homestake	None	0.20352
DD	16-Sep-91	Uranium	Homestake	None	0.15264

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
DD	09-Mar-92	Uranium	Homestake	None	0.13568
DD	22-Sep-92	Uranium	Homestake	None	0.10176
DD	21-Oct-93	Uranium	Energy Lab	None	0.147
DD	09-Mar-94	Uranium	Energy Lab	None	0.182
DD	21-Oct-94	Uranium	Energy Lab	None	0.155
DD	10-Oct-95	Uranium	Energy Lab	None	0.163
DD	10-Oct-96	Uranium	Energy Lab	None	0.162
DD	14-Apr-97	Uranium	Energy Lab	None	0.188
DD	09-Sep-97	Uranium	Energy Lab	None	0.147
DD	01-Apr-98	Uranium	Energy Lab	None	0.175
ND	12-Jan-83	Uranium	Homestake	None	0.06784
ND	06-Jan-84	Uranium	Homestake	Less than	0.00848
ND	18-Dec-89	Uranium	Homestake	None	0.10176
ND	17-Oct-90	Uranium	Homestake	None	0.11872
ND	16-Sep-91	Uranium	Homestake	None	0.05936
ND	18-Aug-92	Uranium	Homestake	None	0.0424
ND	25-Aug-93	Uranium	Energy Laboratories	None	0.02544
ND	14-Mar-94	Uranium	Energy Laboratories	None	0.064
ND	22-Aug-94	Uranium	Energy Laboratories	None	0.028
ND	22-Aug-95	Uranium	Energy Laboratories	None	0.038
ND	29-Jul-96	Uranium	Energy Laboratories	None	0.0529
ND	11-Aug-97	Uranium	Energy Laboratories	None	0.056
ND	05-Aug-98	Uranium	Energy Laboratories	None	0.0723
P	30-Mar-76	Uranium	Homestake	None	0.1696
P	09-Apr-76	Uranium	Homestake	None	0.7208
P	03-Jun-76	Uranium	Homestake	None	0.07632
P	27-Aug-76	Uranium	Homestake	None	0.0848
P	13-Jun-77	Uranium	Eberline	None	0.07
P	13-Jun-77	Uranium	Homestake	None	0.05936
P	13-Jun-77	Uranium	NM EID	None	0.07
P	24-Aug-77	Uranium	Eberline	None	0.06
P	24-Aug-77	Uranium	Homestake	None	0.07632
P	24-Aug-77	Uranium	NM EID	None	0.06
P	11-Oct-77	Uranium	NM EID	None	0.06
P	11-Oct-77	Uranium	Homestake	None	0.05088
P	01-Feb-78	Uranium	NM EID	None	0.02
P	01-Feb-78	Uranium	Homestake	None	0.01696
P	17-Apr-78	Uranium	Homestake	None	0.14416
P	11-Jul-78	Uranium	NM EID	None	0.06
P	11-Jul-78	Uranium	Homestake	None	0.06784
P	23-Oct-78	Uranium	Homestake	None	0.0424
P	23-Oct-78	Uranium	NM EID	None	0.06
P	30-Jan-79	Uranium	Homestake	None	0.07632
P	30-Jan-79	Uranium	NM EID	None	0.052
P	30-Apr-79	Uranium	Homestake	None	0.05936
P	30-Apr-79	Uranium	NM EID	None	0.06
P	12-Jul-79	Uranium	Homestake	None	0.0424
P	06-Nov-79	Uranium	Homestake	None	0.00848
P	09-Jan-80	Uranium	Homestake	Less than	0.00848
P	16-Apr-80	Uranium	Homestake	Less than	0.00848
P	17-Apr-80	Uranium	NM EID	None	0.06

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
P	16-Jul-80	Uranium	Homestake	Less than	0.00848
P	16-Jul-80	Uranium	NM EID	None	0.05
P	13-Oct-80	Uranium	Homestake	Less than	0.00848
P	07-Jan-81	Uranium	Homestake	None	0.01696
P	07-Jan-81	Uranium	NM EID	U-Nat	0.048
P	15-Apr-81	Uranium	Homestake	Less than	0.00848
P	15-Apr-81	Uranium	NM EID	U-Nat	0.047
P	07-Jul-81	Uranium	Homestake	Less than	0.00848
P	15-Sep-81	Uranium	Homestake	Less than	0.00848
P	07-Oct-81	Uranium	Homestake	None	0.07632
P	28-Dec-81	Uranium	NM EID	U-Nat	0.043
P	28-Dec-81	Uranium	Homestake	Less than	0.00848
P	24-Mar-82	Uranium	Homestake	None	0.02544
P	24-Mar-82	Uranium	NM EID	U-Nat	0.04
P	22-May-82	Uranium	Homestake	Less than	0.00848
P	25-Aug-82	Uranium	Homestake	None	0.00848
P	18-Nov-82	Uranium	Assaigai Lab	None	0.3
P	18-Nov-82	Uranium	Homestake	None	0.05088
P	23-Feb-83	Uranium	Homestake	None	0.01696
P	23-Feb-83	Uranium	Homestake	None	0.01696
P	26-May-83	Uranium	Homestake	None	0.027136
P	27-Jun-83	Uranium	Homestake	None	0.02544
P	27-Jun-83	Uranium	NM EID	None	0.048
P	12-Sep-83	Uranium	Homestake	None	0.027136
P	19-Dec-83	Uranium	Homestake	None	0.02713
P	07-Mar-84	Uranium	Homestake	None	0.047488
P	07-Mar-84	Uranium	Homestake	None	0.047488
P	09-May-84	Uranium	Controls for Environmental Pollution	None	0.006
P	09-May-84	Uranium	Homestake	None	0.02544
P	12-Sep-84	Uranium	Homestake	None	0.10176
P	13-Dec-84	Uranium	Homestake	None	0.02544
P	11-Mar-85	Uranium	Controls for Environmental Pollution	None	0.039008
P	11-Mar-85	Uranium	Homestake	None	0.03392
P	29-May-85	Uranium	Homestake	None	0.03392
P	04-Sep-85	Uranium	Controls for Environmental Pollution	None	0.03816
P	04-Sep-85	Uranium	Homestake	None	0.05088
P	16-Dec-85	Uranium	Homestake	None	0.02544
P	10-Mar-86	Uranium	Controls for Environmental Pollution	None	0.052
P	10-Mar-86	Uranium	Homestake	None	0.03392
P	30-Jun-86	Uranium	Homestake	None	0.02544
P	15-Sep-86	Uranium	Controls for Environmental Pollution	None	0.05
P	15-Sep-86	Uranium	Homestake	None	0.03392

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
P	06-Dec-86	Uranium	Controls for Environmental Pollution	None	0.03816
P	16-Dec-86	Uranium	Homestake	None	0.01696
P	19-Mar-87	Uranium	Controls for Environmental Pollution	None	0.03
P	19-Mar-87	Uranium	Homestake	None	0.01696
P	24-Jun-87	Uranium	Homestake	None	0.00848
P	16-Sep-87	Uranium	Controls for Environmental Pollution	None	0.036
P	16-Sep-87	Uranium	Homestake	None	0.07632
P	08-Dec-87	Uranium	Homestake	None	0.02544
P	24-Feb-88	Uranium	Homestake	None	0.01696
P	24-Feb-88	Uranium	Barringer Laboratories Inc.	None	0.0465
P	12-May-88	Uranium	Homestake	None	0.11024
P	23-Aug-88	Uranium	Homestake	None	0.0424
P	23-Aug-88	Uranium	Barringer Laboratories Inc.	None	0.039
P	12-Oct-88	Uranium	Homestake	None	0.03392
P	13-Dec-88	Uranium	Homestake	None	0.0424
P	13-Dec-88	Uranium	Barringer Laboratories Inc.	None	0.041
P	11-Jan-89	Uranium	Homestake	None	0.02544
P	11-Jan-89	Uranium	Barringer Laboratories Inc.	None	0.0368
P	15-Feb-89	Uranium	Homestake	None	0.0424
P	15-Feb-89	Uranium	Barringer Laboratories Inc.	None	0.0399
P	16-May-89	Uranium	Homestake	None	0.03392
P	10-Aug-89	Uranium	Homestake	None	0.03392
P	15-Nov-89	Uranium	Homestake	None	0.00848
P	13-Mar-90	Uranium	Homestake	None	0.05088
P	04-Jun-90	Uranium	Homestake	None	0.02544
P	12-Sep-90	Uranium	Homestake	None	0.0848
P	03-Dec-90	Uranium	Homestake	None	0.02544
P	03-Dec-90	Uranium	Barringer Laboratories Inc.	None	0.0391
P	27-Feb-91	Uranium	Homestake	None	0.05936
P	03-Jun-91	Uranium	Homestake	Less than	0.00848
P	16-Sep-91	Uranium	Homestake	None	0.0424
P	18-Nov-91	Uranium	Homestake	None	0.06784
P	09-Mar-92	Uranium	Homestake	None	0.0424
P	04-Jun-92	Uranium	Homestake	None	0.05936
P	21-Sep-92	Uranium	Homestake	None	0.00848
P	03-Dec-92	Uranium	Homestake	None	0.05088
P	03-Mar-93	Uranium	Homestake	None	0.06784
P	01-Jun-93	Uranium	Homestake	None	0.03392
P	08-Sep-93	Uranium	Energy Laboratories	None	0.061
P	24-Nov-93	Uranium	Energy Laboratories	None	0.049

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
P	01-Mar-94	Uranium	Energy Laboratories	None	0.059
P	31-May-94	Uranium	Energy Laboratories	None	0.052
P	01-Sep-94	Uranium	Energy Laboratories	None	0.05
P	28-Nov-94	Uranium	Energy Laboratories	None	0.053
P	16-Mar-95	Uranium	Energy Laboratories	None	0.047
P	16-Mar-95	Uranium	Energy Laboratories	None	0.048
P	06-Jun-95	Uranium	Energy Laboratories	None	0.0636
P	05-Sep-95	Uranium	Energy Laboratories	None	0.054
P	05-Dec-95	Uranium	Energy Laboratories	None	0.0493
P	05-Dec-95	Uranium	Energy Laboratories	None	0.0506
P	11-Mar-96	Uranium	Energy Laboratories	None	0.046
P	03-Jun-96	Uranium	Energy Laboratories	None	0.056
P	17-Sep-96	Uranium	Energy Laboratories	None	0.0393
P	10-Oct-96	Uranium	Energy Laboratories	None	0.0652
P	06-Mar-97	Uranium	Energy Laboratories	None	0.044
P	27-May-97	Uranium	Energy Laboratories	None	0.045
P	09-Sep-97	Uranium	Energy Laboratories	None	0.04
P	09-Sep-97	Uranium	Energy Laboratories	Quality Control	0.04
P	03-Nov-97	Uranium	Energy Laboratories	None	0.051
P	04-Mar-98	Uranium	Energy Laboratories	None	0.0511
P	04-Mar-98	Uranium	Energy Laboratories	Quality Control	0.0474
P	05-May-98	Uranium	Energy Laboratories	None	0.0344
P	16-Sep-98	Uranium	Energy Laboratories	None	0.0409
P	12-Nov-98	Uranium	Energy Laboratories	None	0.032
P	12-Nov-98	Uranium	ACZ Laboratories	Quality Control	0.0299
P	12-Nov-98	Uranium	Energy Laboratories	Quality Control	0.03
P1	21-Sep-92	Uranium	Homestake	None	0.00848
P1	21-Jan-93	Uranium	Energy Laboratories	None	0.026288
P1	21-Jan-93	Uranium	Homestake	None	0.01696
P1	13-Apr-93	Uranium	Homestake	None	0.01696
P1	13-Jul-93	Uranium	Homestake	None	0.00848
P1	21-Oct-93	Uranium	Energy Laboratories	None	0.03
P1	04-Jan-94	Uranium	Energy Laboratories	None	0.026
P1	07-Mar-94	Uranium	Energy Laboratories	None	0.038
P1	12-Apr-94	Uranium	Energy Laboratories	None	0.028
P1	06-Jul-94	Uranium	Energy Laboratories	None	0.033
P1	21-Oct-94	Uranium	Energy Laboratories	None	0.028
P1	04-Jan-95	Uranium	Energy Laboratories	None	0.026
P1	04-Jan-95	Uranium	Energy Laboratories	None	0.031
P1	12-Apr-95	Uranium	Energy Laboratories	None	0.032
P1	06-Jul-95	Uranium	Energy Laboratories	None	0.0383
P1	03-Oct-95	Uranium	Energy Laboratories	None	0.03
P1	10-Jan-96	Uranium	Energy Laboratories	None	0.031
P1	10-Jan-96	Uranium	Energy Laboratories	None	0.032
P1	09-Apr-96	Uranium	Energy Laboratories	None	0.033
P1	09-Apr-96	Uranium	Energy Laboratories	None	0.034
P1	19-Jul-96	Uranium	Energy Laboratories	None	0.028
P1	19-Jul-96	Uranium	Energy Laboratories	None	0.029

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
P1	04-Nov-96	Uranium	Energy Laboratories	None	0.0308
P1	04-Nov-96	Uranium	Energy Laboratories	None	0.0315
P1	13-Jan-97	Uranium	Energy Laboratories	Quality Control	0.028
P1	13-Jan-97	Uranium	Energy Laboratories	None	0.024
P1	14-Apr-97	Uranium	Energy Laboratories	None	0.029
P1	14-Apr-97	Uranium	Energy Laboratories	Quality Control	0.03
P1	08-Jul-97	Uranium	Energy Laboratories	None	0.036
P1	03-Nov-97	Uranium	Energy Laboratories	None	0.031
P1	19-Jan-98	Uranium	Energy Laboratories	None	0.035
P1	19-Jan-98	Uranium	Energy Laboratories	Quality Control	0.0354
P1	01-Apr-98	Uranium	Energy Laboratories	None	0.0297
P1	01-Apr-98	Uranium	Energy Laboratories	Quality Control	0.0567
P1	14-Jul-98	Uranium	Energy Laboratories	None	0.0416
P1	28-Oct-98	Uranium	Energy Laboratories	None	0.041
P2	21-Sep-92	Uranium	Homestake	None	0.00848
P2	08-Feb-93	Uranium	Energy Laboratories	None	0.0212
P2	08-Feb-93	Uranium	Homestake	None	0.01696
P2	04-May-93	Uranium	Energy Laboratories	None	0.02544
P2	04-May-93	Uranium	Homestake	None	0.05088
P2	12-Aug-93	Uranium	Homestake	Less than	0.00848
P2	01-Nov-93	Uranium	Energy Laboratories	None	0.025
P2	01-Nov-93	Uranium	Energy Laboratories	None	0.028
P2	02-Feb-94	Uranium	Energy Laboratories	None	0.02
P2	07-Mar-94	Uranium	Energy Laboratories	None	0.041
P2	29-Apr-94	Uranium	Energy Laboratories	None	0.005
P2	29-Apr-94	Uranium	Energy Laboratories	Less than	0.01
P2	01-Aug-94	Uranium	Energy Laboratories	None	0.03
P2	01-Nov-94	Uranium	Energy Laboratories	None	0.031
P2	03-Feb-95	Uranium	Energy Laboratories	None	0.027
P2	05-May-95	Uranium	Energy Laboratories	None	0.025
P2	02-Aug-95	Uranium	Energy Laboratories	None	0.025
P2	02-Aug-95	Uranium	Energy Laboratories	None	0.025
P2	06-Nov-95	Uranium	Energy Laboratories	None	0.029
P2	12-Feb-96	Uranium	Energy Laboratories	None	0.033
P2	14-May-96	Uranium	Energy Laboratories	None	0.027
P2	14-May-96	Uranium	Energy Laboratories	None	0.028
P2	29-Jul-96	Uranium	Energy Laboratories	None	0.0316
P2	03-Feb-97	Uranium	Energy Laboratories	None	0.035
P2	03-Feb-97	Uranium	Energy Laboratories	Quality Control	0.028
P2	29-Apr-97	Uranium	Energy Laboratories	None	0.029
P2	29-Apr-97	Uranium	Energy Laboratories	Quality Control	0.027
P2	28-Jul-97	Uranium	Energy Laboratories	None	0.027
P2	28-Jul-97	Uranium	Energy Laboratories	Quality Control	0.022
P2	13-Oct-97	Uranium	Energy Laboratories	None	0.026

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
P2	10-Feb-98	Uranium	Energy Laboratories	Quality Control	0.033
P2	10-Feb-98	Uranium	Energy Laboratories	None	0.0274
P2	05-May-98	Uranium	Energy Laboratories	None	0.0286
P2	04-Aug-98	Uranium	Energy Laboratories	None	0.0432
P2	28-Oct-98	Uranium	Energy Laboratories	None	0.0494
P3	23-Apr-98	Uranium	Energy Laboratories	None	0.024
P4	24-Apr-98	Uranium	Energy Laboratories	None	0.022
Q	30-Mar-76	Uranium	Homestake	None	0.1696
Q	09-Apr-76	Uranium	Homestake	None	0.0848
Q	03-Jun-76	Uranium	Homestake	None	0.05088
Q	27-Aug-76	Uranium	Homestake	None	0.0848
Q	13-Jun-77	Uranium	Eberline	None	0.05
Q	13-Jun-77	Uranium	Homestake	None	0.02544
Q	24-Aug-77	Uranium	Eberline	None	0.08
Q	24-Aug-77	Uranium	Homestake	None	0.11872
Q	11-Oct-77	Uranium	Eberline	None	0.07
Q	11-Oct-77	Uranium	Homestake	None	0.06784
Q	01-Feb-78	Uranium	Homestake	None	0.01696
Q	17-Apr-78	Uranium	Homestake	None	0.09328
Q	10-Jul-78	Uranium	NM EID	None	0.06
Q	10-Jul-78	Uranium	Homestake	None	0.06784
Q	23-Oct-78	Uranium	Homestake	None	0.02544
Q	23-Oct-78	Uranium	NM EID	None	0.05
Q	30-Jan-79	Uranium	Homestake	None	0.05936
Q	30-Jan-79	Uranium	NM EID	None	0.056
Q	30-Apr-79	Uranium	Homestake	None	0.09328
Q	30-Apr-79	Uranium	NM EID	None	0.055
Q	12-Jul-79	Uranium	Homestake	None	0.07632
Q	10-Sep-79	Uranium	Homestake	Less than	0.00848
Q	06-Nov-79	Uranium	Homestake	None	0.00848
Q	09-Jan-80	Uranium	Homestake	None	0.05088
Q	16-Apr-80	Uranium	Homestake	Less than	0.00848
Q	17-Apr-80	Uranium	NM EID	None	0.053
Q	16-Jul-80	Uranium	Homestake	Less than	0.00848
Q	16-Jul-80	Uranium	NM EID	None	0.047
Q	13-Oct-80	Uranium	Homestake	Less than	0.00848
Q	07-Jan-81	Uranium	Homestake	Less than	0.00848
Q	07-Jan-81	Uranium	NM EID	U-Nat	0.063
Q	15-Apr-81	Uranium	Homestake	Less than	0.00848
Q	15-Apr-81	Uranium	NM EID	U-Nat	0.058
Q	07-Jul-81	Uranium	Homestake	Less than	0.00848
Q	15-Sep-81	Uranium	Homestake	Less than	0.00848
Q	07-Oct-81	Uranium	Homestake	Less than	0.00848
Q	28-Dec-81	Uranium	Homestake	Less than	0.00848
Q	28-Dec-81	Uranium	NM EID	U-Nat	0.061
Q	28-Dec-81	Uranium	Homestake	Less than	0.00848
Q	24-Mar-82	Uranium	Homestake	None	0.03392
Q	24-Mar-82	Uranium	NM EID	None	0.047
Q	22-May-82	Uranium	Homestake	None	0.00848
Q	25-Aug-82	Uranium	Homestake	None	0.00848
Q	18-Nov-82	Uranium	Homestake	None	0.02544

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
Q	23-Feb-83	Uranium	Homestake	None	0.02544
Q	23-Feb-83	Uranium	Homestake	None	0.02544
Q	26-May-83	Uranium	Homestake	None	0.02544
Q	28-Jun-83	Uranium	Homestake	None	0.02544
Q	28-Jun-83	Uranium	NM EID	None	0.059
Q	21-Sep-83	Uranium	Homestake	None	0.03392
Q	19-Dec-83	Uranium	Homestake	None	0.0407
Q	07-Mar-84	Uranium	Homestake	None	0.037312
Q	09-May-84	Uranium	Controls for Environmental Pollution	None	0.013
Q	09-May-84	Uranium	Homestake	None	0.03392
Q	12-Sep-84	Uranium	Homestake	None	0.037312
Q	12-Dec-84	Uranium	Homestake	None	0.03392
Q	11-Mar-85	Uranium	Homestake	None	0.03392
Q	29-May-85	Uranium	Homestake	None	0.03392
Q	06-Sep-85	Uranium	Homestake	None	0.0424
Q	16-Dec-85	Uranium	Homestake	None	0.02544
Q	16-Dec-85	Uranium	Homestake	None	0.02544
Q	10-Mar-86	Uranium	Homestake	None	0.0424
Q	30-Jun-86	Uranium	Homestake	None	0.03392
Q	15-Sep-86	Uranium	Homestake	None	0.0424
Q	15-Dec-86	Uranium	Controls for Environmental Pollution	None	0.050032
Q	15-Dec-86	Uranium	Homestake	Less than	0.01
Q	19-Mar-87	Uranium	Homestake	None	0.03392
Q	19-Jun-87	Uranium	Homestake	None	0.0424
Q	15-Sep-87	Uranium	Homestake	None	0.02544
Q	08-Dec-87	Uranium	Homestake	None	0.02544
Q	24-Feb-88	Uranium	Homestake	None	0.03392
Q	12-May-88	Uranium	Homestake	None	0.05936
Q	23-Aug-88	Uranium	Homestake	None	0.0424
Q	03-Nov-88	Uranium	Homestake	None	0.0424
Q	13-Dec-88	Uranium	Homestake	None	0.05936
Q	13-Dec-88	Uranium	Barringer Laboratories Inc.	None	0.0454
Q	11-Jan-89	Uranium	Homestake	None	0.02544
Q	11-Jan-89	Uranium	Barringer Laboratories Inc.	None	0.0501
Q	15-Feb-89	Uranium	Homestake	None	0.03392
Q	15-Feb-89	Uranium	Barringer Laboratories Inc.	None	0.0512
Q	16-May-89	Uranium	Homestake	None	0.31376
Q	15-Nov-89	Uranium	Homestake	None	0.00848
Q	13-Mar-90	Uranium	Homestake	None	0.06784
Q	12-Sep-90	Uranium	Homestake	None	0.05936
Q	27-Feb-91	Uranium	Homestake	None	0.09328
Q	16-Sep-91	Uranium	Homestake	None	0.06784
Q	09-Mar-92	Uranium	Homestake	None	0.05088
Q	16-Sep-92	Uranium	Homestake	None	0.02544
Q	03-Mar-93	Uranium	Homestake	None	0.05088

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
Q	08-Sep-93	Uranium	Energy Laboratories	None	0.026
Q	01-Mar-94	Uranium	Energy Laboratories	None	0.053
Q	01-Mar-94	Uranium	Energy Laboratories	None	0.079
Q	01-Sep-94	Uranium	Energy Laboratories	None	0.043
Q	16-Mar-95	Uranium	Energy Laboratories	None	0.046
Q	05-Sep-95	Uranium	Energy Laboratories	None	0.052
Q	11-Mar-96	Uranium	Energy Laboratories	None	0.046
Q	17-Sep-96	Uranium	Energy Laboratories	None	0.0413
Q	06-Mar-97	Uranium	Energy Laboratories	None	0.051
Q	09-Sep-97	Uranium	Energy Laboratories	None	0.043
Q	04-Mar-98	Uranium	Energy Laboratories	None	0.0538
R	30-Mar-76	Uranium	Homestake	None	0.00848
R	09-Apr-76	Uranium	Homestake	None	0.0424
R	03-Jun-76	Uranium	Homestake	None	0.02544
R	01-Sep-76	Uranium	Homestake	None	0.0848
R	13-Jun-77	Uranium	Eberline	None	0.02
R	13-Jun-77	Uranium	Homestake	None	0.06784
R	24-Aug-77	Uranium	Eberline	None	0.02
R	24-Aug-77	Uranium	Homestake	None	0.02544
R	11-Oct-77	Uranium	Eberline	Less than	0.01
R	11-Oct-77	Uranium	Homestake	None	0.02544
R	01-Feb-78	Uranium	Homestake	None	0.01696
R	17-Apr-78	Uranium	Homestake	None	0.09328
R	10-Jul-78	Uranium	Homestake	None	0.0424
R	23-Oct-78	Uranium	Homestake	None	0.0424
R	23-Oct-78	Uranium	NM EID	Less than	0.0229
R	31-Jan-79	Uranium	Homestake	None	0.05936
R	31-Jan-79	Uranium	NM EID	None	0.027
R	30-Apr-79	Uranium	Homestake	None	0.05088
R	30-Apr-79	Uranium	NM EID	None	0.024
R	12-Jul-79	Uranium	Homestake	None	0.07632
R	06-Nov-79	Uranium	Homestake	None	0.00848
R	07-Jan-80	Uranium	NM EID	U-Nat	0.025
R	09-Jan-80	Uranium	Homestake	Less than	0.00848
R	16-Apr-80	Uranium	Homestake	Less than	0.00848
R	17-Apr-80	Uranium	NM EID	None	0.015
R	16-Jul-80	Uranium	Homestake	Less than	0.00848
R	16-Jul-80	Uranium	NM EID	None	0.012
R	13-Oct-80	Uranium	Homestake	Less than	0.00848
R	07-Jan-81	Uranium	Homestake	Less than	0.00848
R	15-Apr-81	Uranium	Homestake	Less than	0.00848
R	15-Apr-81	Uranium	NM EID	U-Nat	0.052
R	07-Jul-81	Uranium	Homestake	Less than	0.00848
R	15-Sep-81	Uranium	Homestake	Less than	0.00848
R	28-Dec-81	Uranium	Homestake	Less than	0.00848
R	28-Dec-81	Uranium	NM EID	U-Nat	0.018
R	24-Mar-82	Uranium	Homestake	Less than	0.00848
R	24-Mar-82	Uranium	NM EID	U-Nat	0.014
R	22-May-82	Uranium	Homestake	Less than	0.00848
R	22-May-82	Uranium	Homestake	Less than	0.00848
R	25-Aug-82	Uranium	Homestake	Less than	0.00848
R	18-Nov-82	Uranium	Homestake	None	0.003392

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
R	18-Nov-82	Uranium	Homestake	Less than	0.00848
R	22-Feb-83	Uranium	Homestake	Less than	0.00848
R	23-Feb-83	Uranium	Homestake	None	0.00848
R	26-May-83	Uranium	Homestake	Less than	0.00848
R	28-Jun-83	Uranium	Homestake	Less than	0.00848
R	28-Jun-83	Uranium	NM EID	None	0.02
R	12-Sep-83	Uranium	Homestake	None	0.003392
R	20-Dec-83	Uranium	Homestake	None	0.0814
R	07-Mar-84	Uranium	Homestake	None	0.01017
R	09-May-84	Uranium	Controls for Environmental Pollution	None	0.008
R	09-May-84	Uranium	Homestake	Less than	0.01
R	12-Sep-84	Uranium	Homestake	Less than	0.01
R	12-Dec-84	Uranium	Homestake	Less than	0.01
R	11-Mar-85	Uranium	Controls for Environmental Pollution	None	0.020352
R	11-Mar-85	Uranium	Homestake	Less than	0.01
R	29-May-85	Uranium	Homestake	Less than	0.01
R	04-Sep-85	Uranium	Homestake	Less than	0.01
R	05-Sep-85	Uranium	Controls for Environmental Pollution	None	0.055968
R	05-Sep-85	Uranium	Homestake	Less than	0.01
R	16-Dec-85	Uranium	Homestake	Less than	0.01
R	16-Dec-85	Uranium	Homestake	Less than	0.01
R	10-Mar-86	Uranium	Controls for Environmental Pollution	None	0.021
R	10-Mar-86	Uranium	Homestake	None	0.00848
R	30-Jun-86	Uranium	Homestake	Less than	0.01
R	15-Sep-86	Uranium	Controls for Environmental Pollution	None	0.02
R	15-Sep-86	Uranium	Homestake	None	0.00848
R	15-Dec-86	Uranium	Controls for Environmental Pollution	None	0.126352
R	15-Dec-86	Uranium	Homestake	None	0.03392
R	19-Mar-87	Uranium	Controls for Environmental Pollution	None	0.03
R	19-Mar-87	Uranium	Homestake	Less than	0.01
R	19-Jun-87	Uranium	Homestake	None	0.01696
R	15-Sep-87	Uranium	Controls for Environmental Pollution	None	0.028
R	15-Sep-87	Uranium	Homestake	None	0.03392
R	08-Dec-87	Uranium	Homestake	Less than	0.01
R	24-Feb-88	Uranium	Homestake	Less than	0.01

Table 74. Uranium Near Upgradient Background Data Set
(data not corrected for non-detects or duplicates) (continued)

Well Name	Sample Date	Parameter Code	Lab Code	Remark Code	Value (mg/l)
R	24-Feb-88	Uranium	Barringer Laboratories Inc.	None	0.0259
R	12-May-88	Uranium	Homestake	None	0.03392
R	22-Aug-88	Uranium	Homestake	None	0.01696
R	22-Aug-88	Uranium	Barringer Laboratories Inc.	None	0.0167
R	03-Nov-88	Uranium	Homestake	None	0.03392
R	13-Dec-88	Uranium	Homestake	None	0.0424
R	13-Dec-88	Uranium	Barringer Laboratories Inc.	None	0.023
R	11-Jan-89	Uranium	Homestake	None	0.01696
R	11-Jan-89	Uranium	Barringer Laboratories Inc.	None	0.0169
R	15-Feb-89	Uranium	Homestake	None	0.01696
R	15-Feb-89	Uranium	Barringer Laboratories Inc.	None	0.018
R	16-May-89	Uranium	Homestake	None	0.0424
R	15-Nov-89	Uranium	Homestake	None	0.00848
R	13-Mar-90	Uranium	Homestake	None	0.01696
R	12-Sep-90	Uranium	Homestake	None	0.11024
R	27-Feb-91	Uranium	Homestake	None	0.06784
R	16-Sep-91	Uranium	Homestake	None	0.06784
R	09-Mar-92	Uranium	Homestake	None	0.01696
R	16-Sep-92	Uranium	Energy Laboratories	None	0.01696
R	16-Sep-92	Uranium	Homestake	Less than	0.00848
R	01-Jun-93	Uranium	Homestake	None	0.0424
R	08-Sep-93	Uranium	Energy Laboratories	None	0.005
R	07-Mar-94	Uranium	Energy Laboratories	None	0.021
R	31-May-94	Uranium	Energy Laboratories	None	0.018
R	01-Sep-94	Uranium	Energy Laboratories	None	0.016
R	06-Jun-95	Uranium	Energy Laboratories	None	0.0253
R	06-Jun-95	Uranium	Energy Laboratories	None	0.0247
R	05-Sep-95	Uranium	Energy Laboratories	None	0.018
R	05-Sep-95	Uranium	Energy Laboratories	None	0.018
R	03-Jun-96	Uranium	Energy Laboratories	None	0.02
R	17-Sep-96	Uranium	Energy Laboratories	None	0.0142
R	10-Oct-96	Uranium	Energy Laboratories	None	0.0197
R	27-May-97	Uranium	Energy Laboratories	None	0.014
R	06-May-98	Uranium	Energy Laboratories	None	0.0178

Table 75. Uranium Near Upgradient Background Data Set for Well DD.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
03-Jun-76	Uranium	0.07632
27-Aug-76	Uranium	0.10176
15-Sep-81	Uranium	0.11872
24-Mar-82	Uranium	0.16112
26-May-82	Uranium	0.14416
18-Nov-82	Uranium	0.09328
04-Mar-83	Uranium	0.10176
28-Jun-83	Uranium	0.1536
14-Sep-83	Uranium	0.09328
19-Dec-83	Uranium	0.111936
07-Mar-84	Uranium	0.125504
09-May-84	Uranium	0.06412
12-Sep-84	Uranium	0.11194
12-Dec-84	Uranium	0.09328
13-Mar-85	Uranium	0.1272
06-Jun-85	Uranium	0.11872
04-Sep-85	Uranium	0.13568
16-Dec-85	Uranium	0.1272
20-Mar-86	Uranium	0.11872
30-Jun-86	Uranium	0.11024
15-Sep-86	Uranium	0.13568
09-Dec-86	Uranium	0.11024
19-Mar-87	Uranium	0.11024
24-Jun-87	Uranium	0.03392
15-Sep-87	Uranium	0.14416
08-Dec-87	Uranium	0.11872
24-Feb-88	Uranium	0.10176
09-Jun-88	Uranium	0.14416
11-Oct-88	Uranium	0.14416
08-Dec-88	Uranium	0.10176
13-Dec-88	Uranium	0.16114
11-Jan-89	Uranium	0.14016
15-Feb-89	Uranium	0.1861
29-Mar-89	Uranium	0.0848
13-Jun-89	Uranium	0.05936
15-Nov-89	Uranium	0.03392
13-Mar-90	Uranium	0.13568
12-Sep-90	Uranium	0.17808
27-Feb-91	Uranium	0.20352
16-Sep-91	Uranium	0.15264
09-Mar-92	Uranium	0.13568
22-Sep-92	Uranium	0.10176
21-Oct-93	Uranium	0.147
09-Mar-94	Uranium	0.182
21-Oct-94	Uranium	0.155
10-Oct-95	Uranium	0.163
10-Oct-96	Uranium	0.162
14-Apr-97	Uranium	0.188
09-Sep-97	Uranium	0.147
01-Apr-98	Uranium	0.175

Table 76. Uranium Near Upgradient Background Data Set for Well ND.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
12-Jan-83	Uranium	0.06784
06-Jan-84	Uranium	0.00424
18-Dec-89	Uranium	0.10176
17-Oct-90	Uranium	0.11872
16-Sep-91	Uranium	0.05936
18-Aug-92	Uranium	0.0424
25-Aug-93	Uranium	0.02544
14-Mar-94	Uranium	0.064
22-Aug-94	Uranium	0.028
22-Aug-95	Uranium	0.038
29-Jul-96	Uranium	0.0529
11-Aug-97	Uranium	0.056
05-Aug-98	Uranium	0.0723

Table 77. Uranium Near Upgradient Background Data Set for Well P.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
30-Mar-76	Uranium	0.1696
09-Apr-76	Uranium	0.7208
03-Jun-76	Uranium	0.07632
27-Aug-76	Uranium	0.0848
13-Jun-77	Uranium	0.066453333
24-Aug-77	Uranium	0.06544
11-Oct-77	Uranium	0.05544
01-Feb-78	Uranium	0.01848
17-Apr-78	Uranium	0.14416
11-Jul-78	Uranium	0.06392
23-Oct-78	Uranium	0.0512
30-Jan-79	Uranium	0.06416
30-Apr-79	Uranium	0.05968
12-Jul-79	Uranium	0.0424
06-Nov-79	Uranium	0.00848
09-Jan-80	Uranium	0.00424
16-Apr-80	Uranium	0.03212
16-Jul-80	Uranium	0.02712
13-Oct-80	Uranium	0.00424
07-Jan-81	Uranium	0.03248
15-Apr-81	Uranium	0.02562
07-Jul-81	Uranium	0.00424
15-Sep-81	Uranium	0.00424
07-Oct-81	Uranium	0.07632
28-Dec-81	Uranium	0.02362
24-Mar-82	Uranium	0.03272
22-May-82	Uranium	0.00424
25-Aug-82	Uranium	0.00848
18-Nov-82	Uranium	0.17544
23-Feb-83	Uranium	0.01696
26-May-83	Uranium	0.027136
27-Jun-83	Uranium	0.03672
12-Sep-83	Uranium	0.027136
19-Dec-83	Uranium	0.02713
07-Mar-84	Uranium	0.047488
09-May-84	Uranium	0.01572
12-Sep-84	Uranium	0.10176
13-Dec-84	Uranium	0.02544
11-Mar-85	Uranium	0.036464
29-May-85	Uranium	0.03392
04-Sep-85	Uranium	0.04452
16-Dec-85	Uranium	0.02544
10-Mar-86	Uranium	0.04296
30-Jun-86	Uranium	0.02544
15-Sep-86	Uranium	0.04196
06-Dec-86	Uranium	0.03816
16-Dec-86	Uranium	0.01696
19-Mar-87	Uranium	0.02348
24-Jun-87	Uranium	0.00848
16-Sep-87	Uranium	0.05616
08-Dec-87	Uranium	0.02544
24-Feb-88	Uranium	0.03173
12-May-88	Uranium	0.11024

Table 77. Uranium Near Upgradient Background Data Set for Well P (continued).
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
23-Aug-88	Uranium	0.0407
12-Oct-88	Uranium	0.03392
13-Dec-88	Uranium	0.0417
11-Jan-89	Uranium	0.03112
15-Feb-89	Uranium	0.04115
16-May-89	Uranium	0.03392
10-Aug-89	Uranium	0.03392
15-Nov-89	Uranium	0.00848
13-Mar-90	Uranium	0.05088
04-Jun-90	Uranium	0.02544
12-Sep-90	Uranium	0.0848
03-Dec-90	Uranium	0.03227
27-Feb-91	Uranium	0.05936
03-Jun-91	Uranium	0.00424
16-Sep-91	Uranium	0.0424
18-Nov-91	Uranium	0.06784
09-Mar-92	Uranium	0.0424
04-Jun-92	Uranium	0.05936
21-Sep-92	Uranium	0.00848
03-Dec-92	Uranium	0.05088
03-Mar-93	Uranium	0.06784
01-Jun-93	Uranium	0.03392
08-Sep-93	Uranium	0.061
24-Nov-93	Uranium	0.049
01-Mar-94	Uranium	0.059
31-May-94	Uranium	0.052
01-Sep-94	Uranium	0.05
28-Nov-94	Uranium	0.053
16-Mar-95	Uranium	0.0475
06-Jun-95	Uranium	0.0636
05-Sep-95	Uranium	0.054
05-Dec-95	Uranium	0.04995
11-Mar-96	Uranium	0.046
03-Jun-96	Uranium	0.056
17-Sep-96	Uranium	0.0393
10-Oct-96	Uranium	0.0652
06-Mar-97	Uranium	0.044
27-May-97	Uranium	0.045
09-Sep-97	Uranium	0.04
03-Nov-97	Uranium	0.051
04-Mar-98	Uranium	0.0511
05-May-98	Uranium	0.0344
16-Sep-98	Uranium	0.0409
12-Nov-98	Uranium	0.032

Table 78. Uranium Near Upgradient Background Data Set for Well P1.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
21-Sep-92	Uranium	0.00848
21-Jan-93	Uranium	0.021624
13-Apr-93	Uranium	0.01696
13-Jul-93	Uranium	0.00848
21-Oct-93	Uranium	0.03
04-Jan-94	Uranium	0.026
07-Mar-94	Uranium	0.038
12-Apr-94	Uranium	0.028
06-Jul-94	Uranium	0.033
21-Oct-94	Uranium	0.028
04-Jan-95	Uranium	0.0285
12-Apr-95	Uranium	0.032
06-Jul-95	Uranium	0.0383
03-Oct-95	Uranium	0.03
10-Jan-96	Uranium	0.0315
09-Apr-96	Uranium	0.0335
19-Jul-96	Uranium	0.0285
04-Nov-96	Uranium	0.03115
13-Jan-97	Uranium	0.024
14-Apr-97	Uranium	0.029
08-Jul-97	Uranium	0.036
03-Nov-97	Uranium	0.031
19-Jan-98	Uranium	0.035
01-Apr-98	Uranium	0.0297
14-Jul-98	Uranium	0.0416
28-Oct-98	Uranium	0.041

Table 79. Uranium Near Upgradient Background Data Set for Well P2.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
21-Sep-92	Uranium	0.00848
08-Feb-93	Uranium	0.01908
04-May-93	Uranium	0.03816
12-Aug-93	Uranium	0.00424
01-Nov-93	Uranium	0.0265
02-Feb-94	Uranium	0.02
07-Mar-94	Uranium	0.041
29-Apr-94	Uranium	0.005
01-Aug-94	Uranium	0.03
01-Nov-94	Uranium	0.031
03-Feb-95	Uranium	0.027
05-May-95	Uranium	0.025
02-Aug-95	Uranium	0.025
06-Nov-95	Uranium	0.029
12-Feb-96	Uranium	0.033
14-May-96	Uranium	0.0275
29-Jul-96	Uranium	0.0316
03-Feb-97	Uranium	0.035
29-Apr-97	Uranium	0.029
28-Jul-97	Uranium	0.027
13-Oct-97	Uranium	0.026
10-Feb-98	Uranium	0.0274
05-May-98	Uranium	0.0286
04-Aug-98	Uranium	0.0432
28-Oct-98	Uranium	0.0494

Table 80. Uranium Near Upgradient Background Data Set for Wells P3 and P4.
(corrected for non-detects and duplicates)

Well Name	Sample Date	Parameter Code	Final Data Set
P3	23-Apr-98	Uranium	0.024
P4	24-Apr-98	Uranium	0.022

Table 81. Uranium Near Upgradient Background Data Set for Well Q.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
30-Mar-76	Uranium	0.1696
09-Apr-76	Uranium	0.0848
03-Jun-76	Uranium	0.05088
27-Aug-76	Uranium	0.0848
13-Jun-77	Uranium	0.03772
24-Aug-77	Uranium	0.09936
11-Oct-77	Uranium	0.06892
01-Feb-78	Uranium	0.01696
17-Apr-78	Uranium	0.09328
10-Jul-78	Uranium	0.06392
23-Oct-78	Uranium	0.03772
30-Jan-79	Uranium	0.05768
30-Apr-79	Uranium	0.07414
12-Jul-79	Uranium	0.07632
10-Sep-79	Uranium	0.00424
06-Nov-79	Uranium	0.00848
09-Jan-80	Uranium	0.05088
16-Apr-80	Uranium	0.02862
16-Jul-80	Uranium	0.02562
13-Oct-80	Uranium	0.00424
07-Jan-81	Uranium	0.03362
15-Apr-81	Uranium	0.03112
07-Jul-81	Uranium	0.00424
15-Sep-81	Uranium	0.00424
07-Oct-81	Uranium	0.00424
28-Dec-81	Uranium	0.02316
24-Mar-82	Uranium	0.04046
22-May-82	Uranium	0.00848
25-Aug-82	Uranium	0.00848
18-Nov-82	Uranium	0.02544
23-Feb-83	Uranium	0.02544
26-May-83	Uranium	0.02544
28-Jun-83	Uranium	0.04222
21-Sep-83	Uranium	0.03392
19-Dec-83	Uranium	0.0407
07-Mar-84	Uranium	0.037312
09-May-84	Uranium	0.02346
12-Sep-84	Uranium	0.037312
12-Dec-84	Uranium	0.03392
11-Mar-85	Uranium	0.03392
29-May-85	Uranium	0.03392
06-Sep-85	Uranium	0.0424
16-Dec-85	Uranium	0.02544
10-Mar-86	Uranium	0.0424
30-Jun-86	Uranium	0.03392
15-Sep-86	Uranium	0.0424

Table 81. Uranium Near Upgradient Background Data Set for Well Q (continued).
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
15-Dec-86	Uranium	0.027516
19-Mar-87	Uranium	0.03392
19-Jun-87	Uranium	0.0424
15-Sep-87	Uranium	0.02544
08-Dec-87	Uranium	0.02544
24-Feb-88	Uranium	0.03392
12-May-88	Uranium	0.05936
23-Aug-88	Uranium	0.0424
03-Nov-88	Uranium	0.0424
13-Dec-88	Uranium	0.05238
11-Jan-89	Uranium	0.03777
15-Feb-89	Uranium	0.04256
16-May-89	Uranium	0.31376
15-Nov-89	Uranium	0.00848
13-Mar-90	Uranium	0.06784
12-Sep-90	Uranium	0.05936
27-Feb-91	Uranium	0.09328
16-Sep-91	Uranium	0.06784
09-Mar-92	Uranium	0.05088
16-Sep-92	Uranium	0.02544
03-Mar-93	Uranium	0.05088
08-Sep-93	Uranium	0.026
01-Mar-94	Uranium	0.066
01-Sep-94	Uranium	0.043
16-Mar-95	Uranium	0.046
05-Sep-95	Uranium	0.052
11-Mar-96	Uranium	0.046
17-Sep-96	Uranium	0.0413
06-Mar-97	Uranium	0.051
09-Sep-97	Uranium	0.043
04-Mar-98	Uranium	0.0538

Table 82. Uranium Near Upgradient Background Data Set for Well R.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
30-Mar-76	Uranium	0.00848
09-Apr-76	Uranium	0.0424
03-Jun-76	Uranium	0.02544
01-Sep-76	Uranium	0.0848
13-Jun-77	Uranium	0.04392
24-Aug-77	Uranium	0.02272
11-Oct-77	Uranium	0.01522
01-Feb-78	Uranium	0.01696
17-Apr-78	Uranium	0.09328
10-Jul-78	Uranium	0.0424
23-Oct-78	Uranium	0.026925
31-Jan-79	Uranium	0.04318
30-Apr-79	Uranium	0.03744
12-Jul-79	Uranium	0.07632
06-Nov-79	Uranium	0.00848
07-Jan-80	Uranium	0.01462
16-Apr-80	Uranium	0.00962
16-Jul-80	Uranium	0.00812
13-Oct-80	Uranium	0.00424
07-Jan-81	Uranium	0.00424
15-Apr-81	Uranium	0.02812
07-Jul-81	Uranium	0.00424
15-Sep-81	Uranium	0.00424
28-Dec-81	Uranium	0.01112
24-Mar-82	Uranium	0.00912
22-May-82	Uranium	0.00424
25-Aug-82	Uranium	0.00424
18-Nov-82	Uranium	0.003816
22-Feb-83	Uranium	0.00636
26-May-83	Uranium	0.00424
28-Jun-83	Uranium	0.01212
12-Sep-83	Uranium	0.003392
20-Dec-83	Uranium	0.0814
07-Mar-84	Uranium	0.01017
09-May-84	Uranium	0.0065
12-Sep-84	Uranium	0.005
12-Dec-84	Uranium	0.005
11-Mar-85	Uranium	0.012676
29-May-85	Uranium	0.005
04-Sep-85	Uranium	0.021989333
16-Dec-85	Uranium	0.005
10-Mar-86	Uranium	0.01474
30-Jun-86	Uranium	0.005
15-Sep-86	Uranium	0.01424
15-Dec-86	Uranium	0.080136
19-Mar-87	Uranium	0.0175

Table 82. Uranium Near Upgradient Background Data Set for Well R (continued).
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
19-Jun-87	Uranium	0.01696
15-Sep-87	Uranium	0.03096
08-Dec-87	Uranium	0.005
24-Feb-88	Uranium	0.01545
12-May-88	Uranium	0.03392
22-Aug-88	Uranium	0.01683
03-Nov-88	Uranium	0.03392
13-Dec-88	Uranium	0.0327
11-Jan-89	Uranium	0.01693
15-Feb-89	Uranium	0.01748
16-May-89	Uranium	0.0424
15-Nov-89	Uranium	0.00848
13-Mar-90	Uranium	0.01696
12-Sep-90	Uranium	0.11024
27-Feb-91	Uranium	0.06784
16-Sep-91	Uranium	0.06784
09-Mar-92	Uranium	0.01696
16-Sep-92	Uranium	0.0106
01-Jun-93	Uranium	0.0424
08-Sep-93	Uranium	0.005
07-Mar-94	Uranium	0.021
31-May-94	Uranium	0.018
01-Sep-94	Uranium	0.016
06-Jun-95	Uranium	0.025
05-Sep-95	Uranium	0.018
03-Jun-96	Uranium	0.02
17-Sep-96	Uranium	0.0142
10-Oct-96	Uranium	0.0197
27-May-97	Uranium	0.014
06-May-98	Uranium	0.0178

Table 83. Uranium Near Upgradient Background Groundwater Data Set Used in Statistical Analysis
(all concentrations in mg/L)

Well ID								
DD	ND	P	P1	P2	P3	P4	Q	R
0.20352	0.11872	0.7208	0.0416	0.0494	0.024	0.022	0.31376	0.11024
0.188	0.10176	0.17544	0.041	0.0432			0.1696	0.09328
0.1861	0.0723	0.1696	0.0383	0.041			0.09936	0.0848
0.182	0.06784	0.14416	0.038	0.03816			0.09328	0.0814
0.17808	0.064	0.11024	0.036	0.035			0.09328	0.080136
0.175	0.05936	0.10176	0.035	0.033			0.0848	0.07632
0.163	0.056	0.0848	0.0335	0.0316			0.0848	0.06784
0.162	0.0529	0.0848	0.033	0.031			0.07632	0.06784
0.16114	0.0424	0.07632	0.032	0.03			0.07414	0.04392
0.16112	0.038	0.07632	0.0315	0.029			0.06892	0.04318
0.155	0.028	0.06784	0.03115	0.029			0.06784	0.0424
0.1536	0.02544	0.06784	0.031	0.0286			0.06784	0.0424
0.15264	0.00424	0.0664533	0.03	0.0275			0.066	0.0424
0.147		0.06544	0.03	0.0274			0.06392	0.0424
0.147		0.0652	0.0297	0.027			0.05936	0.03744
0.14416		0.06416	0.029	0.027			0.05936	0.03392
0.14416		0.06392	0.0285	0.0265			0.05768	0.03392
0.14416		0.0636	0.0285	0.026			0.0538	0.0327
0.14416		0.061	0.028	0.025			0.05238	0.03096
0.14016		0.05968	0.028	0.025			0.052	0.02812
0.13568		0.05936	0.026	0.02			0.051	0.026925
0.13568		0.05936	0.024	0.01908			0.05088	0.02544
0.13568		0.059	0.021624	0.00848			0.05088	0.025
0.13568		0.05616	0.01696	0.005			0.05088	0.02272
0.1272		0.056	0.00848	0.00424			0.05088	0.0219893
0.1272		0.05544	0.00848				0.046	0.021
0.125504		0.054					0.046	0.02
0.11872		0.053					0.043	0.0197
0.11872		0.052					0.043	0.018
0.11872		0.0512					0.04256	0.018
0.11872		0.0511					0.0424	0.0178
0.11194		0.051					0.0424	0.0175
0.111936		0.05088					0.0424	0.01748
0.11024		0.05088					0.0424	0.01696
0.11024		0.05					0.0424	0.01696
0.11024		0.04995					0.0424	0.01696
0.10176		0.049					0.04222	0.01696
0.10176		0.0475					0.0413	0.01693
0.10176		0.047488					0.0407	0.01683
0.10176		0.046					0.04046	0.016
0.10176		0.045					0.03777	0.01545
0.09328		0.04452					0.03772	0.01522
0.09328		0.044					0.03772	0.01474
0.09328		0.04296					0.037312	0.01462
0.0848		0.0424					0.037312	0.01424
0.07632		0.0424					0.03392	0.0142

Table 83. Uranium Near Upgradient Background Groundwater Data Set Used in Statistical Analysis (all concentrations in mg/L) (continued)

Well ID								
DD	ND	P	P1	P2	P3	P4	Q	R
0.06412		0.0424					0.03392	0.014
0.05936		0.04196					0.03392	0.012676
0.03392		0.0417					0.03392	0.01212
0.03392		0.04115					0.03392	0.01112
		0.0409					0.03392	0.0106
		0.0407					0.03392	0.01017
		0.04					0.03362	0.00962
		0.0393					0.03112	0.00912
		0.03816					0.02862	0.00848
		0.03672					0.027516	0.00848
		0.036464					0.026	0.00848
		0.0344					0.02562	0.00812
		0.03392					0.02544	0.0065
		0.03392					0.02544	0.00636
		0.03392					0.02544	0.005
		0.03392					0.02544	0.005
		0.03392					0.02544	0.005
		0.03272					0.02544	0.005
		0.03248					0.02544	0.005
		0.03227					0.02346	0.005
		0.03212					0.02316	0.005
		0.032					0.01696	0.00424
		0.03173					0.00848	0.00424
		0.03112					0.00848	0.00424
		0.027136					0.00848	0.00424
		0.027136					0.00848	0.00424
		0.02713					0.00424	0.00424
		0.02712					0.00424	0.00424
		0.02562					0.00424	0.003816
		0.02544					0.00424	0.003392
		0.02544					0.00424	
		0.02544						
		0.02544						
		0.02544						
		0.02362						
		0.02348						
		0.01848						
		0.01696						
		0.01696						
		0.01572						
		0.00848						

Table 83. Uranium Near Upgradient Background Groundwater Data Set Used in Statistical Analysis (all concentrations in mg/L) (continued)

Well ID								
DD	ND	P	P1	P2	P3	P4	Q	R
		0.00848						
		0.00848						
		0.00848						
		0.00848						
		0.00424						
		0.00424						
		0.00424						
		0.00424						
		0.00424						
		0.00424						

Table 84. Uranium Near Upgradient Background Data Set, A Priori Screening

Parameter	Maximum Value	Next Maximum Value	Multiplicative Factor	Results
Uranium	0.7208	0.31376	2.3	**PASS**

Table 85. Uranium Near Upgradient Background Data Set, Coefficient of Variation Analysis

Parameter	Mean	Standard Deviation	Coefficient of Variation	Results
Uranium,normal	0.0516639	0.0564146	1.09	**Fail**
Uranium, lognormal	-3.378416	0.9641056	-0.29	**Pass**

Table 86. Uranium Near Upgradient Background Data Set, Studentized Range Test Analysis

Parameter	Range		Standard Deviation	Critical Values		W/S	Results
	Maximum	Minimum		Maximum	Minimum		
Uranium, normal	0.7208	0.003392	0.06	6.94	5.47	12.72	**FAIL**

w = range of values
s = standard deviation

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.003392	1.151E-05	-0.048272	0.048271895
0.003816	1.456E-05	-0.047848	0.047847895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.00424	1.798E-05	-0.047424	0.047423895
0.005	0.000025	-0.046664	0.046663895
0.005	0.000025	-0.046664	0.046663895
0.005	0.000025	-0.046664	0.046663895
0.005	0.000025	-0.046664	0.046663895
0.005	0.000025	-0.046664	0.046663895
0.005	0.000025	-0.046664	0.046663895
0.005	0.000025	-0.046664	0.046663895
0.005	0.000025	-0.046664	0.046663895
0.00636	4.045E-05	-0.045304	0.045303895
0.0065	4.225E-05	-0.045164	0.045163895
0.00812	6.593E-05	-0.043544	0.043543895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895
0.00848	7.191E-05	-0.043184	0.043183895

0.0516639 =mean
18.908986 = sum of Xi
2.138563 = sum of Xi^2
366 = count

1.1616511 = SSS
12.652378 = SAD

0.6136119 = alpha

-16.6 = Z

Critical value = 1.645

abs(Z)>critical value, thus failed test.

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.00848	7.191E-05	-0.043184	0.043183895
0.00912	8.317E-05	-0.042544	0.042543895
0.00962	9.254E-05	-0.042044	0.042043895
0.01017	0.0001034	-0.041494	0.041493895
0.0106	0.0001124	-0.041064	0.041063895
0.01112	0.0001237	-0.040544	0.040543895
0.01212	0.0001469	-0.039544	0.039543895
0.012676	0.0001607	-0.038988	0.038987895
0.014	0.000196	-0.037664	0.037663895
0.0142	0.0002016	-0.037464	0.037463895
0.01424	0.0002028	-0.037424	0.037423895
0.01462	0.0002137	-0.037044	0.037043895
0.01474	0.0002173	-0.036924	0.036923895
0.01522	0.0002316	-0.036444	0.036443895
0.01545	0.0002387	-0.036214	0.036213895
0.01572	0.0002471	-0.035944	0.035943895
0.016	0.000256	-0.035664	0.035663895
0.01683	0.0002832	-0.034834	0.034833895
0.01693	0.0002866	-0.034734	0.034733895
0.01696	0.0002876	-0.034704	0.034703895
0.01696	0.0002876	-0.034704	0.034703895
0.01696	0.0002876	-0.034704	0.034703895
0.01696	0.0002876	-0.034704	0.034703895
0.01696	0.0002876	-0.034704	0.034703895
0.01696	0.0002876	-0.034704	0.034703895
0.01696	0.0002876	-0.034704	0.034703895
0.01696	0.0002876	-0.034704	0.034703895
0.01748	0.0003056	-0.034184	0.034183895
0.0175	0.0003063	-0.034164	0.034163895
0.0178	0.0003168	-0.033864	0.033863895
0.018	0.000324	-0.033664	0.033663895
0.018	0.000324	-0.033664	0.033663895
0.01848	0.0003415	-0.033184	0.033183895
0.01908	0.000364	-0.032584	0.032583895
0.0197	0.0003881	-0.031964	0.031963895
0.02	0.0004	-0.031664	0.031663895
0.02	0.0004	-0.031664	0.031663895
0.021	0.000441	-0.030664	0.030663895
0.021624	0.0004676	-0.03004	0.030039895
0.0219893	0.0004835	-0.029675	0.029674562
0.022	0.000484	-0.029664	0.029663895
0.02272	0.0005162	-0.028944	0.028943895
0.02316	0.0005364	-0.028504	0.028503895
0.02346	0.0005504	-0.028204	0.028203895
0.02348	0.0005513	-0.028184	0.028183895
0.02362	0.0005579	-0.028044	0.028043895
0.024	0.000576	-0.027664	0.027663895

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	Xi^2	Xi-Mean	abs(Xi-mean)
0.024	0.000576	-0.027664	0.027663895
0.025	0.000625	-0.026664	0.026663895
0.025	0.000625	-0.026664	0.026663895
0.025	0.000625	-0.026664	0.026663895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02544	0.0006472	-0.026224	0.026223895
0.02562	0.0006564	-0.026044	0.026043895
0.02562	0.0006564	-0.026044	0.026043895
0.026	0.000676	-0.025664	0.025663895
0.026	0.000676	-0.025664	0.025663895
0.026	0.000676	-0.025664	0.025663895
0.0265	0.0007023	-0.025164	0.025163895
0.026925	0.000725	-0.024739	0.024738895
0.027	0.000729	-0.024664	0.024663895
0.027	0.000729	-0.024664	0.024663895
0.02712	0.0007355	-0.024544	0.024543895
0.02713	0.000736	-0.024534	0.024533895
0.027136	0.0007364	-0.024528	0.024527895
0.027136	0.0007364	-0.024528	0.024527895
0.0274	0.0007508	-0.024264	0.024263895
0.0275	0.0007563	-0.024164	0.024163895
0.027516	0.0007571	-0.024148	0.024147895
0.028	0.000784	-0.023664	0.023663895
0.028	0.000784	-0.023664	0.023663895
0.028	0.000784	-0.023664	0.023663895
0.02812	0.0007907	-0.023544	0.023543895
0.0285	0.0008123	-0.023164	0.023163895
0.0285	0.0008123	-0.023164	0.023163895
0.0286	0.000818	-0.023064	0.023063895
0.02862	0.0008191	-0.023044	0.023043895
0.029	0.000841	-0.022664	0.022663895
0.029	0.000841	-0.022664	0.022663895
0.029	0.000841	-0.022664	0.022663895
0.0297	0.0008821	-0.021964	0.021963895
0.03	0.0009	-0.021664	0.021663895

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.03	0.0009	-0.021664	**0.021663895**
0.03	0.0009	-0.021664	**0.021663895**
0.03096	0.0009585	-0.020704	**0.020703895**
0.031	0.000961	-0.020664	**0.020663895**
0.031	0.000961	-0.020664	**0.020663895**
0.03112	0.0009685	-0.020544	**0.020543895**
0.03112	0.0009685	-0.020544	**0.020543895**
0.03115	0.0009703	-0.020514	**0.020513895**
0.0315	0.0009923	-0.020164	**0.020163895**
0.0316	0.0009986	-0.020064	**0.020063895**
0.03173	0.0010068	-0.019934	**0.019933895**
0.032	0.001024	-0.019664	**0.019663895**
0.032	0.001024	-0.019664	**0.019663895**
0.03212	0.0010317	-0.019544	**0.019543895**
0.03227	0.0010414	-0.019394	**0.019393895**
0.03248	0.001055	-0.019184	**0.019183895**
0.0327	0.0010693	-0.018964	**0.018963895**
0.03272	0.0010706	-0.018944	**0.018943895**
0.033	0.001089	-0.018664	**0.018663895**
0.033	0.001089	-0.018664	**0.018663895**
0.0335	0.0011223	-0.018164	**0.018163895**
0.03362	0.0011303	-0.018044	**0.018043895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.03392	0.0011506	-0.017744	**0.017743895**
0.0344	0.0011834	-0.017264	**0.017263895**
0.035	0.001225	-0.016664	**0.016663895**
0.035	0.001225	-0.016664	**0.016663895**
0.036	0.001296	-0.015664	**0.015663895**
0.036464	0.0013296	-0.0152	**0.015199895**
0.03672	0.0013484	-0.014944	**0.014943895**
0.037312	0.0013922	-0.014352	**0.014351895**
0.037312	0.0013922	-0.014352	**0.014351895**
0.03744	0.0014018	-0.014224	**0.014223895**

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.03772	0.0014228	-0.013944	0.013943895
0.03772	0.0014228	-0.013944	0.013943895
0.03777	0.0014266	-0.013894	0.013893895
0.038	0.001444	-0.013664	0.013663895
0.038	0.001444	-0.013664	0.013663895
0.03816	0.0014562	-0.013504	0.013503895
0.03816	0.0014562	-0.013504	0.013503895
0.0383	0.0014669	-0.013364	0.013363895
0.0393	0.0015445	-0.012364	0.012363895
0.04	0.0016	-0.011664	0.011663895
0.04046	0.001637	-0.011204	0.011203895
0.0407	0.0016565	-0.010964	0.010963895
0.0407	0.0016565	-0.010964	0.010963895
0.0409	0.0016728	-0.010764	0.010763895
0.041	0.001681	-0.010664	0.010663895
0.041	0.001681	-0.010664	0.010663895
0.04115	0.0016933	-0.010514	0.010513895
0.0413	0.0017057	-0.010364	0.010363895
0.0416	0.0017306	-0.010064	0.010063895
0.0417	0.0017389	-0.009964	0.009963895
0.04196	0.0017606	-0.009704	0.009703895
0.04222	0.0017825	-0.009444	0.009443895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.0424	0.0017978	-0.009264	0.009263895
0.04256	0.0018114	-0.009104	0.009103895
0.04296	0.0018456	-0.008704	0.008703895
0.043	0.001849	-0.008664	0.008663895
0.043	0.001849	-0.008664	0.008663895
0.04318	0.0018645	-0.008484	0.008483895
0.0432	0.0018662	-0.008464	0.008463895
0.04392	0.001929	-0.007744	0.007743895
0.044	0.001936	-0.007664	0.007663895
0.04452	0.001982	-0.007144	0.007143895
0.045	0.002025	-0.006664	0.006663895
0.046	0.002116	-0.005664	0.005663895

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.046	0.002116	-0.005664	0.005663895
0.046	0.002116	-0.005664	0.005663895
0.047488	0.0022551	-0.004176	0.004175895
0.0475	0.0022563	-0.004164	0.004163895
0.049	0.002401	-0.002664	0.002663895
0.0494	0.0024404	-0.002264	0.002263895
0.04995	0.002495	-0.001714	0.001713895
0.05	0.0025	-0.001664	0.001663895
0.05088	0.0025888	-0.000784	0.000783895
0.05088	0.0025888	-0.000784	0.000783895
0.05088	0.0025888	-0.000784	0.000783895
0.05088	0.0025888	-0.000784	0.000783895
0.05088	0.0025888	-0.000784	0.000783895
0.05088	0.0025888	-0.000784	0.000783895
0.051	0.002601	-0.000664	0.000663895
0.051	0.002601	-0.000664	0.000663895
0.0511	0.0026112	-0.000564	0.000563895
0.0512	0.0026214	-0.000464	0.000463895
0.052	0.002704	0.0003361	0.000336105
0.052	0.002704	0.0003361	0.000336105
0.05238	0.0027437	0.0007161	0.000716105
0.0529	0.0027984	0.0012361	0.001236105
0.053	0.002809	0.0013361	0.001336105
0.0538	0.0028944	0.0021361	0.002136105
0.054	0.002916	0.0023361	0.002336105
0.05544	0.0030736	0.0037761	0.003776105
0.056	0.003136	0.0043361	0.004336105
0.056	0.003136	0.0043361	0.004336105
0.05616	0.0031539	0.0044961	0.004496105
0.05768	0.003327	0.0060161	0.006016105
0.059	0.003481	0.0073361	0.007336105
0.05936	0.0035236	0.0076961	0.007696105
0.05936	0.0035236	0.0076961	0.007696105
0.05936	0.0035236	0.0076961	0.007696105
0.05936	0.0035236	0.0076961	0.007696105
0.05936	0.0035236	0.0076961	0.007696105
0.05936	0.0035236	0.0076961	0.007696105
0.05968	0.0035617	0.0080161	0.008016105
0.061	0.003721	0.0093361	0.009336105
0.0636	0.004045	0.0119361	0.011936105
0.06392	0.0040858	0.0122561	0.012256105
0.06392	0.0040858	0.0122561	0.012256105
0.064	0.004096	0.0123361	0.012336105
0.06412	0.0041114	0.0124561	0.012456105
0.06416	0.0041165	0.0124961	0.012496105
0.0652	0.004251	0.0135361	0.013536105
0.06544	0.0042824	0.0137761	0.013776105

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.066	0.004356	0.0143361	0.014336105
0.0664533	0.004416	0.0147894	0.014789438
0.06784	0.0046023	0.0161761	0.016176105
0.06784	0.0046023	0.0161761	0.016176105
0.06784	0.0046023	0.0161761	0.016176105
0.06784	0.0046023	0.0161761	0.016176105
0.06784	0.0046023	0.0161761	0.016176105
0.06784	0.0046023	0.0161761	0.016176105
0.06784	0.0046023	0.0161761	0.016176105
0.06892	0.00475	0.0172561	0.017256105
0.0723	0.0052273	0.0206361	0.020636105
0.07414	0.0054967	0.0224761	0.022476105
0.07632	0.0058247	0.0246561	0.024656105
0.07632	0.0058247	0.0246561	0.024656105
0.07632	0.0058247	0.0246561	0.024656105
0.07632	0.0058247	0.0246561	0.024656105
0.07632	0.0058247	0.0246561	0.024656105
0.080136	0.0064218	0.0284721	0.028472105
0.0814	0.006626	0.0297361	0.029736105
0.0848	0.007191	0.0331361	0.033136105
0.0848	0.007191	0.0331361	0.033136105
0.0848	0.007191	0.0331361	0.033136105
0.0848	0.007191	0.0331361	0.033136105
0.0848	0.007191	0.0331361	0.033136105
0.0848	0.007191	0.0331361	0.033136105
0.09328	0.0087012	0.0416161	0.041616105
0.09328	0.0087012	0.0416161	0.041616105
0.09328	0.0087012	0.0416161	0.041616105
0.09328	0.0087012	0.0416161	0.041616105
0.09328	0.0087012	0.0416161	0.041616105
0.09328	0.0087012	0.0416161	0.041616105
0.09936	0.0098724	0.0476961	0.047696105
0.10176	0.0103551	0.0500961	0.050096105
0.10176	0.0103551	0.0500961	0.050096105
0.10176	0.0103551	0.0500961	0.050096105
0.10176	0.0103551	0.0500961	0.050096105
0.10176	0.0103551	0.0500961	0.050096105
0.10176	0.0103551	0.0500961	0.050096105
0.10176	0.0103551	0.0500961	0.050096105
0.11024	0.0121529	0.0585761	0.058576105
0.11024	0.0121529	0.0585761	0.058576105
0.11024	0.0121529	0.0585761	0.058576105
0.11024	0.0121529	0.0585761	0.058576105
0.11024	0.0121529	0.0585761	0.058576105
0.111936	0.0125297	0.0602721	0.060272105
0.11194	0.0125306	0.0602761	0.060276105
0.11872	0.0140944	0.0670561	0.067056105

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.11872	0.0140944	0.0670561	0.067056105
0.11872	0.0140944	0.0670561	0.067056105
0.11872	0.0140944	0.0670561	0.067056105
0.11872	0.0140944	0.0670561	0.067056105
0.125504	0.0157513	0.0738401	0.073840105
0.1272	0.0161798	0.0755361	0.075536105
0.1272	0.0161798	0.0755361	0.075536105
0.13568	0.0184091	0.0840161	0.084016105
0.13568	0.0184091	0.0840161	0.084016105
0.13568	0.0184091	0.0840161	0.084016105
0.13568	0.0184091	0.0840161	0.084016105
0.14016	0.0196448	0.0884961	0.088496105
0.14416	0.0207821	0.0924961	0.092496105
0.14416	0.0207821	0.0924961	0.092496105
0.14416	0.0207821	0.0924961	0.092496105
0.14416	0.0207821	0.0924961	0.092496105
0.14416	0.0207821	0.0924961	0.092496105
0.147	0.021609	0.0953361	0.095336105
0.147	0.021609	0.0953361	0.095336105
0.15264	0.023299	0.1009761	0.100976105
0.1536	0.023593	0.1019361	0.101936105
0.155	0.024025	0.1033361	0.103336105
0.16112	0.0259597	0.1094561	0.109456105
0.16114	0.0259661	0.1094761	0.109476105
0.162	0.026244	0.1103361	0.110336105
0.163	0.026569	0.1113361	0.111336105
0.1696	0.0287642	0.1179361	0.117936105
0.1696	0.0287642	0.1179361	0.117936105
0.175	0.030625	0.1233361	0.123336105
0.17544	0.0307792	0.1237761	0.123776105
0.17808	0.0317125	0.1264161	0.126416105
0.182	0.033124	0.1303361	0.130336105
0.1861	0.0346332	0.1344361	0.134436105
0.188	0.035344	0.1363361	0.136336105
0.20352	0.0414204	0.1518561	0.151856105
0.31376	0.0984453	0.2620961	0.262096105
0.7208	0.5195526	0.6691361	0.669136105

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-5.686336	32.334412	-2.30792	2.307919609
-5.568553	31.008777	-2.190137	2.190136573
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.463192	29.846467	-2.084776	2.084776058
-5.298317	28.072167	-1.919901	1.919901414
-5.298317	28.072167	-1.919901	1.919901414
-5.298317	28.072167	-1.919901	1.919901414
-5.298317	28.072167	-1.919901	1.919901414
-5.298317	28.072167	-1.919901	1.919901414
-5.298317	28.072167	-1.919901	1.919901414
-5.298317	28.072167	-1.919901	1.919901414
-5.298317	28.072167	-1.919901	1.919901414
-5.057727	25.580601	-1.679311	1.679310949
-5.035953	25.360824	-1.657537	1.65753715
-4.813425	23.169061	-1.435009	1.435009173
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877

-3.378416 =mean
-1236.5 = sum of Xi
4516.6795 = sum of Xi^2
366 = count

339.26737 = SSS
266.08586 = SAD

0.75511 = alpha

-3.9 = Z

Critical value = 1.645

abs(Z)>critical value, thus failed test.

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	Xi^2	Xi-Mean	abs(Xi-mean)
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.770045	22.753328	-1.391629	1.391628877
-4.697285	22.064491	-1.31887	1.318869523
-4.643911	21.56591	-1.265495	1.265495062
-4.588313	21.052617	-1.209897	1.209897117
-4.546901	20.674311	-1.168485	1.168485326
-4.49901	20.241091	-1.120594	1.120594038
-4.412898	19.473671	-1.034482	1.034482346
-4.368045	19.079816	-0.989629	0.989628885
-4.268698	18.221782	-0.890282	0.890281997
-4.254513	18.100884	-0.876097	0.876097362
-4.2517	18.076956	-0.873284	0.873284421
-4.225365	17.853708	-0.846949	0.846948872
-4.21719	17.784695	-0.838774	0.83877444
-4.185145	17.515438	-0.806729	0.806728974
-4.170146	17.39012	-0.79173	0.791730323
-4.152821	17.245926	-0.774406	0.77440554
-4.135167	17.099602	-0.756751	0.756750605
-4.084592	16.683894	-0.706176	0.706176319
-4.078668	16.635533	-0.700252	0.700252131
-4.076898	16.621094	-0.698482	0.698481696
-4.076898	16.621094	-0.698482	0.698481696
-4.076898	16.621094	-0.698482	0.698481696
-4.076898	16.621094	-0.698482	0.698481696
-4.076898	16.621094	-0.698482	0.698481696
-4.076898	16.621094	-0.698482	0.698481696
-4.076898	16.621094	-0.698482	0.698481696
-4.076898	16.621094	-0.698482	0.698481696
-4.046698	16.375764	-0.668282	0.668281957
-4.045554	16.36651	-0.667138	0.667138446
-4.028557	16.22927	-0.650141	0.650140869
-4.017384	16.13937	-0.638968	0.638967569
-4.017384	16.13937	-0.638968	0.638967569
-3.991066	15.92861	-0.61265	0.612650261
-3.959115	15.674589	-0.580699	0.580698661
-3.927137	15.422402	-0.548721	0.548720691
-3.912023	15.303924	-0.533607	0.533607053
-3.912023	15.303924	-0.533607	0.533607053
-3.863233	14.924568	-0.484817	0.484816889
-3.833951	14.699184	-0.455536	0.455535518
-3.817198	14.570999	-0.438782	0.438781839
-3.816713	14.567297	-0.438297	0.438296873
-3.78451	14.322514	-0.406094	0.406093733
-3.765329	14.1777	-0.386913	0.386912674
-3.752458	14.080944	-0.374042	0.374042484
-3.751606	14.07455	-0.37319	0.373190332

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-3.745661	14.02998	-0.367246	0.367245516
-3.729701	13.910673	-0.351285	0.351285496
-3.729701	13.910673	-0.351285	0.351285496
-3.688879	13.607832	-0.310464	0.310463502
-3.688879	13.607832	-0.310464	0.310463502
-3.688879	13.607832	-0.310464	0.310463502
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.671433	13.479417	-0.293017	0.293016588
-3.664382	13.427695	-0.285966	0.28596603
-3.664382	13.427695	-0.285966	0.28596603
-3.649659	13.320009	-0.271243	0.271242789
-3.649659	13.320009	-0.271243	0.271242789
-3.649659	13.320009	-0.271243	0.271242789
-3.630611	13.181333	-0.252195	0.252194594
-3.6147	13.066056	-0.236284	0.236284104
-3.611918	13.045955	-0.233502	0.233502461
-3.611918	13.045955	-0.233502	0.233502461
-3.607484	13.013939	-0.229068	0.229067864
-3.607115	13.01128	-0.228699	0.2286992
-3.606894	13.009684	-0.228478	0.228478067
-3.606894	13.009684	-0.228478	0.228478067
-3.597212	12.939936	-0.218796	0.218796313
-3.593569	12.91374	-0.215153	0.215153322
-3.592988	12.90956	-0.214572	0.214571673
-3.575551	12.784563	-0.197135	0.197134817
-3.575551	12.784563	-0.197135	0.197134817
-3.575551	12.784563	-0.197135	0.197134817
-3.571274	12.753999	-0.192858	0.19285826
-3.557851	12.658305	-0.179435	0.179435239
-3.557851	12.658305	-0.179435	0.179435239
-3.554349	12.633394	-0.175933	0.175932609
-3.55365	12.628425	-0.175234	0.175233553
-3.540459	12.534853	-0.162043	0.162043497
-3.540459	12.534853	-0.162043	0.162043497
-3.540459	12.534853	-0.162043	0.162043497

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-3.516608	12.366533	-0.138192	0.138192281
-3.506558	12.295948	-0.128142	0.128141945
-3.506558	12.295948	-0.128142	0.128141945
-3.506558	12.295948	-0.128142	0.128141945
-3.475059	12.076037	-0.096643	0.096643278
-3.473768	12.067065	-0.095352	0.095352122
-3.473768	12.067065	-0.095352	0.095352122
-3.469905	12.040238	-0.091489	0.091488627
-3.469905	12.040238	-0.091489	0.091488627
-3.468941	12.033552	-0.090525	0.090525082
-3.457768	11.956158	-0.079352	0.079351781
-3.454598	11.934248	-0.076182	0.076182206
-3.450493	11.9059	-0.072077	0.072076721
-3.442019	11.847497	-0.063603	0.063603424
-3.442019	11.847497	-0.063603	0.063603424
-3.438276	11.821745	-0.05986	0.059860438
-3.433617	11.789728	-0.055201	0.055201321
-3.427131	11.745225	-0.048715	0.048714811
-3.42038	11.699001	-0.041964	0.041964249
-3.419769	11.694818	-0.041353	0.041352815
-3.411248	11.636611	-0.032832	0.032831765
-3.411248	11.636611	-0.032832	0.032831765
-3.39621	11.534241	-0.017794	0.017793888
-3.392634	11.509966	-0.014218	0.014218199
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.38375	11.449767	-0.005335	0.005334516
-3.369699	11.354869	0.0087172	0.008717238
-3.352407	11.238634	0.0260087	0.026008735
-3.352407	11.238634	0.0260087	0.026008735
-3.324236	11.050547	0.0541796	0.054179612
-3.31143	10.965567	0.0669861	0.066986146
-3.304434	10.919282	0.0739822	0.073982239
-3.28844	10.81384	0.0899757	0.089975664

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-3.28844	10.81384	0.0899757	0.089975664
-3.285016	10.791328	0.0934003	0.093400325
-3.277565	10.742431	0.1008511	0.100851131
-3.277565	10.742431	0.1008511	0.100851131
-3.27624	10.733749	0.1021758	0.10217581
-3.270169	10.694006	0.1082468	0.108246833
-3.270169	10.694006	0.1082468	0.108246833
-3.265967	10.666543	0.1124485	0.11244852
-3.265967	10.666543	0.1124485	0.11244852
-3.262305	10.642636	0.1161106	0.116110569
-3.236531	10.475131	0.1418852	0.141885192
-3.218876	10.361162	0.1595401	0.159540127
-3.207441	10.287681	0.1709745	0.170974505
-3.201527	10.249776	0.1768888	0.176888766
-3.201527	10.249776	0.1768888	0.176888766
-3.196625	10.218413	0.1817907	0.181790736
-3.194183	10.202806	0.1842327	0.18423274
-3.194183	10.202806	0.1842327	0.18423274
-3.190531	10.17949	0.1878846	0.1878846
-3.186893	10.156286	0.1915232	0.191523173
-3.179655	10.110207	0.1987608	0.198760841
-3.177254	10.094944	0.2011618	0.201161802
-3.171038	10.055485	0.2073775	0.207377457
-3.164861	10.016347	0.2135547	0.213554716
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.160607	9.9894361	0.217809	0.217809035
-3.15684	9.9656415	0.2215755	0.221575518
-3.147486	9.906667	0.2309301	0.230930123
-3.146555	9.9008094	0.2318608	0.231860789
-3.146555	9.9008094	0.2318608	0.231860789
-3.142378	9.8745386	0.2360381	0.236038098
-3.141915	9.8716285	0.2365012	0.236501168
-3.125385	9.7680344	0.2530305	0.25303047
-3.123566	9.7566623	0.2548503	0.254850307
-3.111817	9.6834035	0.2665992	0.2665992

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-3.101093	9.6167765	0.2773232	0.277323163
-3.079114	9.4809423	0.2993021	0.29930207
-3.079114	9.4809423	0.2993021	0.29930207
-3.079114	9.4809423	0.2993021	0.29930207
-3.047278	9.2859046	0.3311377	0.331137721
-3.047026	9.2843648	0.3313904	0.331390384
-3.015935	9.0958638	0.362481	0.362480971
-3.007805	9.04689	0.3706111	0.370611097
-2.996733	8.9804073	0.3816832	0.381683178
-2.995732	8.9744119	0.3826837	0.382683679
-2.978285	8.8701837	0.4001306	0.400130592
-2.978285	8.8701837	0.4001306	0.400130592
-2.978285	8.8701837	0.4001306	0.400130592
-2.978285	8.8701837	0.4001306	0.400130592
-2.978285	8.8701837	0.4001306	0.400130592
-2.978285	8.8701837	0.4001306	0.400130592
-2.97593	8.8561573	0.4024863	0.402486306
-2.97593	8.8561573	0.4024863	0.402486306
-2.973971	8.8445022	0.4044452	0.40444517
-2.972016	8.8328776	0.4064002	0.406400205
-2.956512	8.7409606	0.4219044	0.421904392
-2.956512	8.7409606	0.4219044	0.421904392
-2.94923	8.6979602	0.4291855	0.429185512
-2.939352	8.6397898	0.439064	0.439064012
-2.937463	8.628691	0.4409526	0.440952587
-2.922482	8.5408999	0.4559341	0.45593414
-2.918771	8.5192255	0.4596447	0.45964472
-2.892454	8.3662897	0.485962	0.485962028
-2.882404	8.3082504	0.4960124	0.496012364
-2.882404	8.3082504	0.4960124	0.496012364
-2.879551	8.2918112	0.4988654	0.498865433
-2.852845	8.1387234	0.5255712	0.525571166
-2.830218	8.010133	0.5481981	0.548198117
-2.824135	7.9757367	0.5542813	0.554281272
-2.824135	7.9757367	0.5542813	0.554281272
-2.824135	7.9757367	0.5542813	0.554281272
-2.824135	7.9757367	0.5542813	0.554281272
-2.824135	7.9757367	0.5542813	0.554281272
-2.824135	7.9757367	0.5542813	0.554281272
-2.818758	7.9453985	0.5596576	0.559657629
-2.796881	7.8225456	0.5815345	0.581534537
-2.755142	7.5908064	0.6232741	0.623274144
-2.750123	7.5631764	0.628293	0.628292975
-2.750123	7.5631764	0.628293	0.628292975
-2.748872	7.5562983	0.6295438	0.629543757
-2.746999	7.5460032	0.631417	0.631417001
-2.746375	7.5425774	0.6320406	0.632040637

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-2.730296	7.4545152	0.6481201	0.648120142
-2.726622	7.4344653	0.6517944	0.651794366
-2.718101	7.3880705	0.6603154	0.660315415
-2.711255	7.3509055	0.6671606	0.66716062
-2.690603	7.2393461	0.6878127	0.687812665
-2.690603	7.2393461	0.6878127	0.687812665
-2.690603	7.2393461	0.6878127	0.687812665
-2.690603	7.2393461	0.6878127	0.687812665
-2.690603	7.2393461	0.6878127	0.687812665
-2.690603	7.2393461	0.6878127	0.687812665
-2.690603	7.2393461	0.6878127	0.687812665
-2.674809	7.1546025	0.7036071	0.703607085
-2.626931	6.9007673	0.7514848	0.751484802
-2.6018	6.7693637	0.7766159	0.776615871
-2.57282	6.619404	0.8055957	0.8055957
-2.57282	6.619404	0.8055957	0.8055957
-2.57282	6.619404	0.8055957	0.8055957
-2.57282	6.619404	0.8055957	0.8055957
-2.57282	6.619404	0.8055957	0.8055957
-2.52403	6.3707279	0.8543859	0.854385865
-2.50838	6.2919703	0.8700359	0.870035946
-2.46746	6.0883575	0.9109562	0.910956216
-2.46746	6.0883575	0.9109562	0.910956216
-2.46746	6.0883575	0.9109562	0.910956216
-2.46746	6.0883575	0.9109562	0.910956216
-2.46746	6.0883575	0.9109562	0.910956216
-2.46746	6.0883575	0.9109562	0.910956216
-2.37215	5.6270935	1.0062664	1.006266396
-2.37215	5.6270935	1.0062664	1.006266396
-2.37215	5.6270935	1.0062664	1.006266396
-2.37215	5.6270935	1.0062664	1.006266396
-2.37215	5.6270935	1.0062664	1.006266396
-2.37215	5.6270935	1.0062664	1.006266396
-2.309006	5.3315071	1.0694103	1.069410291
-2.285138	5.2218565	1.0932778	1.093277773
-2.285138	5.2218565	1.0932778	1.093277773
-2.285138	5.2218565	1.0932778	1.093277773
-2.285138	5.2218565	1.0932778	1.093277773
-2.285138	5.2218565	1.0932778	1.093277773
-2.285138	5.2218565	1.0932778	1.093277773
-2.285138	5.2218565	1.0932778	1.093277773
-2.205095	4.862446	1.1733205	1.173320481
-2.205095	4.862446	1.1733205	1.173320481
-2.205095	4.862446	1.1733205	1.173320481
-2.205095	4.862446	1.1733205	1.173320481
-2.205095	4.862446	1.1733205	1.173320481
-2.189828	4.7953467	1.188588	1.188587953

Table 87. Uranium Near Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-2.189792	4.7951902	1.1886237	1.188623687
-2.130987	4.5411077	1.2474285	1.247428453
-2.130987	4.5411077	1.2474285	1.247428453
-2.130987	4.5411077	1.2474285	1.247428453
-2.130987	4.5411077	1.2474285	1.247428453
-2.130987	4.5411077	1.2474285	1.247428453
-2.075418	4.3073584	1.3029983	1.302998304
-2.061995	4.2518218	1.3164213	1.316421324
-2.061995	4.2518218	1.3164213	1.316421324
-1.997456	3.9898309	1.3809598	1.380959845
-1.997456	3.9898309	1.3809598	1.380959845
-1.997456	3.9898309	1.3809598	1.380959845
-1.997456	3.9898309	1.3809598	1.380959845
-1.964971	3.8611097	1.4134453	1.4134453
-1.936831	3.7513162	1.4415845	1.441584467
-1.936831	3.7513162	1.4415845	1.441584467
-1.936831	3.7513162	1.4415845	1.441584467
-1.936831	3.7513162	1.4415845	1.441584467
-1.936831	3.7513162	1.4415845	1.441584467
-1.917323	3.6761263	1.4610933	1.46109326
-1.917323	3.6761263	1.4610933	1.46109326
-1.879673	3.5331709	1.4987429	1.498742881
-1.873403	3.5096405	1.5050125	1.505012494
-1.86433	3.475727	1.5140858	1.51408579
-1.825606	3.3328367	1.5528101	1.552810102
-1.825482	3.3323835	1.5529342	1.552934226
-1.820159	3.3129786	1.558257	1.558257008
-1.814005	3.2906144	1.5644109	1.564410874
-1.774313	3.148185	1.6041034	1.604103397
-1.774313	3.148185	1.6041034	1.604103397
-1.742969	3.037942	1.6354466	1.635446647
-1.740458	3.0291947	1.6379578	1.637957777
-1.725522	2.9774275	1.6528936	1.652893561
-1.703749	2.9027593	1.6746674	1.67466736
-1.681471	2.8273451	1.6969448	1.696944837
-1.671313	2.7932882	1.7071026	1.707102636
-1.591991	2.5344353	1.786425	1.786424953
-1.159127	1.3435752	2.219289	2.219289036
-0.327394	0.1071866	3.0510224	3.05102238

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis

Uranium	Normal (xi-avg)^3
0.7208	0.299601092
0.31376	0.018004526
0.20352	0.003501844
0.188	0.002534152
0.1861	0.002429673
0.182	0.002214085
0.17808	0.00202026
0.17544	0.001896315
0.175	0.001876164
0.1696	0.001640364
0.1696	0.001640364
0.163	0.001380092
0.162	0.001343238
0.16114	0.001312073
0.16112	0.001311354
0.155	0.001103459
0.1536	0.001059215
0.15264	0.00102957
0.147	0.000866507
0.147	0.000866507
0.14416	0.000791353
0.14416	0.000791353
0.14416	0.000791353
0.14416	0.000791353
0.14416	0.000791353
0.14016	0.000693063
0.13568	0.000593045
0.13568	0.000593045
0.13568	0.000593045
0.13568	0.000593045
0.1272	0.000430987
0.1272	0.000430987
0.125504	0.000402603
0.11872	0.000301519
0.11872	0.000301519
0.11872	0.000301519
0.11872	0.000301519
0.11872	0.000301519
0.11194	0.000218996
0.111936	0.000218952
0.11024	0.000200984
0.11024	0.000200984
0.11024	0.000200984
0.11024	0.000200984
0.11024	0.000200984
0.10176	0.000125722
0.10176	0.000125722

	Normal
standard deviation =	0.0564146
mean =	0.052
count =	366
sum of (xi-avg)^3 =	0.3530307
1/n =	0.0027322
standard deviation cubed =	0.0001795
((n-1)/n)^(3/2) =	0.9959044
coef. of skewness =	5.4
acceptable range -1 to 1	**Fail**

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.10176	0.000125722
0.10176	0.000125722
0.10176	0.000125722
0.10176	0.000125722
0.10176	0.000125722
0.09936	0.000108505
0.09328	7.20749E-05
0.09328	7.20749E-05
0.09328	7.20749E-05
0.09328	7.20749E-05
0.09328	7.20749E-05
0.09328	7.20749E-05
0.0848	3.63835E-05
0.0848	3.63835E-05
0.0848	3.63835E-05
0.0848	3.63835E-05
0.0848	3.63835E-05
0.0848	3.63835E-05
0.0814	2.62937E-05
0.080136	2.30812E-05
0.07632	1.4989E-05
0.07632	1.4989E-05
0.07632	1.4989E-05
0.07632	1.4989E-05
0.07632	1.4989E-05
0.07414	1.13544E-05
0.0723	8.78786E-06
0.06892	5.1384E-06
0.06784	4.23274E-06
0.06784	4.23274E-06
0.06784	4.23274E-06
0.06784	4.23274E-06
0.06784	4.23274E-06
0.06784	4.23274E-06
0.06784	4.23274E-06
0.0664533	3.23486E-06
0.066	2.94641E-06
0.06544	2.61444E-06
0.0652	2.48017E-06
0.06416	1.9513E-06
0.06412	1.93262E-06
0.064	1.8773E-06
0.06392	1.84102E-06
0.06392	1.84102E-06
0.0636	1.70054E-06
0.061	8.13762E-07
0.05968	5.15098E-07
0.05936	4.5584E-07

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.05936	4.5584E-07
0.05936	4.5584E-07
0.05936	4.5584E-07
0.05936	4.5584E-07
0.05936	4.5584E-07
0.059	3.94818E-07
0.05768	2.17744E-07
0.05616	9.08886E-08
0.056	8.15266E-08
0.056	8.15266E-08
0.05544	5.38434E-08
0.054	1.2749E-08
0.0538	9.74693E-09
0.053	2.38518E-09
0.0529	1.88871E-09
0.05238	3.67223E-10
0.052	3.79685E-11
0.052	3.79685E-11
0.0512	-9.98297E-11
0.0511	-1.79306E-10
0.051	-2.92616E-10
0.051	-2.92616E-10
0.05088	-4.81697E-10
0.05088	-4.81697E-10
0.05088	-4.81697E-10
0.05088	-4.81697E-10
0.05088	-4.81697E-10
0.05088	-4.81697E-10
0.05	-4.60657E-09
0.04995	-5.03446E-09
0.0494	-1.1603E-08
0.049	-1.89039E-08
0.0475	-7.21937E-08
0.047488	-7.28197E-08
0.046	-1.81696E-07
0.046	-1.81696E-07
0.046	-1.81696E-07
0.045	-2.95927E-07
0.04452	-3.6459E-07
0.044	-4.50141E-07
0.04392	-4.64385E-07
0.0432	-6.06332E-07
0.04318	-6.10641E-07
0.043	-6.50339E-07
0.043	-6.50339E-07
0.04296	-6.59388E-07
0.04256	-7.54539E-07
0.0424	-7.95025E-07

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.0424	-7.95025E-07
0.04222	-8.42274E-07
0.04196	-9.13773E-07
0.0417	-9.89208E-07
0.0416	-1.01929E-06
0.0413	-1.11319E-06
0.04115	-1.16223E-06
0.041	-1.21268E-06
0.041	-1.21268E-06
0.0409	-1.24712E-06
0.0407	-1.31794E-06
0.0407	-1.31794E-06
0.04046	-1.40639E-06
0.04	-1.58683E-06
0.0393	-1.89002E-06
0.0383	-2.38671E-06
0.03816	-2.46251E-06
0.03816	-2.46251E-06
0.038	-2.55108E-06
0.038	-2.55108E-06
0.03777	-2.68208E-06
0.03772	-2.71114E-06
0.03772	-2.71114E-06
0.03744	-2.87777E-06
0.037312	-2.95616E-06
0.037312	-2.95616E-06
0.03672	-3.33727E-06
0.036464	-3.51174E-06
0.036	-3.84326E-06
0.035	-4.62732E-06
0.035	-4.62732E-06
0.0344	-5.14537E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03392	-5.58659E-06
0.03362	-5.87477E-06
0.0335	-5.99276E-06
0.033	-6.5014E-06
0.033	-6.5014E-06
0.03272	-6.79842E-06
0.0327	-6.81997E-06
0.03248	-7.06009E-06
0.03227	-7.29449E-06
0.03212	-7.46506E-06
0.032	-7.60341E-06
0.032	-7.60341E-06
0.03173	-7.92094E-06
0.0316	-8.07692E-06
0.0315	-8.19829E-06
0.03115	-8.63266E-06
0.03112	-8.67058E-06
0.03112	-8.67058E-06
0.031	-8.82341E-06
0.031	-8.82341E-06
0.03096	-8.87475E-06
0.03	-1.01674E-05
0.03	-1.01674E-05
0.03	-1.01674E-05
0.0297	-1.05957E-05
0.029	-1.16414E-05
0.029	-1.16414E-05
0.029	-1.16414E-05
0.02862	-1.22368E-05
0.0286	-1.22687E-05
0.0285	-1.2429E-05
0.0285	-1.2429E-05
0.02812	-1.30507E-05
0.028	-1.32513E-05
0.028	-1.32513E-05
0.028	-1.32513E-05
0.027516	-1.40811E-05

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.0275	-1.41091E-05
0.0274	-1.4285E-05
0.027136	-1.47564E-05
0.027136	-1.47564E-05
0.02713	-1.47672E-05
0.02712	-1.47853E-05
0.027	-1.50032E-05
0.027	-1.50032E-05
0.026925	-1.51405E-05
0.0265	-1.59343E-05
0.026	-1.69032E-05
0.026	-1.69032E-05
0.026	-1.69032E-05
0.02562	-1.76652E-05
0.02562	-1.76652E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.02544	-1.8034E-05
0.025	-1.89571E-05
0.025	-1.89571E-05
0.025	-1.89571E-05
0.024	-2.11709E-05
0.024	-2.11709E-05
0.02362	-2.20554E-05
0.02348	-2.23874E-05
0.02346	-2.24351E-05
0.02316	-2.31586E-05
0.02272	-2.42477E-05
0.022	-2.61026E-05
0.0219893	-2.61308E-05
0.021624	-2.71079E-05
0.021	-2.88325E-05
0.02	-3.17463E-05
0.02	-3.17463E-05
0.0197	-3.26572E-05
0.01908	-3.45947E-05
0.01848	-3.65411E-05

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.018	-3.81499E-05
0.018	-3.81499E-05
0.0178	-3.88339E-05
0.0175	-3.98751E-05
0.01748	-3.99452E-05
0.01696	-4.1796E-05
0.01696	-4.1796E-05
0.01696	-4.1796E-05
0.01696	-4.1796E-05
0.01696	-4.1796E-05
0.01696	-4.1796E-05
0.01696	-4.1796E-05
0.01696	-4.1796E-05
0.01693	-4.19045E-05
0.01683	-4.22675E-05
0.016	-4.53614E-05
0.01572	-4.64382E-05
0.01545	-4.74926E-05
0.01522	-4.84032E-05
0.01474	-5.03411E-05
0.01462	-5.08335E-05
0.01424	-5.2414E-05
0.0142	-5.25822E-05
0.014	-5.34288E-05
0.012676	-5.92638E-05
0.01212	-6.18356E-05
0.01112	-6.66464E-05
0.0106	-6.92437E-05
0.01017	-7.14418E-05
0.00962	-7.43205E-05
0.00912	-7.70037E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00848	-8.05314E-05
0.00812	-8.25623E-05
0.0065	-9.21243E-05

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.00636	-9.29837E-05
0.005	-0.000101612
0.005	-0.000101612
0.005	-0.000101612
0.005	-0.000101612
0.005	-0.000101612
0.005	-0.000101612
0.005	-0.000101612
0.005	-0.000101612
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.00424	-0.000106658
0.003816	-0.000109544
0.003392	-0.000112482

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-0.327394	28.40116662
-1.159127	10.93053962
-1.591991	5.701043168
-1.671313	4.974837495
-1.681471	4.886559311
-1.703749	4.696622644
-1.725522	4.515799627
-1.740458	4.394486225
-1.742969	4.374305819
-1.774313	4.127594977
-1.774313	4.127594977
-1.814005	3.828710048
-1.820159	3.78370498
-1.825482	3.745063491
-1.825606	3.744165553
-1.86433	3.470974721
-1.873403	3.408947523
-1.879673	3.366521556
-1.917323	3.119132416
-1.917323	3.119132416
-1.936831	2.995851502
-1.936831	2.995851502
-1.936831	2.995851502
-1.936831	2.995851502
-1.936831	2.995851502
-1.964971	2.823820057
-1.997456	2.633559603
-1.997456	2.633559603
-1.997456	2.633559603
-1.997456	2.633559603
-2.061995	2.281312215
-2.061995	2.281312215
-2.075418	2.212236488
-2.130987	1.941095653
-2.130987	1.941095653
-2.130987	1.941095653
-2.130987	1.941095653
-2.130987	1.941095653
-2.189792	1.679318768
-2.189828	1.679167315
-2.205095	1.615287954
-2.205095	1.615287954
-2.205095	1.615287954
-2.205095	1.615287954
-2.205095	1.615287954
-2.285138	1.306747133
-2.285138	1.306747133

Lognormal	
standard deviation =	0.9641056
mean =	-3.378
count =	366
sum of (xi-avg)^3 =	-132.6356
1/n =	0.0027322
standard deviation cubed =	0.8961358
((n-1)/n)^(3/2) =	0.9959044
coef. of skewness =	-0.4
acceptable range -1 to 1	**Pass**

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued

Uranium	Lognormal (xi-avg)^3
-2.285138	1.306747133
-2.285138	1.306747133
-2.285138	1.306747133
-2.285138	1.306747133
-2.285138	1.306747133
-2.309006	1.223018644
-2.37215	1.018917237
-2.37215	1.018917237
-2.37215	1.018917237
-2.37215	1.018917237
-2.37215	1.018917237
-2.37215	1.018917237
-2.46746	0.755949025
-2.46746	0.755949025
-2.46746	0.755949025
-2.46746	0.755949025
-2.46746	0.755949025
-2.46746	0.755949025
-2.50838	0.658584627
-2.52403	0.623680497
-2.57282	0.522819068
-2.57282	0.522819068
-2.57282	0.522819068
-2.57282	0.522819068
-2.57282	0.522819068
-2.6018	0.468402047
-2.626931	0.424385568
-2.674809	0.348329785
-2.690603	0.325394722
-2.690603	0.325394722
-2.690603	0.325394722
-2.690603	0.325394722
-2.690603	0.325394722
-2.690603	0.325394722
-2.690603	0.325394722
-2.711255	0.296955389
-2.718101	0.287908382
-2.726622	0.276905643
-2.730296	0.272249165
-2.746375	0.252484665
-2.746999	0.251738021
-2.748872	0.249504144
-2.750123	0.248019947
-2.750123	0.248019947
-2.755142	0.242123717
-2.796881	0.196664756
-2.818758	0.175294094

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued

Uranium	Lognormal (xi-avg)^3
-2.824135	0.170290576
-2.824135	0.170290576
-2.824135	0.170290576
-2.824135	0.170290576
-2.824135	0.170290576
-2.824135	0.170290576
-2.830218	0.164745143
-2.852845	0.145175922
-2.879551	0.124151004
-2.882404	0.122033061
-2.882404	0.122033061
-2.892454	0.114764352
-2.918771	0.097110642
-2.922482	0.094777738
-2.937463	0.085738461
-2.939352	0.084641534
-2.94923	0.079056059
-2.956512	0.075100381
-2.956512	0.075100381
-2.972016	0.067121516
-2.973971	0.066157481
-2.97593	0.06520086
-2.97593	0.06520086
-2.978285	0.064062705
-2.978285	0.064062705
-2.978285	0.064062705
-2.978285	0.064062705
-2.978285	0.064062705
-2.978285	0.064062705
-2.995732	0.056042799
-2.996733	0.055604387
-3.007805	0.050904392
-3.015935	0.047627265
-3.047026	0.036393155
-3.047278	0.036309976
-3.079114	0.026811997
-3.079114	0.026811997
-3.079114	0.026811997
-3.101093	0.021328408
-3.111817	0.018948574
-3.123566	0.016552191
-3.125385	0.016200129
-3.141915	0.013228173
-3.142378	0.013150623
-3.146555	0.012464703
-3.146555	0.012464703
-3.147486	0.012315208

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued

Uranium	Lognormal (xi-avg)^3
-3.15684	0.010878407
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.160607	0.01033303
-3.164861	0.009739294
-3.171038	0.008918352
-3.177254	0.008140228
-3.179655	0.00785222
-3.186893	0.007025286
-3.190531	0.006632443
-3.194183	0.006253173
-3.194183	0.006253173
-3.196625	0.006007797
-3.201527	0.005534785
-3.201527	0.005534785
-3.207441	0.004997975
-3.218876	0.004060783
-3.236531	0.002856349
-3.262305	0.001565364
-3.265967	0.001421874
-3.265967	0.001421874
-3.270169	0.001268369
-3.270169	0.001268369
-3.27624	0.001066705
-3.277565	0.001025752
-3.277565	0.001025752
-3.285016	0.000814789
-3.28844	0.000728409
-3.28844	0.000728409
-3.304434	0.000404932
-3.31143	0.000300576
-3.324236	0.00015904
-3.352407	1.75937E-05
-3.352407	1.75937E-05
-3.369699	6.62425E-07
-3.38375	-1.51805E-07

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued

Uranium	Lognormal (xi-avg)^3
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.38375	-1.51805E-07
-3.392634	-2.87431E-06
-3.39621	-5.63394E-06
-3.411248	-3.53902E-05
-3.411248	-3.53902E-05
-3.419769	-7.07156E-05
-3.42038	-7.3899E-05
-3.427131	-0.000115607
-3.433617	-0.000168209
-3.438276	-0.000214496
-3.442019	-0.000257301
-3.442019	-0.000257301
-3.450493	-0.000374442
-3.454598	-0.000442141
-3.457768	-0.000499655
-3.468941	-0.000741834
-3.469905	-0.000765775
-3.469905	-0.000765775
-3.473768	-0.000866944
-3.473768	-0.000866944
-3.475059	-0.000902641
-3.506558	-0.002104137
-3.506558	-0.002104137
-3.506558	-0.002104137
-3.516608	-0.002639073
-3.540459	-0.004254954
-3.540459	-0.004254954
-3.540459	-0.004254954
-3.55365	-0.005380861
-3.554349	-0.005445516
-3.557851	-0.005777277
-3.557851	-0.005777277
-3.571274	-0.00717323

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued

Uranium	Lognormal (xi-avg)^3
-3.575551	-0.00766108
-3.575551	-0.00766108
-3.575551	-0.00766108
-3.592988	-0.009879095
-3.593569	-0.009959652
-3.597212	-0.010474179
-3.606894	-0.011927064
-3.606894	-0.011927064
-3.607115	-0.011961728
-3.607484	-0.012019669
-3.611918	-0.012731348
-3.611918	-0.012731348
-3.6147	-0.013191783
-3.630611	-0.016040109
-3.649659	-0.019956051
-3.649659	-0.019956051
-3.649659	-0.019956051
-3.664382	-0.023385321
-3.664382	-0.023385321
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.671433	-0.02515803
-3.688879	-0.029924827
-3.688879	-0.029924827
-3.688879	-0.029924827
-3.729701	-0.043349157
-3.729701	-0.043349157
-3.745661	-0.049530134
-3.751606	-0.0519746
-3.752458	-0.052331453
-3.765329	-0.057921376
-3.78451	-0.066969778
-3.816713	-0.084198648
-3.817198	-0.084478449
-3.833951	-0.094529363
-3.863233	-0.113954957

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued

Uranium	Lognormal (xi-avg)^3
-3.912023	-0.151937398
-3.912023	-0.151937398
-3.927137	-0.165216725
-3.959115	-0.195817938
-3.991066	-0.229952358
-4.017384	-0.260877394
-4.017384	-0.260877394
-4.028557	-0.274803591
-4.045554	-0.29692578
-4.046698	-0.298455239
-4.076898	-0.340772931
-4.076898	-0.340772931
-4.076898	-0.340772931
-4.076898	-0.340772931
-4.076898	-0.340772931
-4.076898	-0.340772931
-4.076898	-0.340772931
-4.076898	-0.340772931
-4.078668	-0.343370766
-4.084592	-0.352159532
-4.135167	-0.433369487
-4.152821	-0.464414053
-4.170146	-0.496285786
-4.185145	-0.525028605
-4.21719	-0.590113518
-4.225365	-0.607535392
-4.2517	-0.665989125
-4.254513	-0.672445541
-4.268698	-0.705639322
-4.368045	-0.969208219
-4.412898	-1.107055136
-4.49901	-1.407164669
-4.546901	-1.595400736
-4.588313	-1.771109144
-4.643911	-2.026662187
-4.697285	-2.294063828
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528

Table 88. Uranium Near Upgradient Background Data Set, Coefficient of Skewness Analysis (continued

Uranium	Lognormal (xi-avg)^3
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.770045	-2.695071528
-4.813425	-2.955044541
-5.035953	-4.553966302
-5.057727	-4.735800063
-5.298317	-7.076797777
-5.298317	-7.076797777
-5.298317	-7.076797777
-5.298317	-7.076797777
-5.298317	-7.076797777
-5.298317	-7.076797777
-5.298317	-7.076797777
-5.298317	-7.076797777
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.463192	-9.061043854
-5.568553	-10.50542418
-5.686336	-12.29311746

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.003392	1	0.0027248	-2.779198	-0.009427038	7.7239389
0.003816	2	0.0054496	-2.54593	-0.00971527	6.4817612
0.00424	3	0.0081744	-2.40103	-0.010180366	5.7649433
0.00424	4	0.0108992	-2.293855	-0.009725944	5.2617697
0.00424	5	0.013624	-2.207944	-0.009361682	4.8750163
0.00424	6	0.0163488	-2.135776	-0.009055688	4.561537
0.00424	7	0.0190736	-2.073266	-0.008790648	4.2984316
0.00424	8	0.0217984	-2.01795	-0.00855611	4.0721241
0.00424	9	0.0245232	-1.968183	-0.008345096	3.873744
0.00424	10	0.027248	-1.922872	-0.008152977	3.6974363
0.00424	11	0.0299728	-1.88119	-0.007976245	3.5388749
0.00424	12	0.0326975	-1.842545	-0.007812392	3.3949732
0.00424	13	0.0354223	-1.806475	-0.007659453	3.263351
0.00424	14	0.0381471	-1.772605	-0.007515846	3.1421291
0.00424	15	0.0408719	-1.740655	-0.007380376	3.0298785
0.00424	16	0.0435967	-1.710391	-0.007252059	2.925438
0.00424	17	0.0463215	-1.681619	-0.007130066	2.8278436
0.00424	18	0.0490463	-1.654171	-0.007013684	2.7362809
0.00424	19	0.0517711	-1.627918	-0.006902373	2.6501177
0.00424	20	0.0544959	-1.602739	-0.006795613	2.5687718
0.00424	21	0.0572207	-1.578542	-0.006693017	2.491794
0.00424	22	0.0599455	-1.555231	-0.006594181	2.4187447
0.005	23	0.0626703	-1.532735	-0.007663675	2.3492767
0.005	24	0.0653951	-1.510994	-0.007554968	2.2831016
0.005	25	0.0681199	-1.489943	-0.007449717	2.2199311
0.005	26	0.0708447	-1.46953	-0.007347649	2.1595176
0.005	27	0.0735695	-1.449712	-0.007248559	2.1016644
0.005	28	0.0762943	-1.430449	-0.007152244	2.0461835
0.005	29	0.0790191	-1.411699	-0.007058497	1.9928954
0.005	30	0.0817439	-1.393437	-0.006967184	1.9416662
0.00636	31	0.0844687	-1.375627	-0.008748986	1.8923487
0.0065	32	0.0871935	-1.358244	-0.008828586	1.8448266
0.00812	33	0.0899183	-1.341259	-0.010891024	1.798976
0.00848	34	0.0926431	-1.324654	-0.011233066	1.7547083

Uranium - normal
256.28477 = (sum of Mi*Xi)^2
365 = count -1
0.0031826 = standard deviation ^2
355.90411 = sum of Mi^2

0.62 = W statistic

FAIL

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.00848	35	0.095368	-1.308406	-0.011095282	1.711926
0.00848	36	0.098093	-1.292497	-0.010960371	1.670547
0.00848	37	0.100817	-1.276908	-0.010828178	1.630494
0.00848	38	0.103542	-1.261624	-0.01069857	1.591695
0.00848	39	0.106267	-1.246628	-0.010571409	1.554083
0.00848	40	0.108992	-1.231908	-0.010446582	1.517598
0.00848	41	0.111717	-1.21745	-0.010323973	1.482184
0.00848	42	0.114441	-1.203243	-0.010203503	1.447794
0.00848	43	0.117166	-1.189273	-0.010085039	1.414371
0.00848	44	0.119891	-1.175531	-0.009968503	1.381873
0.00848	45	0.122616	-1.162009	-0.009853837	1.350265
0.00848	46	0.125341	-1.148696	-0.009740945	1.319503
0.00848	47	0.128065	-1.135584	-0.00962975	1.28955
0.00848	48	0.13079	-1.122664	-0.009520194	1.260375
0.00912	49	0.133515	-1.109929	-0.010122554	1.231943
0.00962	50	0.13624	-1.097371	-0.010556712	1.204224
0.01017	51	0.138965	-1.084984	-0.011034287	1.17719
0.0106	52	0.141689	-1.07276	-0.01137126	1.150815
0.01112	53	0.144414	-1.060696	-0.011794939	1.125076
0.01212	54	0.147139	-1.048784	-0.01271126	1.099947
0.012676	55	0.149864	-1.037017	-0.01314523	1.075405
0.014	56	0.152589	-1.025394	-0.014355514	1.051433
0.0142	57	0.155313	-1.013907	-0.014397479	1.028007
0.01424	58	0.158038	-1.002554	-0.014276372	1.005115
0.01462	59	0.160763	-0.991326	-0.014493193	0.982728
0.01474	60	0.163488	-0.980224	-0.014448499	0.960839
0.01522	61	0.166213	-0.969242	-0.014751858	0.939429
0.01545	62	0.168937	-0.958373	-0.014806866	0.918479
0.01572	63	0.171662	-0.947618	-0.014896562	0.897981
0.016	64	0.174387	-0.936971	-0.014991529	0.877914
0.01683	65	0.177112	-0.926427	-0.01559177	0.858267
0.01693	66	0.179837	-0.915988	-0.015507685	0.839035
0.01696	67	0.182561	-0.905648	-0.015359782	0.820197
0.01696	68	0.185286	-0.895402	-0.015186019	0.801745
0.01696	69	0.188011	-0.88525	-0.015013837	0.783667

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.01696	70	0.190736	-0.875189	-0.014843198	0.765955
0.01696	71	0.19346	-0.865214	-0.014674024	0.748595
0.01696	72	0.196185	-0.855325	-0.014506315	0.731581
0.01696	73	0.19891	-0.845521	-0.014340034	0.714905
0.01696	74	0.201635	-0.835796	-0.014175101	0.698555
0.01748	75	0.20436	-0.826149	-0.014441078	0.682522
0.0175	76	0.207084	-0.816578	-0.014290123	0.6668
0.0178	77	0.209809	-0.807083	-0.014366083	0.651383
0.018	78	0.212534	-0.797659	-0.014357856	0.636259
0.018	79	0.215259	-0.788307	-0.014189523	0.621428
0.01848	80	0.217984	-0.779021	-0.014396306	0.606874
0.01908	81	0.220708	-0.769803	-0.014687844	0.592597
0.0197	82	0.223433	-0.760649	-0.014984787	0.578587
0.02	83	0.226158	-0.751559	-0.015031173	0.56484
0.02	84	0.228883	-0.742531	-0.014850616	0.551352
0.021	85	0.231608	-0.733562	-0.015404803	0.538113
0.021624	86	0.234332	-0.724654	-0.015669908	0.525123
0.021989	87	0.237057	-0.7158	-0.015739956	0.512369
0.022	88	0.239782	-0.707004	-0.015554081	0.499854
0.02272	89	0.242507	-0.698262	-0.015864519	0.48757
0.02316	90	0.245232	-0.689572	-0.015970489	0.47551
0.02346	91	0.247956	-0.680934	-0.015974715	0.463671
0.02348	92	0.250681	-0.672347	-0.015786716	0.452051
0.02362	93	0.253406	-0.663809	-0.01567918	0.440643
0.024	94	0.256131	-0.65532	-0.015727692	0.429445
0.024	95	0.258856	-0.646878	-0.015525075	0.418451
0.025	96	0.26158	-0.638481	-0.01596203	0.407658
0.025	97	0.264305	-0.630129	-0.015753216	0.397062
0.025	98	0.26703	-0.62182	-0.01554551	0.386661
0.02544	99	0.269755	-0.613554	-0.015608819	0.376449
0.02544	100	0.27248	-0.60533	-0.015399598	0.366425
0.02544	101	0.275204	-0.597147	-0.015191418	0.356584
0.02544	102	0.277929	-0.589005	-0.014984279	0.346927
0.02544	103	0.280654	-0.5809	-0.014778095	0.337445
0.02544	104	0.283379	-0.572834	-0.014572894	0.328139

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.02544	105	0.286104	-0.564803	-0.014368589	0.319002
0.02544	106	0.288828	-0.556811	-0.014165268	0.310038
0.02544	107	0.291553	-0.548853	-0.013962814	0.301239
0.02544	108	0.294278	-0.54093	-0.013761257	0.292605
0.02544	109	0.297003	-0.533041	-0.013560568	0.284133
0.02544	110	0.299728	-0.525184	-0.013360689	0.275819
0.02544	111	0.302452	-0.51736	-0.013161648	0.267662
0.02544	112	0.305177	-0.509567	-0.012963388	0.259659
0.02562	113	0.307902	-0.501807	-0.012856292	0.25181
0.02562	114	0.310627	-0.494074	-0.012658173	0.244109
0.026	115	0.313351	-0.486373	-0.012645692	0.236558
0.026	116	0.316076	-0.478699	-0.012446171	0.229153
0.026	117	0.318801	-0.471055	-0.012247419	0.221892
0.0265	118	0.321526	-0.463436	-0.012281066	0.214773
0.026925	119	0.324251	-0.455846	-0.012273642	0.207795
0.027	120	0.326975	-0.448281	-0.012103583	0.200956
0.027	121	0.3297	-0.440741	-0.011900011	0.194253
0.02712	122	0.332425	-0.433226	-0.011749101	0.187685
0.02713	123	0.33515	-0.425737	-0.011550238	0.181252
0.027136	124	0.337875	-0.418271	-0.0113502	0.174951
0.027136	125	0.340599	-0.410828	-0.011148225	0.16878
0.0274	126	0.343324	-0.403408	-0.011053366	0.162738
0.0275	127	0.346049	-0.39601	-0.010890273	0.156824
0.027516	128	0.348774	-0.388633	-0.010693619	0.151035
0.028	129	0.351499	-0.381278	-0.010675794	0.145373
0.028	130	0.354223	-0.373943	-0.010470412	0.139834
0.028	131	0.356948	-0.366629	-0.010265603	0.134417
0.02812	132	0.359673	-0.359333	-0.010104455	0.12912
0.0285	133	0.362398	-0.352056	-0.010033605	0.123944
0.0285	134	0.365123	-0.3448	-0.009826791	0.118887
0.0286	135	0.367847	-0.33756	-0.009654219	0.113947
0.02862	136	0.370572	-0.330339	-0.009454294	0.109124
0.029	137	0.373297	-0.323134	-0.009370897	0.104416
0.029	138	0.376022	-0.315946	-0.009162433	0.099822
0.029	139	0.378747	-0.308775	-0.008954463	0.095342

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.0297	140	0.381471	-0.301619	-0.008958088	0.090974
0.03	141	0.384196	-0.294478	-0.008834354	0.086718
0.03	142	0.386921	-0.287353	-0.008620577	0.082572
0.03	143	0.389646	-0.280243	-0.008407278	0.078536
0.03096	144	0.392371	-0.273146	-0.008456609	0.074609
0.031	145	0.395095	-0.266064	-0.008247971	0.07079
0.031	146	0.39782	-0.258993	-0.008028795	0.067078
0.03112	147	0.400545	-0.251937	-0.007840275	0.063472
0.03112	148	0.40327	-0.244893	-0.007621064	0.059972
0.03115	149	0.405995	-0.23786	-0.007409344	0.056577
0.0315	150	0.408719	-0.230841	-0.007271495	0.053288
0.0316	151	0.411444	-0.223831	-0.007073066	0.0501
0.03173	152	0.414169	-0.216834	-0.006880135	0.047017
0.032	153	0.416894	-0.209847	-0.00671509	0.044036
0.032	154	0.419619	-0.20287	-0.006491828	0.041156
0.03212	155	0.422343	-0.195903	-0.006292401	0.038378
0.03227	156	0.425068	-0.188945	-0.006097263	0.0357
0.03248	157	0.427793	-0.181997	-0.005911253	0.033123
0.0327	158	0.430518	-0.175056	-0.005724335	0.030645
0.03272	159	0.433243	-0.168125	-0.005501038	0.028266
0.033	160	0.435967	-0.161201	-0.005319637	0.025986
0.033	161	0.438692	-0.154287	-0.00509146	0.023804
0.0335	162	0.441417	-0.147378	-0.004937161	0.02172
0.03362	163	0.444142	-0.140476	-0.004722803	0.019734
0.03392	164	0.446866	-0.133582	-0.004531103	0.017844
0.03392	165	0.449591	-0.126694	-0.004297452	0.016051
0.03392	166	0.452316	-0.119812	-0.004064033	0.014355
0.03392	167	0.455041	-0.112935	-0.003830768	0.012754
0.03392	168	0.457766	-0.106064	-0.003597695	0.01125
0.03392	169	0.46049	-0.099199	-0.003364816	0.00984
0.03392	170	0.463215	-0.092336	-0.003132052	0.008526
0.03392	171	0.46594	-0.085479	-0.002899443	0.007307
0.03392	172	0.468665	-0.078626	-0.002666988	0.006182
0.03392	173	0.47139	-0.071777	-0.002434687	0.005152
0.03392	174	0.474114	-0.064931	-0.002202463	0.004216

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.03392	175	0.476839	-0.058087	-0.001970316	0.003374
0.03392	176	0.479564	-0.051248	-0.001738324	0.002626
0.03392	177	0.482289	-0.044409	-0.00150637	0.001972
0.03392	178	0.485014	-0.037573	-0.001274493	0.001412
0.03392	179	0.487738	-0.03074	-0.001042693	0.000945
0.0344	180	0.490463	-0.023907	-0.000822408	0.000572
0.035	181	0.493188	-0.017076	-0.000597652	0.000292
0.035	182	0.495913	-0.010245	-0.000358591	0.000105
0.036	183	0.498638	-0.003415	-0.000122945	1.17E-05
0.036464	184	0.501362	0.003415	0.00012453	1.17E-05
0.03672	185	0.504087	0.010245	0.000376213	0.000105
0.037312	186	0.506812	0.017076	0.000637131	0.000292
0.037312	187	0.509537	0.023907	0.000892026	0.000572
0.03744	188	0.512262	0.03074	0.001150898	0.000945
0.03772	189	0.514986	0.037573	0.001417272	0.001412
0.03772	190	0.517711	0.044409	0.001675126	0.001972
0.03777	191	0.520436	0.051248	0.001935628	0.002626
0.038	192	0.523161	0.058087	0.002207312	0.003374
0.038	193	0.525886	0.064931	0.002467382	0.004216
0.03816	194	0.52861	0.071777	0.002739023	0.005152
0.03816	195	0.531335	0.078626	0.003000361	0.006182
0.0383	196	0.53406	0.085479	0.00327384	0.007307
0.0393	197	0.536785	0.092336	0.003628822	0.008526
0.04	198	0.53951	0.099199	0.003967943	0.00984
0.04046	199	0.542234	0.106064	0.004291355	0.01125
0.0407	200	0.544959	0.112935	0.004596469	0.012754
0.0407	201	0.547684	0.119812	0.00487636	0.014355
0.0409	202	0.550409	0.126694	0.005181774	0.016051
0.041	203	0.553134	0.133582	0.005476863	0.017844
0.041	204	0.555858	0.140476	0.005759516	0.019734
0.04115	205	0.558583	0.147378	0.006064602	0.02172
0.0413	206	0.561308	0.154287	0.00637204	0.023804
0.0416	207	0.564033	0.161201	0.006705966	0.025986
0.0417	208	0.566757	0.168125	0.007010798	0.028266
0.04196	209	0.569482	0.175056	0.007345355	0.030645

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.04222	210	0.572207	0.181997	0.007683901	0.033123
0.0424	211	0.574932	0.188945	0.008011279	0.0357
0.0424	212	0.577657	0.195903	0.008306282	0.038378
0.0424	213	0.580381	0.20287	0.008601672	0.041156
0.0424	214	0.583106	0.209847	0.008897495	0.044036
0.0424	215	0.585831	0.216834	0.009193752	0.047017
0.0424	216	0.588556	0.223831	0.009490443	0.0501
0.0424	217	0.591281	0.230841	0.009787664	0.053288
0.0424	218	0.594005	0.23786	0.01008527	0.056577
0.0424	219	0.59673	0.244893	0.010383455	0.059972
0.0424	220	0.599455	0.251937	0.010682123	0.063472
0.0424	221	0.60218	0.258993	0.01098132	0.067078
0.0424	222	0.604905	0.266064	0.011281096	0.07079
0.0424	223	0.607629	0.273146	0.011581402	0.074609
0.0424	224	0.610354	0.280243	0.011882286	0.078536
0.04256	225	0.613079	0.287353	0.012229726	0.082572
0.04296	226	0.615804	0.294478	0.012650795	0.086718
0.043	227	0.618529	0.301619	0.012969623	0.090974
0.043	228	0.621253	0.308775	0.013277307	0.095342
0.04318	229	0.623978	0.315946	0.013642546	0.099822
0.0432	230	0.626703	0.323134	0.013959405	0.104416
0.04392	231	0.629428	0.330339	0.014508476	0.109124
0.044	232	0.632153	0.33756	0.014852644	0.113947
0.04452	233	0.634877	0.3448	0.015350481	0.118887
0.045	234	0.637602	0.352056	0.015842534	0.123944
0.046	235	0.640327	0.359333	0.016529336	0.12912
0.046	236	0.643052	0.366629	0.016864919	0.134417
0.046	237	0.645777	0.373943	0.017201392	0.139834
0.047488	238	0.648501	0.381278	0.018106147	0.145373
0.0475	239	0.651226	0.388633	0.018460057	0.151035
0.049	240	0.653951	0.39601	0.019404486	0.156824
0.0494	241	0.656676	0.403408	0.019928331	0.162738
0.04995	242	0.659401	0.410828	0.020520851	0.16878
0.05	243	0.662125	0.418271	0.020913546	0.174951
0.05088	244	0.66485	0.425737	0.021661486	0.181252

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.05088	245	0.667575	0.433226	0.022042561	0.187685
0.05088	246	0.6703	0.440741	0.022424909	0.194253
0.05088	247	0.673025	0.448281	0.022808529	0.200956
0.05088	248	0.675749	0.455846	0.023193422	0.207795
0.05088	249	0.678474	0.463436	0.023579646	0.214773
0.051	250	0.681199	0.471055	0.024023784	0.221892
0.051	251	0.683924	0.478699	0.024413644	0.229153
0.0511	252	0.686649	0.486373	0.024853648	0.236558
0.0512	253	0.689373	0.494074	0.025296584	0.244109
0.052	254	0.692098	0.501807	0.026093958	0.25181
0.052	255	0.694823	0.509567	0.026497491	0.259659
0.05238	256	0.697548	0.51736	0.027099337	0.267662
0.0529	257	0.700272	0.525184	0.02778225	0.275819
0.053	258	0.702997	0.533041	0.028251184	0.284133
0.0538	259	0.705722	0.54093	0.02910203	0.292605
0.054	260	0.708447	0.548853	0.029638049	0.301239
0.05544	261	0.711172	0.556811	0.030869593	0.310038
0.056	262	0.713896	0.564803	0.03162897	0.319002
0.056	263	0.716621	0.572834	0.032078697	0.328139
0.05616	264	0.719346	0.5809	0.032623341	0.337445
0.05768	265	0.722071	0.589005	0.03397379	0.346927
0.059	266	0.724796	0.597147	0.035231669	0.356584
0.05936	267	0.72752	0.60533	0.035932396	0.366425
0.05936	268	0.730245	0.613554	0.036420579	0.376449
0.05936	269	0.73297	0.62182	0.036911258	0.386661
0.05936	270	0.735695	0.630129	0.037404435	0.397062
0.05936	271	0.73842	0.638481	0.037900244	0.407658
0.05936	272	0.741144	0.646878	0.038398684	0.418451
0.05968	273	0.743869	0.65532	0.039109527	0.429445
0.061	274	0.746594	0.663809	0.040492379	0.440643
0.0636	275	0.749319	0.672347	0.042761293	0.452051
0.06392	276	0.752044	0.680934	0.04352531	0.463671
0.06392	277	0.754768	0.689572	0.044077446	0.47551
0.064	278	0.757493	0.698262	0.044688786	0.48757
0.06412	279	0.760218	0.707004	0.045333075	0.499854

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.06416	280	0.762943	0.7158	0.045925703	0.512369
0.0652	281	0.765668	0.724654	0.047247411	0.525123
0.06544	282	0.768392	0.733562	0.0480043	0.538113
0.066	283	0.771117	0.742531	0.049007033	0.551352
0.066453	284	0.773842	0.751559	0.049943579	0.56484
0.06784	285	0.776567	0.760649	0.051602433	0.578587
0.06784	286	0.779292	0.769803	0.052223445	0.592597
0.06784	287	0.782016	0.779021	0.052848776	0.606874
0.06784	288	0.784741	0.788307	0.053478734	0.621428
0.06784	289	0.787466	0.797659	0.054113165	0.636259
0.06784	290	0.790191	0.807083	0.054752533	0.651383
0.06784	291	0.792916	0.816578	0.055396682	0.6668
0.06892	292	0.79564	0.826149	0.056938162	0.682522
0.0723	293	0.798365	0.835796	0.060428056	0.698555
0.07414	294	0.80109	0.845521	0.062686915	0.714905
0.07632	295	0.803815	0.855325	0.065278419	0.731581
0.07632	296	0.80654	0.865214	0.066033108	0.748595
0.07632	297	0.809264	0.875189	0.066794391	0.765955
0.07632	298	0.811989	0.88525	0.067562268	0.783667
0.07632	299	0.814714	0.895402	0.068337087	0.801745
0.080136	300	0.817439	0.905648	0.072574971	0.820197
0.0814	301	0.820163	0.915988	0.074561463	0.839035
0.0848	302	0.822888	0.926427	0.078561028	0.858267
0.0848	303	0.825613	0.936971	0.079455102	0.877914
0.0848	304	0.828338	0.947618	0.080358044	0.897981
0.0848	305	0.831063	0.958373	0.081270049	0.918479
0.0848	306	0.833787	0.969242	0.082191695	0.939429
0.0848	307	0.836512	0.980224	0.083122981	0.960839
0.09328	308	0.839237	0.991326	0.092470935	0.982728
0.09328	309	0.841962	1.002554	0.093518256	1.005115
0.09328	310	0.844687	1.013907	0.094577242	1.028007
0.09328	311	0.847411	1.025394	0.095648742	1.051433
0.09328	312	0.850136	1.037017	0.096732967	1.075405
0.09328	313	0.852861	1.048784	0.097830554	1.099947
0.09936	314	0.855586	1.060696	0.105390747	1.125076

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.10176	315	0.858311	1.07276	0.109164095	1.150815
0.10176	316	0.861035	1.084984	0.11040797	1.17719
0.10176	317	0.86376	1.097371	0.111668503	1.204224
0.10176	318	0.866485	1.109929	0.11294639	1.231943
0.10176	319	0.86921	1.122664	0.114242324	1.260375
0.10176	320	0.871935	1.135584	0.115556999	1.28955
0.10176	321	0.874659	1.148696	0.116891341	1.319503
0.11024	322	0.877384	1.162009	0.128099881	1.350265
0.11024	323	0.880109	1.175531	0.129590537	1.381873
0.11024	324	0.882834	1.189273	0.131105506	1.414371
0.11024	325	0.885559	1.203243	0.132645541	1.447794
0.11024	326	0.888283	1.21745	0.134211645	1.482184
0.111936	327	0.891008	1.231908	0.137894887	1.517598
0.11194	328	0.893733	1.246628	0.139547591	1.554083
0.11872	329	0.896458	1.261624	0.149779973	1.591695
0.11872	330	0.899183	1.276908	0.151594497	1.630494
0.11872	331	0.901907	1.292497	0.153445192	1.670547
0.11872	332	0.904632	1.308406	0.155333948	1.711926
0.11872	333	0.907357	1.324654	0.157262925	1.754708
0.125504	334	0.910082	1.341259	0.168333385	1.798976
0.1272	335	0.912807	1.358244	0.172768629	1.844827
0.1272	336	0.915531	1.375627	0.17497971	1.892349
0.13568	337	0.918256	1.393437	0.189061509	1.941666
0.13568	338	0.920981	1.411699	0.191539386	1.992895
0.13568	339	0.923706	1.430449	0.194083282	2.046184
0.13568	340	0.926431	1.449712	0.196696899	2.101664
0.14016	341	0.929155	1.46953	0.205969284	2.159518
0.14416	342	0.93188	1.489943	0.214790228	2.219931
0.14416	343	0.934605	1.510994	0.217824833	2.283102
0.14416	344	0.93733	1.532735	0.220959084	2.349277
0.14416	345	0.940054	1.555231	0.224202158	2.418745
0.14416	346	0.942779	1.578542	0.227562577	2.491794
0.147	347	0.945504	1.602739	0.235602611	2.568772
0.147	348	0.948229	1.627918	0.239303977	2.650118
0.15264	349	0.950954	1.654171	0.252492627	2.736281

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.1536	350	0.953678	1.681619	0.258296728	2.827844
0.155	351	0.956403	1.710391	0.265110634	2.925438
0.16112	352	0.959128	1.740655	0.280454273	3.029879
0.16114	353	0.961853	1.772605	0.285637598	3.142129
0.162	354	0.964578	1.806475	0.292648911	3.263351
0.163	355	0.967302	1.842545	0.300334887	3.394973
0.1696	356	0.970027	1.88119	0.319049781	3.538875
0.1696	357	0.972752	1.922872	0.326119072	3.697436
0.175	358	0.975477	1.968183	0.34443201	3.873744
0.17544	359	0.978202	2.01795	0.354029229	4.072124
0.17808	360	0.980926	2.073266	0.369207197	4.298432
0.182	361	0.983651	2.135776	0.388711142	4.561537
0.1861	362	0.986376	2.207944	0.410898361	4.875016
0.188	363	0.989101	2.293855	0.431244698	5.26177
0.20352	364	0.991826	2.40103	0.488657551	5.764943
0.31376	365	0.99455	2.54593	0.7988111	6.481761
0.7208	366	0.997275	2.779198	2.00324558	7.723939

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-5.686336	1	0.0027248	-2.779198	15.80344975	7.7239389
-5.568553	2	0.0054496	-2.54593	14.17714676	6.4817612
-5.463192	3	0.0081744	-2.40103	13.11728591	5.7649433
-5.463192	4	0.0108992	-2.293855	12.53176909	5.2617697
-5.463192	5	0.013624	-2.207944	12.06242151	4.8750163
-5.463192	6	0.0163488	-2.135776	11.66815166	4.561537
-5.463192	7	0.0190736	-2.073266	11.32664988	4.2984316
-5.463192	8	0.0217984	-2.01795	11.02445085	4.0721241
-5.463192	9	0.0245232	-1.968183	10.75256117	3.873744
-5.463192	10	0.027248	-1.922872	10.50501834	3.6974363
-5.463192	11	0.0299728	-1.88119	10.27730079	3.5388749
-5.463192	12	0.0326975	-1.842545	10.06617885	3.3949732
-5.463192	13	0.0354223	-1.806475	9.869118455	3.263351
-5.463192	14	0.0381471	-1.772605	9.684082422	3.1421291
-5.463192	15	0.0408719	-1.740655	9.509530438	3.0298785
-5.463192	16	0.0435967	-1.710391	9.344195476	2.925438
-5.463192	17	0.0463215	-1.681619	9.187009253	2.8278436
-5.463192	18	0.0490463	-1.654171	9.037052554	2.7362809
-5.463192	19	0.0517711	-1.627918	8.893629753	2.6501177
-5.463192	20	0.0544959	-1.602739	8.75607007	2.5687718
-5.463192	21	0.0572207	-1.578542	8.623876631	2.491794
-5.463192	22	0.0599455	-1.555231	8.496527717	2.4187447
-5.298317	23	0.0626703	-1.532735	8.120916687	2.3492767
-5.298317	24	0.0653951	-1.510994	8.005723474	2.2831016
-5.298317	25	0.0681199	-1.489943	7.894192543	2.2199311
-5.298317	26	0.0708447	-1.46953	7.786034766	2.1595176
-5.298317	27	0.0735695	-1.449712	7.681033298	2.1016644
-5.298317	28	0.0762943	-1.430449	7.578971292	2.0461835
-5.298317	29	0.0790191	-1.411699	7.479631904	1.9928954
-5.298317	30	0.0817439	-1.393437	7.382870569	1.9416662
-5.057727	31	0.0844687	-1.375627	6.957543927	1.8923487
-5.035953	32	0.0871935	-1.358244	6.840052758	1.8448266
-4.813425	33	0.0899183	-1.341259	6.456050355	1.798976
-4.770045	34	0.0926431	-1.324654	6.318659068	1.7547083

Uranium - lognormal
116483.21 = (sum of Mi*Xi)^2
365 = count -1
0.9294996 = standard deviation ^2
355.90411 = sum of Mi^2

0.96 = W statistic

FAIL

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-4.770045	35	0.0953678	-1.308406	6.241154794	1.711926
-4.770045	36	0.0980926	-1.292497	6.165266548	1.6705474
-4.770045	37	0.1008174	-1.276908	6.090907563	1.6304936
-4.770045	38	0.1035422	-1.261624	6.018001919	1.5916945
-4.770045	39	0.106267	-1.246628	5.946473695	1.5540825
-4.770045	40	0.1089918	-1.231908	5.876257816	1.5175981
-4.770045	41	0.1117166	-1.21745	5.807289206	1.4821835
-4.770045	42	0.1144414	-1.203243	5.739524484	1.4477944
-4.770045	43	0.1171662	-1.189273	5.672887728	1.4143714
-4.770045	44	0.119891	-1.175531	5.607335554	1.3818731
-4.770045	45	0.1226158	-1.162009	5.542835425	1.3502651
-4.770045	46	0.1253406	-1.148696	5.479333112	1.3195033
-4.770045	47	0.1280654	-1.135584	5.416785232	1.2895504
-4.770045	48	0.1307902	-1.122664	5.355159248	1.2603752
-4.697285	49	0.133515	-1.109929	5.213654047	1.2319427
-4.643911	50	0.1362398	-1.097371	5.096094649	1.2042238
-4.588313	51	0.1389646	-1.084984	4.978246167	1.1771902
-4.546901	52	0.1416894	-1.07276	4.877735495	1.1508148
-4.49901	53	0.1444142	-1.060696	4.772081551	1.1250758
-4.412898	54	0.147139	-1.048784	4.628176314	1.0999475
-4.368045	55	0.1498638	-1.037017	4.529737747	1.0754047
-4.268698	56	0.1525886	-1.025394	4.377096776	1.0514326
-4.254513	57	0.1553134	-1.013907	4.313680692	1.0280073
-4.2517	58	0.1580381	-1.002554	4.262560065	1.0051149
-4.225365	59	0.1607629	-0.991326	4.18871607	0.9827282
-4.21719	60	0.1634877	-0.980224	4.133790522	0.9608388
-4.185145	61	0.1662125	-0.969242	4.05641691	0.9394294
-4.170146	62	0.1689373	-0.958373	3.996556517	0.9184792
-4.152821	63	0.1716621	-0.947618	3.935290248	0.8979807
-4.135167	64	0.1743869	-0.936971	3.874529228	0.8779138
-4.084592	65	0.1771117	-0.926427	3.78407746	0.8582674
-4.078668	66	0.1798365	-0.915988	3.736013034	0.8390349
-4.076898	67	0.1825613	-0.905648	3.692232323	0.8201975
-4.076898	68	0.1852861	-0.895402	3.65046264	0.8017449
-4.076898	69	0.1880109	-0.88525	3.609073019	0.7836673
-4.076898	70	0.1907357	-0.875189	3.568054189	0.765955
-4.076898	71	0.1934605	-0.865214	3.527387611	0.7485947
-4.076898	72	0.1961853	-0.855325	3.487073286	0.7315812
-4.076898	73	0.1989101	-0.845521	3.447101943	0.7149055

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-4.076898	74	0.2016349	-0.835796	3.407455042	0.6985551
-4.046698	75	0.2043597	-0.826149	3.343173841	0.6825215
-4.045554	76	0.2070845	-0.816578	3.303512537	0.6668004
-4.028557	77	0.2098093	-0.807083	3.251381033	0.6513835
-4.017384	78	0.2125341	-0.797659	3.20450086	0.6362594
-4.017384	79	0.2152589	-0.788307	3.166930774	0.6214276
-3.991066	80	0.2179837	-0.779021	3.109123856	0.6068735
-3.959115	81	0.2207084	-0.769803	3.047738848	0.5925969
-3.927137	82	0.2234332	-0.760649	2.987172846	0.578587
-3.912023	83	0.226158	-0.751559	2.940114819	0.5648404
-3.912023	84	0.2288828	-0.742531	2.904797577	0.551352
-3.863233	85	0.2316076	-0.733562	2.83392099	0.5381133
-3.833951	86	0.2343324	-0.724654	2.778286528	0.5251228
-3.817198	87	0.2370572	-0.7158	2.73234871	0.5123691
-3.816713	88	0.239782	-0.707004	2.698429954	0.4998542
-3.78451	89	0.2425068	-0.698262	2.642580375	0.4875702
-3.765329	90	0.2452316	-0.689572	2.596465424	0.4755096
-3.752458	91	0.2479564	-0.680934	2.555177042	0.4636713
-3.751606	92	0.2506812	-0.672347	2.522382614	0.452051
-3.745661	93	0.253406	-0.663809	2.486405619	0.440643
-3.729701	94	0.2561308	-0.65532	2.444149785	0.4294449
-3.729701	95	0.2588556	-0.646878	2.412662211	0.4184513
-3.688879	96	0.2615804	-0.638481	2.355280169	0.4076582
-3.688879	97	0.2643052	-0.630129	2.324468538	0.3970621
-3.688879	98	0.26703	-0.62182	2.293820464	0.3866606
-3.671433	99	0.2697548	-0.613554	2.252622931	0.3764488
-3.671433	100	0.2724796	-0.60533	2.222428682	0.3664245
-3.671433	101	0.2752044	-0.597147	2.192384694	0.3565845
-3.671433	102	0.2779292	-0.589005	2.162490967	0.3469265
-3.671433	103	0.280654	-0.5809	2.132734981	0.3374448
-3.671433	104	0.2833787	-0.572834	2.103120908	0.3281386
-3.671433	105	0.2861035	-0.564803	2.073636227	0.3190025
-3.671433	106	0.2888283	-0.556811	2.04429346	0.3100383
-3.671433	107	0.2915531	-0.548853	2.015075911	0.3012394
-3.671433	108	0.2942779	-0.54093	1.985987754	0.2926052
-3.671433	109	0.2970027	-0.533041	1.957024816	0.2841329
-3.671433	110	0.2997275	-0.525184	1.928178747	0.2758186
-3.671433	111	0.3024523	-0.51736	1.899453722	0.2676618
-3.671433	112	0.3051771	-0.509567	1.870841394	0.2596587

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-3.664382	113	0.3079019	-0.501807	1.838812092	0.2518101
-3.664382	114	0.3106267	-0.494074	1.810475504	0.244109
-3.649659	115	0.3133515	-0.486373	1.775094578	0.2365585
-3.649659	116	0.3160763	-0.478699	1.747087602	0.2291526
-3.649659	117	0.3188011	-0.471055	1.719188505	0.2218924
-3.630611	118	0.3215259	-0.463436	1.682557212	0.2147733
-3.6147	119	0.3242507	-0.455846	1.647744992	0.2077952
-3.611918	120	0.3269755	-0.448281	1.619153833	0.2009557
-3.611918	121	0.3297003	-0.440741	1.591921012	0.1942527
-3.607484	122	0.3324251	-0.433226	1.562857344	0.1876851
-3.607115	123	0.3351499	-0.425737	1.535681459	0.1812518
-3.606894	124	0.3378747	-0.418271	1.508658912	0.1749506
-3.606894	125	0.3405995	-0.410828	1.481812521	0.1687795
-3.597212	126	0.3433243	-0.403408	1.45114245	0.1627376
-3.593569	127	0.346049	-0.39601	1.423089042	0.1568238
-3.592988	128	0.3487738	-0.388633	1.396352735	0.1510354
-3.575551	129	0.3514986	-0.381278	1.363280165	0.1453732
-3.575551	130	0.3542234	-0.373943	1.337053233	0.1398336
-3.575551	131	0.3569482	-0.366629	1.310899469	0.1344166
-3.571274	132	0.359673	-0.359333	1.2832781	0.1291205
-3.557851	133	0.3623978	-0.352056	1.252563941	0.1239436
-3.557851	134	0.3651226	-0.3448	1.226745928	0.1188868
-3.554349	135	0.3678474	-0.33756	1.19980624	0.1139468
-3.55365	136	0.3705722	-0.330339	1.173907984	0.1091237
-3.540459	137	0.373297	-0.323134	1.144044143	0.1044158
-3.540459	138	0.3760218	-0.315946	1.118593838	0.0998218
-3.540459	139	0.3787466	-0.308775	1.093203908	0.0953417
-3.516608	140	0.3814714	-0.301619	1.060676346	0.0909741
-3.506558	141	0.3841962	-0.294478	1.032605799	0.0867176
-3.506558	142	0.386921	-0.287353	1.007618449	0.0825715
-3.506558	143	0.3896458	-0.280243	0.982686911	0.0785359
-3.475059	144	0.3923706	-0.273146	0.949199467	0.0746089
-3.473768	145	0.3950954	-0.266064	0.92424317	0.0707898
-3.473768	146	0.3978202	-0.258993	0.899682989	0.0670776
-3.469905	147	0.400545	-0.251937	0.874196842	0.0634722
-3.469905	148	0.4032698	-0.244893	0.849754708	0.0599725
-3.468941	149	0.4059946	-0.23786	0.825122832	0.0565775
-3.457768	150	0.4087193	-0.230841	0.79819499	0.0532876
-3.454598	151	0.4114441	-0.223831	0.773246829	0.0501004

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-3.450493	152	0.4141689	-0.216834	0.74818333	0.0470169
-3.442019	153	0.4168937	-0.209847	0.722295979	0.0440356
-3.442019	154	0.4196185	-0.20287	0.698281144	0.0411561
-3.438276	155	0.4223433	-0.195903	0.673568264	0.0383779
-3.433617	156	0.4250681	-0.188945	0.648765676	0.0357003
-3.427131	157	0.4277929	-0.181997	0.623726527	0.0331228
-3.42038	158	0.4305177	-0.175056	0.59875852	0.0306446
-3.419769	159	0.4332425	-0.168125	0.574947403	0.0282659
-3.411248	160	0.4359673	-0.161201	0.549896935	0.0259858
-3.411248	161	0.4386921	-0.154287	0.526310089	0.0238044
-3.39621	162	0.4414169	-0.147378	0.500526383	0.0217203
-3.392634	163	0.4441417	-0.140476	0.476583689	0.0197335
-3.38375	164	0.4468665	-0.133582	0.452008271	0.0178442
-3.38375	165	0.4495913	-0.126694	0.428700032	0.0160513
-3.38375	166	0.4523161	-0.119812	0.405414874	0.014355
-3.38375	167	0.4550409	-0.112935	0.382145103	0.0127544
-3.38375	168	0.4577657	-0.106064	0.358894567	0.0112496
-3.38375	169	0.4604905	-0.099199	0.335663266	0.0098404
-3.38375	170	0.4632153	-0.092336	0.312443505	0.008526
-3.38375	171	0.4659401	-0.085479	0.289239131	0.0073066
-3.38375	172	0.4686649	-0.078626	0.266050145	0.006182
-3.38375	173	0.4713896	-0.071777	0.242876546	0.005152
-3.38375	174	0.4741144	-0.064931	0.219710642	0.004216
-3.38375	175	0.4768392	-0.058087	0.196552431	0.0033741
-3.38375	176	0.479564	-0.051248	0.173409607	0.0026263
-3.38375	177	0.4822888	-0.044409	0.150270631	0.0019722
-3.38375	178	0.4850136	-0.037573	0.127139348	0.0014118
-3.38375	179	0.4877384	-0.03074	0.104015759	0.0009449
-3.369699	180	0.4904632	-0.023907	0.080560078	0.0005716
-3.352407	181	0.493188	-0.017076	0.057244911	0.0002916
-3.352407	182	0.4959128	-0.010245	0.034346947	0.000105
-3.324236	183	0.4986376	-0.003415	0.011352774	1.166E-05
-3.31143	184	0.5013624	0.0034152	-0.011309038	1.166E-05
-3.304434	185	0.5040872	0.0102455	-0.033855436	0.000105
-3.28844	186	0.506812	0.0170758	-0.056152627	0.0002916
-3.28844	187	0.5095368	0.0239072	-0.078617416	0.0005716
-3.285016	188	0.5122616	0.0307398	-0.100980671	0.0009449
-3.277565	189	0.5149864	0.0375735	-0.123149581	0.0014118
-3.277565	190	0.5177112	0.0444095	-0.14555498	0.0019722

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-3.27624	191	0.520436	0.0512478	-0.167899945	0.0026263
-3.270169	192	0.5231608	0.0580872	-0.189954814	0.0033741
-3.270169	193	0.5258856	0.0649311	-0.21233568	0.004216
-3.265967	194	0.5286104	0.0717773	-0.234422396	0.005152
-3.265967	195	0.5313351	0.0786258	-0.256789358	0.006182
-3.262305	196	0.5340599	0.0854789	-0.278858144	0.0073066
-3.236531	197	0.5367847	0.0923364	-0.298849759	0.008526
-3.218876	198	0.5395095	0.0991986	-0.319307934	0.0098404
-3.207441	199	0.5422343	0.1060641	-0.340194503	0.0112496
-3.201527	200	0.5449591	0.1129354	-0.36156565	0.0127544
-3.201527	201	0.5476839	0.1198123	-0.383582286	0.014355
-3.196625	202	0.5504087	0.1266937	-0.404992432	0.0160513
-3.194183	203	0.5531335	0.133582	-0.426685491	0.0178442
-3.194183	204	0.5558583	0.140476	-0.448706094	0.0197335
-3.190531	205	0.5585831	0.1473779	-0.470213913	0.0217203
-3.186893	206	0.5613079	0.1542867	-0.49169511	0.0238044
-3.179655	207	0.5640327	0.1612011	-0.512563948	0.0259858
-3.177254	208	0.5667575	0.1681246	-0.53417472	0.0282659
-3.171038	209	0.5694823	0.1750561	-0.555109726	0.0306446
-3.164861	210	0.5722071	0.1819967	-0.575994336	0.0331228
-3.160607	211	0.5749319	0.1889453	-0.597181666	0.0357003
-3.160607	212	0.5776567	0.1959029	-0.619172013	0.0383779
-3.160607	213	0.5803815	0.2028696	-0.641191107	0.0411561
-3.160607	214	0.5831063	0.2098466	-0.663242539	0.0440356
-3.160607	215	0.5858311	0.2168338	-0.685326309	0.0470169
-3.160607	216	0.5885559	0.2238312	-0.707442419	0.0501004
-3.160607	217	0.5912807	0.2308411	-0.729598053	0.0532876
-3.160607	218	0.5940054	0.2378601	-0.751782433	0.0565775
-3.160607	219	0.5967302	0.2448928	-0.774009932	0.0599725
-3.160607	220	0.599455	0.2519369	-0.796273362	0.0634722
-3.160607	221	0.6021798	0.2589934	-0.818576318	0.0670776
-3.160607	222	0.6049046	0.2660636	-0.840922391	0.0707898
-3.160607	223	0.6076294	0.2731463	-0.86330799	0.0746089
-3.160607	224	0.6103542	0.2802426	-0.885736708	0.0785359
-3.15684	225	0.613079	0.2873526	-0.907126235	0.0825715
-3.147486	226	0.6158038	0.2944785	-0.926866806	0.0867176
-3.146555	227	0.6185286	0.3016191	-0.949061258	0.0909741
-3.146555	228	0.6212534	0.3087746	-0.971576275	0.0953417
-3.142378	229	0.6239782	0.315946	-0.992821568	0.0998218

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-3.141915	230	0.626703	0.3231344	-1.015260662	0.1044158
-3.125385	231	0.6294278	0.3303387	-1.0324358	0.1091237
-3.123566	232	0.6321526	0.3375601	-1.054391117	0.1139468
-3.111817	233	0.6348774	0.3447997	-1.0729534	0.1188868
-3.101093	234	0.6376022	0.3520563	-1.091759266	0.1239436
-3.079114	235	0.640327	0.3593334	-1.106428456	0.1291205
-3.079114	236	0.6430518	0.3666287	-1.128891467	0.1344166
-3.079114	237	0.6457766	0.3739433	-1.151413988	0.1398336
-3.047278	238	0.6485014	0.3812784	-1.161861274	0.1453732
-3.047026	239	0.6512262	0.3886328	-1.184173988	0.1510354
-3.015935	240	0.653951	0.3960099	-1.194340138	0.1568238
-3.007805	241	0.6566757	0.4034075	-1.213371073	0.1627376
-2.996733	242	0.6594005	0.4108279	-1.231141288	0.1687795
-2.995732	243	0.6621253	0.4182709	-1.253027721	0.1749506
-2.978285	244	0.6648501	0.4257367	-1.267965511	0.1812518
-2.978285	245	0.6675749	0.4332264	-1.290271941	0.1876851
-2.978285	246	0.6702997	0.4407411	-1.312652862	0.1942527
-2.978285	247	0.6730245	0.4482808	-1.335108274	0.2009557
-2.978285	248	0.6757493	0.4558456	-1.357638175	0.2077952
-2.978285	249	0.6784741	0.4634364	-1.380245952	0.2147733
-2.97593	250	0.6811989	0.4710546	-1.401825322	0.2218924
-2.97593	251	0.6839237	0.4786989	-1.42457423	0.2291526
-2.973971	252	0.6866485	0.4863728	-1.446458364	0.2365585
-2.972016	253	0.6893733	0.4940739	-1.468395416	0.244109
-2.956512	254	0.6920981	0.5018069	-1.483597843	0.2518101
-2.956512	255	0.6948229	0.5095671	-1.506541152	0.2596587
-2.94923	256	0.6975477	0.5173604	-1.525814972	0.2676618
-2.939352	257	0.7002725	0.5251843	-1.543701506	0.2758186
-2.937463	258	0.7029973	0.5330412	-1.565789004	0.2841329
-2.922482	259	0.7057221	0.5409299	-1.580857888	0.2926052
-2.918771	260	0.7084469	0.5488528	-1.601975669	0.3012394
-2.892454	261	0.7111717	0.5568108	-1.610549717	0.3100383
-2.882404	262	0.7138965	0.564803	-1.627990283	0.3190025
-2.882404	263	0.7166213	0.5728339	-1.6511384	0.3281386
-2.879551	264	0.719346	0.5809	-1.672730754	0.3374448
-2.852845	265	0.7220708	0.5890047	-1.680338945	0.3469265
-2.830218	266	0.7247956	0.5971469	-1.690055909	0.3565845
-2.824135	267	0.7275204	0.6053301	-1.70953377	0.3664245
-2.824135	268	0.7302452	0.6135542	-1.732759753	0.3764488

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-2.824135	269	0.73297	0.6218204	-1.75610453	0.3866606
-2.824135	270	0.7356948	0.6301286	-1.779568102	0.3970621
-2.824135	271	0.7384196	0.6384812	-1.80315689	0.4076582
-2.824135	272	0.7411444	0.6468781	-1.826870895	0.4184513
-2.818758	273	0.7438692	0.6553205	-1.847190089	0.4294449
-2.796881	274	0.746594	0.6638095	-1.856596418	0.440643
-2.755142	275	0.7493188	0.6723474	-1.852412346	0.452051
-2.750123	276	0.7520436	0.6809341	-1.872652613	0.4636713
-2.750123	277	0.7547684	0.6895721	-1.896407971	0.4755096
-2.748872	278	0.7574932	0.6982623	-1.919433777	0.4875702
-2.746999	279	0.760218	0.7070037	-1.942138325	0.4998542
-2.746375	280	0.7629428	0.7157996	-1.965854394	0.5123691
-2.730296	281	0.7656676	0.7246535	-1.978518541	0.5251228
-2.726622	282	0.7683924	0.733562	-2.000146112	0.5381133
-2.718101	283	0.7711172	0.7425308	-2.01827337	0.551352
-2.711255	284	0.773842	0.7515587	-2.03766746	0.5648404
-2.690603	285	0.7765668	0.7606491	-2.046604895	0.578587
-2.690603	286	0.7792916	0.7698031	-2.071234851	0.5925969
-2.690603	287	0.7820163	0.7790209	-2.096036102	0.6068735
-2.690603	288	0.7847411	0.7883068	-2.121020885	0.6214276
-2.690603	289	0.7874659	0.7976587	-2.146183082	0.6362594
-2.690603	290	0.7901907	0.8070833	-2.171541046	0.6513835
-2.690603	291	0.7929155	0.8165784	-2.19708866	0.6668004
-2.674809	292	0.7956403	0.8261486	-2.209789621	0.6825215
-2.626931	293	0.7983651	0.8357961	-2.195578737	0.6985551
-2.6018	294	0.8010899	0.8455208	-2.199876202	0.7149055
-2.57282	295	0.8038147	0.8553252	-2.20059799	0.7315812
-2.57282	296	0.8065395	0.8652137	-2.226039274	0.7485947
-2.57282	297	0.8092643	0.8751886	-2.251702856	0.765955
-2.57282	298	0.8119891	0.8852498	-2.277588734	0.7836673
-2.57282	299	0.8147139	0.8954021	-2.303708608	0.8017449
-2.52403	300	0.8174387	0.9056475	-2.285881638	0.8201975
-2.50838	301	0.8201635	0.9159885	-2.297647224	0.8390349
-2.46746	302	0.8228883	0.9264272	-2.285921862	0.8582674
-2.46746	303	0.8256131	0.9369705	-2.311937073	0.8779138
-2.46746	304	0.8283379	0.9476184	-2.338210361	0.8979807
-2.46746	305	0.8310627	0.9583732	-2.364747335	0.9184792
-2.46746	306	0.8337875	0.9692417	-2.391564826	0.9394294
-2.46746	307	0.8365123	0.9802238	-2.418662835	0.9608388

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-2.37215	308	0.8392371	0.9913265	-2.351574688	0.9827282
-2.37215	309	0.8419619	1.0025542	-2.3782085	1.0051149
-2.37215	310	0.8446866	1.013907	-2.405138963	1.0280073
-2.37215	311	0.8474114	1.0253939	-2.43238765	1.0514326
-2.37215	312	0.8501362	1.0370172	-2.459959957	1.0754047
-2.37215	313	0.852861	1.0487838	-2.487872062	1.0999475
-2.309006	314	0.8555858	1.0606959	-2.449152889	1.1250758
-2.285138	315	0.8583106	1.0727604	-2.451405678	1.1508148
-2.285138	316	0.8610354	1.084984	-2.479338313	1.1771902
-2.285138	317	0.8637602	1.0973713	-2.507645046	1.2042238
-2.285138	318	0.866485	1.1099291	-2.536341464	1.2319427
-2.285138	319	0.8692098	1.1226643	-2.565443154	1.2603752
-2.285138	320	0.8719346	1.1355837	-2.594965705	1.2895504
-2.285138	321	0.8746594	1.1486964	-2.624929899	1.3195033
-2.205095	322	0.8773842	1.1620091	-2.56234097	1.3502651
-2.205095	323	0.880109	1.175531	-2.592158078	1.3818731
-2.205095	324	0.8828338	1.1892735	-2.622461526	1.4143714
-2.205095	325	0.8855586	1.2032433	-2.653266353	1.4477944
-2.205095	326	0.8882834	1.2174496	-2.684592617	1.4821835
-2.189828	327	0.8910082	1.2319083	-2.697667288	1.5175981
-2.189792	328	0.893733	1.2466285	-2.729857385	1.5540825
-2.130987	329	0.8964578	1.2616238	-2.688504473	1.5916945
-2.130987	330	0.8991826	1.2769078	-2.721074611	1.6304936
-2.130987	331	0.9019074	1.2924966	-2.754294019	1.6705474
-2.130987	332	0.9046322	1.3084059	-2.788196616	1.711926
-2.130987	333	0.9073569	1.324654	-2.822821162	1.7547083
-2.075418	334	0.9100817	1.3412591	-2.783672852	1.798976
-2.061995	335	0.9128065	1.3582439	-2.800691698	1.8448266
-2.061995	336	0.9155313	1.3756267	-2.836534768	1.8923487
-1.997456	337	0.9182561	1.3934368	-2.783328911	1.9416662
-1.997456	338	0.9209809	1.4116995	-2.81980776	1.9928954
-1.997456	339	0.9237057	1.4304487	-2.85725853	2.0461835
-1.997456	340	0.9264305	1.4497118	-2.895735723	2.1016644
-1.964971	341	0.9291553	1.4695297	-2.887582746	2.1595176
-1.936831	342	0.9318801	1.4899433	-2.885769124	2.2199311
-1.936831	343	0.9346049	1.5109936	-2.926539921	2.2831016
-1.936831	344	0.9373297	1.532735	-2.968649486	2.3492767
-1.936831	345	0.9400545	1.5552314	-3.012221128	2.4187447
-1.936831	346	0.9427793	1.5785417	-3.057369346	2.491794

Table 89. Uranium Near Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (lognormal)	Mi^2
-1.917323	347	0.9455041	1.6027388	-3.072967564	2.5687718
-1.917323	348	0.9482289	1.6279182	-3.121244523	2.6501177
-1.879673	349	0.9509537	1.6541708	-3.109300259	2.7362809
-1.873403	350	0.9536785	1.6816193	-3.150351457	2.8278436
-1.86433	351	0.9564033	1.7103912	-3.188733882	2.925438
-1.825606	352	0.9591281	1.7406546	-3.177749266	3.0298785
-1.825482	353	0.9618529	1.7726052	-3.235858353	3.1421291
-1.820159	354	0.9645777	1.8064748	-3.288071185	3.263351
-1.814005	355	0.9673025	1.8425453	-3.342386561	3.3949732
-1.774313	356	0.9700272	1.8811897	-3.337818586	3.5388749
-1.774313	357	0.972752	1.9228719	-3.411775734	3.6974363
-1.742969	358	0.9754768	1.9681829	-3.430482407	3.873744
-1.740458	359	0.9782016	2.0179505	-3.512158382	4.0721241
-1.725522	360	0.9809264	2.0732659	-3.57746679	4.2984316
-1.703749	361	0.9836512	2.1357755	-3.638824506	4.561537
-1.681471	362	0.986376	2.2079439	-3.712593905	4.8750163
-1.671313	363	0.9891008	2.2938548	-3.833750035	5.2617697
-1.591991	364	0.9918256	2.4010296	-3.822417563	5.7649433
-1.159127	365	0.9945504	2.5459303	-2.951056372	6.4817612
-0.327394	366	0.9972752	2.7791975	-0.909891409	7.7239389

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.003392	-5.686335561	1	0.00189	-2.8956	-0.009822	8.3845738	16.46542633
0.003816	-5.568552525	2	0.00459	-2.6051	-0.009941	6.7864619	14.50654633
0.00424	-5.46319201	3	0.00732	-2.4411	-0.01035	5.9588012	13.33601002
0.00424	-5.46319201	4	0.01005	-2.3244	-0.009856	5.4028995	12.6987189
0.00424	-5.46319201	5	0.01278	-2.2328	-0.009467	4.9854382	12.19826698
0.00424	-5.46319201	6	0.01551	-2.1568	-0.009145	4.6517993	11.78302903
0.00424	-5.46319201	7	0.01824	-2.0915	-0.008868	4.3744918	11.42642226
0.00424	-5.46319201	8	0.02097	-2.0341	-0.008625	4.1376494	11.11279513
0.00424	-5.46319201	9	0.02370	-1.9827	-0.008407	3.9312013	10.83201139
0.00424	-5.46319201	10	0.02643	-1.9361	-0.008209	3.7484323	10.57721419
0.00424	-5.46319201	11	0.02916	-1.8933	-0.008028	3.5846353	10.34353415
0.00424	-5.46319201	12	0.03189	-1.8538	-0.00786	3.4363901	10.12739378
0.00424	-5.46319201	13	0.03462	-1.8169	-0.007704	3.3010837	9.926010576
0.00424	-5.46319201	14	0.03735	-1.7823	-0.007557	3.1767568	9.737297672
0.00424	-5.46319201	15	0.04008	-1.7498	-0.007419	3.0618145	9.559516005
0.00424	-5.46319201	16	0.04281	-1.7190	-0.007289	2.955022	9.391324014
0.00424	-5.46319201	17	0.04554	-1.6898	-0.007165	2.855348	9.231578889
0.00424	-5.46319201	18	0.04826	-1.6619	-0.007047	2.761977	9.079386254
0.00424	-5.46319201	19	0.05099	-1.6353	-0.006934	2.6741723	8.933901424
0.00424	-5.46319201	20	0.05372	-1.6098	-0.006825	2.5913717	8.794503306
0.00424	-5.46319201	21	0.05645	-1.5853	-0.006722	2.5130585	8.66059565
0.00424	-5.46319201	22	0.05918	-1.5617	-0.006621	2.4388151	8.531706426
0.005	-5.298317367	23	0.06191	-1.5389	-0.007695	2.3682596	8.153660375
0.005	-5.298317367	24	0.06464	-1.5169	-0.007585	2.3010844	8.037190183
0.005	-5.298317367	25	0.06737	-1.4957	-0.007478	2.2369973	7.924478648
0.005	-5.298317367	26	0.07010	-1.4750	-0.007375	2.1757467	7.815236643
0.005	-5.298317367	27	0.07283	-1.4550	-0.007275	2.1171192	7.709223229
0.005	-5.298317367	28	0.07556	-1.4356	-0.007178	2.0609111	7.606197465
0.005	-5.298317367	29	0.07829	-1.4167	-0.007083	2.0069664	7.505990694
0.005	-5.298317367	30	0.08102	-1.3983	-0.006991	1.9551104	7.408386071
0.00636	-5.057726902	31	0.08375	-1.3803	-0.008779	1.9052007	6.981130303
0.0065	-5.035953102	32	0.08648	-1.3628	-0.008858	1.8571385	6.862839117
0.00812	-4.813425125	33	0.08921	-1.3457	-0.010927	1.8107793	6.477195054
0.00848	-4.770044829	34	0.09194	-1.3289	-0.011269	1.7660332	6.339016684
0.00848	-4.770044829	35	0.09467	-1.3126	-0.01113	1.7228019	6.260948427

Normal

16.179 =sum X(i)*M(i)
361.144 =sum M(i)^2
0.06 = standard deviation
19.0038 = square root of sum Mi^2

0.790 = Fillibens's Statistic

Lognormal

343.737 =sum X(i)*M(i)
361.144 =sum M(i)^2
0.96 = standard deviation
19.0038 = square root of sum Mi^2

0.982 = Fillibens's Statistic

.987+ is acceptable value

Normal - Fail
Lognormal - Fail

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.00848	-4.770044829	36	0.09740	-1.2965	-0.010995	1.6809964	6.184517889
0.00848	-4.770044829	37	0.10013	-1.2808	-0.010861	1.640543	6.109649151
0.00848	-4.770044829	38	0.10286	-1.2655	-0.010731	1.6013649	6.036255444
0.00848	-4.770044829	39	0.10558	-1.2504	-0.010603	1.5633936	5.96426085
0.00848	-4.770044829	40	0.10831	-1.2355	-0.010477	1.526569	5.893600292
0.00848	-4.770044829	41	0.11104	-1.2210	-0.010354	1.4908328	5.824208695
0.00848	-4.770044829	42	0.11377	-1.2067	-0.010233	1.4561344	5.756031832
0.00848	-4.770044829	43	0.11650	-1.1927	-0.010114	1.4224194	5.689004625
0.00848	-4.770044829	44	0.11923	-1.1788	-0.009997	1.3896513	5.623094539
0.00848	-4.770044829	45	0.12196	-1.1652	-0.009881	1.3577738	5.558225652
0.00848	-4.770044829	46	0.12469	-1.1519	-0.009768	1.3267637	5.494387119
0.00848	-4.770044829	47	0.12742	-1.1387	-0.009656	1.2965675	5.431503019
0.00848	-4.770044829	48	0.13015	-1.1257	-0.009546	1.267159	5.369551659
0.00912	-4.697285475	49	0.13288	-1.1129	-0.010149	1.2385029	5.227517194
0.00962	-4.643911014	50	0.13561	-1.1003	-0.010585	1.2105747	5.109515177
0.01017	-4.588313069	51	0.13834	-1.0878	-0.011063	1.183336	4.991224341
0.0106	-4.546901278	52	0.14107	-1.0755	-0.011401	1.1567692	4.890338073
0.01112	-4.49900999	53	0.14380	-1.0634	-0.011825	1.1308425	4.78429565
0.01212	-4.412898298	54	0.14653	-1.0514	-0.012744	1.1055347	4.639915824
0.012676	-4.368044837	55	0.14926	-1.0396	-0.013178	1.0808206	4.541129504
0.014	-4.268697949	56	0.15199	-1.0280	-0.014391	1.056685	4.388015908
0.0142	-4.254513314	57	0.15472	-1.0164	-0.014433	1.0330992	4.32435072
0.01424	-4.251700373	58	0.15745	-1.0050	-0.014311	1.0100493	4.273010359
0.01462	-4.225364825	59	0.16017	-0.9937	-0.014528	0.987517	4.198909487
0.01474	-4.217190392	60	0.16290	-0.9826	-0.014483	0.9654847	4.143772443
0.01522	-4.185144927	61	0.16563	-0.9716	-0.014787	0.943935	4.066132662
0.01545	-4.170146276	62	0.16836	-0.9607	-0.014842	0.9228513	4.006057296
0.01572	-4.152821492	63	0.17109	-0.9499	-0.014932	0.9022217	3.94457215
0.016	-4.135166557	64	0.17382	-0.9392	-0.015027	0.8820346	3.883611831
0.01683	-4.084592271	65	0.17655	-0.9286	-0.015628	0.8622701	3.792891096
0.01693	-4.078668083	66	0.17928	-0.9181	-0.015544	0.8429174	3.744646959
0.01696	-4.076897649	67	0.18201	-0.9077	-0.015395	0.8239701	3.700714183
0.01696	-4.076897649	68	0.18474	-0.8974	-0.015221	0.8054096	3.658796183
0.01696	-4.076897649	69	0.18747	-0.8873	-0.015048	0.787226	3.617258245
0.01696	-4.076897649	70	0.19020	-0.8772	-0.014877	0.7694095	3.576091099

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.01696	-4.076897649	71	0.19293	-0.8672	-0.014707	0.7519546	3.535294744
0.01696	-4.076897649	72	0.19566	-0.8572	-0.014539	0.7348443	3.494841372
0.01696	-4.076897649	73	0.19839	-0.8474	-0.014372	0.7180734	3.454730981
0.01696	-4.076897649	74	0.20112	-0.8376	-0.014206	0.7016333	3.414954304
0.01748	-4.046697909	75	0.20385	-0.8280	-0.014473	0.6855134	3.350493337
0.0175	-4.045554398	76	0.20658	-0.8184	-0.014321	0.6697074	3.310705784
0.0178	-4.028556822	77	0.20931	-0.8088	-0.014397	0.6542052	3.258415819
0.018	-4.017383521	78	0.21204	-0.7994	-0.014389	0.6390046	3.211406521
0.018	-4.017383521	79	0.21477	-0.7900	-0.01422	0.6240904	3.173708553
0.01848	-3.991066213	80	0.21749	-0.7807	-0.014427	0.6094623	3.115748338
0.01908	-3.959114613	81	0.22022	-0.7714	-0.014719	0.595113	3.054202273
0.0197	-3.927136643	82	0.22295	-0.7623	-0.015016	0.5810317	2.993476914
0.02	-3.912023005	83	0.22568	-0.7531	-0.015063	0.5672182	2.946296782
0.02	-3.912023005	84	0.22841	-0.7441	-0.014882	0.553659	2.910868353
0.021	-3.863232841	85	0.23114	-0.7351	-0.015437	0.5403573	2.839823821
0.021624	-3.83395147	86	0.23387	-0.7262	-0.015702	0.5272999	2.78404001
0.02198933	-3.817197792	87	0.23660	-0.7173	-0.015772	0.5144871	2.737990257
0.022	-3.816712826	88	0.23933	-0.7085	-0.015586	0.5019091	2.703970985
0.02272	-3.784509685	89	0.24206	-0.6997	-0.015897	0.4895664	2.647984302
0.02316	-3.765328626	90	0.24479	-0.6910	-0.016003	0.4774495	2.601756348
0.02346	-3.752458436	91	0.24752	-0.6823	-0.016007	0.4655559	2.56036456
0.02348	-3.751606284	92	0.25025	-0.6737	-0.015819	0.4538797	2.527479388
0.02362	-3.745661468	93	0.25298	-0.6651	-0.015711	0.4424183	2.49140915
0.024	-3.729701449	94	0.25571	-0.6566	-0.015759	0.4311691	2.449051433
0.024	-3.729701449	95	0.25844	-0.6482	-0.015556	0.4201238	2.417479055
0.025	-3.688879454	96	0.26117	-0.6398	-0.015994	0.4092814	2.35996461
0.025	-3.688879454	97	0.26390	-0.6314	-0.015784	0.3986382	2.329077491
0.025	-3.688879454	98	0.26663	-0.6230	-0.015576	0.3881905	2.298353929
0.02544	-3.671432541	99	0.26936	-0.6148	-0.01564	0.3779332	2.257059825
0.02544	-3.671432541	100	0.27209	-0.6065	-0.01543	0.3678656	2.226794618
0.02544	-3.671432541	101	0.27481	-0.5983	-0.015221	0.3579816	2.196675499
0.02544	-3.671432541	102	0.27754	-0.5902	-0.015013	0.3482805	2.166706642
0.02544	-3.671432541	103	0.28027	-0.5820	-0.014807	0.3387576	2.136879699
0.02544	-3.671432541	104	0.28300	-0.5739	-0.014601	0.3294111	2.107194669
0.02544	-3.671432541	105	0.28573	-0.5659	-0.014396	0.3202365	2.077643205

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.02544	-3.671432541	106	0.28846	-0.5579	-0.014193	0.3112321	2.048225307
0.02544	-3.671432541	107	0.29119	-0.5499	-0.01399	0.3023961	2.018940976
0.02544	-3.671432541	108	0.29392	-0.5420	-0.013788	0.2937267	1.98979021
0.02544	-3.671432541	109	0.29665	-0.5341	-0.013586	0.2852175	1.960756314
0.02544	-3.671432541	110	0.29938	-0.5262	-0.013386	0.2768692	1.931847636
0.02544	-3.671432541	111	0.30211	-0.5183	-0.013187	0.2686779	1.903055829
0.02544	-3.671432541	112	0.30484	-0.5105	-0.012988	0.2606421	1.874380892
0.02562	-3.664381983	113	0.30757	-0.5028	-0.012881	0.2527603	1.842278137
0.02562	-3.664381983	114	0.31030	-0.4950	-0.012682	0.2450288	1.813883226
0.026	-3.649658741	115	0.31303	-0.4873	-0.012669	0.2374473	1.778426371
0.026	-3.649658741	116	0.31576	-0.4796	-0.012469	0.2300111	1.750357157
0.026	-3.649658741	117	0.31849	-0.4719	-0.01227	0.2227222	1.722399972
0.0265	-3.630610546	118	0.32122	-0.4643	-0.012304	0.2155739	1.685690004
0.026925	-3.614700056	119	0.32395	-0.4567	-0.012296	0.2085681	1.650806523
0.027	-3.611918413	120	0.32668	-0.4491	-0.012126	0.2017015	1.622155521
0.027	-3.611918413	121	0.32941	-0.4416	-0.011922	0.1949719	1.594865212
0.02712	-3.607483816	122	0.33213	-0.4340	-0.011771	0.1883793	1.565744613
0.02713	-3.607115152	123	0.33486	-0.4265	-0.011572	0.1819203	1.538511021
0.027136	-3.606894019	124	0.33759	-0.4190	-0.011371	0.1755941	1.511430893
0.027136	-3.606894019	125	0.34032	-0.4116	-0.011169	0.1693994	1.484531195
0.0274	-3.597212266	126	0.34305	-0.4041	-0.011074	0.1633335	1.453796572
0.0275	-3.593569274	127	0.34578	-0.3967	-0.01091	0.157397	1.425687367
0.027516	-3.592987625	128	0.34851	-0.3893	-0.010713	0.1515864	1.398897537
0.028	-3.575550769	129	0.35124	-0.3820	-0.010695	0.1459025	1.365759773
0.028	-3.575550769	130	0.35397	-0.3746	-0.010489	0.1403416	1.339479996
0.028	-3.575550769	131	0.35670	-0.3673	-0.010284	0.1349039	1.313273389
0.02812	-3.571274212	132	0.35943	-0.3600	-0.010123	0.1295883	1.285600459
0.0285	-3.557851192	133	0.36216	-0.3527	-0.010052	0.1243923	1.254829034
0.0285	-3.557851192	134	0.36489	-0.3454	-0.009845	0.119316	1.228958439
0.0286	-3.554348561	135	0.36762	-0.3382	-0.009672	0.1143578	1.201968082
0.02862	-3.553649505	136	0.37035	-0.3309	-0.009471	0.1095161	1.176016881
0.029	-3.540459449	137	0.37308	-0.3237	-0.009388	0.1047909	1.146096911
0.029	-3.540459449	138	0.37581	-0.3165	-0.009179	0.1001799	1.120598306
0.029	-3.540459449	139	0.37854	-0.3093	-0.00897	0.0956833	1.095160076
0.0297	-3.516608233	140	0.38127	-0.3022	-0.008974	0.0912995	1.06257136

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.03	-3.506557897	141	0.38400	-0.2950	-0.00885	0.0870272	1.034447559
0.03	-3.506557897	142	0.38672	-0.2879	-0.008636	0.0828664	1.009416358
0.03	-3.506557897	143	0.38945	-0.2807	-0.008422	0.0788153	0.984432996
0.03096	-3.47505923	144	0.39218	-0.2736	-0.008472	0.0748743	0.950886409
0.031	-3.473768074	145	0.39491	-0.2665	-0.008263	0.0710411	0.925882095
0.031	-3.473768074	146	0.39764	-0.2595	-0.008043	0.0673157	0.901278473
0.03112	-3.46990458	147	0.40037	-0.2524	-0.007854	0.0636969	0.875743213
0.03112	-3.46990458	148	0.40310	-0.2453	-0.007635	0.0601848	0.851257686
0.03115	-3.468941034	149	0.40583	-0.2383	-0.007422	0.0567777	0.826582012
0.0315	-3.457767733	150	0.40856	-0.2312	-0.007284	0.0534757	0.799602298
0.0316	-3.454598158	151	0.41129	-0.2242	-0.007086	0.0502777	0.774613572
0.03173	-3.450492673	152	0.41402	-0.2172	-0.006892	0.0471827	0.749501376
0.032	-3.442019376	153	0.41675	-0.2102	-0.006727	0.0441908	0.723567744
0.032	-3.442019376	154	0.41948	-0.2032	-0.006503	0.041301	0.699509864
0.03212	-3.43827639	155	0.42221	-0.1962	-0.006303	0.0385126	0.674748742
0.03227	-3.433617273	156	0.42494	-0.1893	-0.006108	0.0358254	0.649901615
0.03248	-3.427130764	157	0.42767	-0.1823	-0.005922	0.0332388	0.624817462
0.0327	-3.420380201	158	0.43040	-0.1754	-0.005734	0.0307522	0.599808421
0.03272	-3.419768767	159	0.43313	-0.1684	-0.005511	0.028365	0.575954351
0.033	-3.411247718	160	0.43586	-0.1615	-0.005329	0.0260768	0.550858713
0.033	-3.411247718	161	0.43859	-0.1546	-0.0051	0.0238872	0.52722533
0.0335	-3.39620984	162	0.44132	-0.1476	-0.004946	0.0217961	0.501398979
0.03362	-3.392634151	163	0.44404	-0.1407	-0.004731	0.0198026	0.477416796
0.03392	-3.383750468	164	0.44677	-0.1338	-0.004539	0.0179065	0.452796881
0.03392	-3.383750468	165	0.44950	-0.1269	-0.004305	0.0161075	0.429450173
0.03392	-3.383750468	166	0.45223	-0.1200	-0.004071	0.0144049	0.406118853
0.03392	-3.383750468	167	0.45496	-0.1131	-0.003837	0.0127989	0.382810613
0.03392	-3.383750468	168	0.45769	-0.1062	-0.003604	0.0112889	0.359521609
0.03392	-3.383750468	169	0.46042	-0.0994	-0.003371	0.0098744	0.336244144
0.03392	-3.383750468	170	0.46315	-0.0925	-0.003137	0.0085556	0.312985914
0.03392	-3.383750468	171	0.46588	-0.0856	-0.002904	0.0073321	0.289743072
0.03392	-3.383750468	172	0.46861	-0.0788	-0.002672	0.0062035	0.26651177
0.03392	-3.383750468	173	0.47134	-0.0719	-0.002439	0.0051698	0.243295856
0.03392	-3.383750468	174	0.47407	-0.0650	-0.002206	0.0042307	0.220091483
0.03392	-3.383750468	175	0.47680	-0.0582	-0.001974	0.0033859	0.196894803

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.03392	-3.383750468	176	0.47953	-0.0513	-0.001741	0.0026354	0.173709664
0.03392	-3.383750468	177	0.48226	-0.0445	-0.001509	0.0019791	0.150532218
0.03392	-3.383750468	178	0.48499	-0.0376	-0.001277	0.0014167	0.127362467
0.03392	-3.383750468	179	0.48772	-0.0308	-0.001045	0.0009482	0.104196562
0.0344	-3.369698715	180	0.49045	-0.0239	-0.000824	0.0005736	0.080701822
0.035	-3.352407217	181	0.49318	-0.0171	-0.000599	0.0002926	0.057344004
0.035	-3.352407217	182	0.49591	-0.0103	-0.000359	0.0001053	0.034407927
0.036	-3.324236341	183	0.49864	-0.0034	-0.000123	1.17E-05	0.01137167
0.036464	-3.311429806	184	0.50136	0.0034	0.0001247	1.17E-05	-0.011327861
0.03672	-3.304433713	185	0.50409	0.0103	0.0003769	0.0001053	-0.033915544
0.037312	-3.288440288	186	0.50682	0.0171	0.0006382	0.0002926	-0.056249829
0.037312	-3.288440288	187	0.50955	0.0239	0.0008936	0.0005736	-0.078755742
0.03744	-3.285015627	188	0.51228	0.0308	0.0011529	0.0009482	-0.101156199
0.03772	-3.277564821	189	0.51501	0.0376	0.0014198	0.0014167	-0.123365699
0.03772	-3.277564821	190	0.51774	0.0445	0.001678	0.0019791	-0.145808359
0.03777	-3.276240142	191	0.52047	0.0513	0.001939	0.0026354	-0.168190468
0.038	-3.270169119	192	0.52320	0.0582	0.0022112	0.0033859	-0.190285693
0.038	-3.270169119	193	0.52593	0.0650	0.0024717	0.0042307	-0.212703737
0.03816	-3.265967432	194	0.52866	0.0719	0.0027438	0.0051698	-0.23482711
0.03816	-3.265967432	195	0.53139	0.0788	0.0030056	0.0062035	-0.257234915
0.0383	-3.262305383	196	0.53412	0.0856	0.0032795	0.0073321	-0.279343998
0.0393	-3.23653076	197	0.53685	0.0925	0.0036351	0.0085556	-0.29936857
0.04	-3.218875825	198	0.53958	0.0994	0.0039748	0.0098744	-0.319860509
0.04046	-3.207441447	199	0.54231	0.1062	0.0042989	0.0112889	-0.340788873
0.0407	-3.201527187	200	0.54504	0.1131	0.0046045	0.0127989	-0.362195321
0.0407	-3.201527187	201	0.54777	0.1200	0.0048848	0.0144049	-0.384248354
0.0409	-3.196625216	202	0.55050	0.1269	0.0051908	0.0161075	-0.40570109
0.041	-3.194183212	203	0.55323	0.1338	0.0054864	0.0179065	-0.427429922
0.041	-3.194183212	204	0.55596	0.1407	0.0057696	0.0198026	-0.449490469
0.04115	-3.190531352	205	0.55868	0.1476	0.0060752	0.0217961	-0.471033663
0.0413	-3.186892779	206	0.56141	0.1546	0.0063831	0.0238872	-0.492550157
0.0416	-3.179655112	207	0.56414	0.1615	0.0067177	0.0260768	-0.513460431
0.0417	-3.17725415	208	0.56687	0.1684	0.0070231	0.028365	-0.535110259
0.04196	-3.171038495	209	0.56960	0.1754	0.0073582	0.0307522	-0.55608309
0.04222	-3.164861237	210	0.57233	0.1823	0.0076973	0.0332388	-0.577001785

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.0424	-3.160606917	211	0.57506	0.1893	0.0080253	0.0358254	-0.598227285
0.0424	-3.160606917	212	0.57779	0.1962	0.0083208	0.0385126	-0.620257158
0.0424	-3.160606917	213	0.58052	0.2032	0.0086168	0.041301	-0.64231937
0.0424	-3.160606917	214	0.58325	0.2102	0.0089132	0.0441908	-0.664410327
0.0424	-3.160606917	215	0.58598	0.2172	0.0092099	0.0471827	-0.686533622
0.0424	-3.160606917	216	0.58871	0.2242	0.0095072	0.0502777	-0.70869285
0.0424	-3.160606917	217	0.59144	0.2312	0.0098049	0.0534757	-0.730884417
0.0424	-3.160606917	218	0.59417	0.2383	0.0101031	0.0567777	-0.753111915
0.0424	-3.160606917	219	0.59690	0.2453	0.0104018	0.0601848	-0.775378939
0.0424	-3.160606917	220	0.59963	0.2524	0.010701	0.0636969	-0.797681894
0.0424	-3.160606917	221	0.60236	0.2595	0.0110008	0.0673157	-0.820027968
0.0424	-3.160606917	222	0.60509	0.2665	0.0113011	0.0710411	-0.842413567
0.0424	-3.160606917	223	0.60782	0.2736	0.011602	0.0748743	-0.864842284
0.0424	-3.160606917	224	0.61055	0.2807	0.0119034	0.0788153	-0.887310527
0.04256	-3.156840434	225	0.61328	0.2879	0.0122515	0.0828664	-0.908744834
0.04296	-3.147485829	226	0.61600	0.2950	0.0126734	0.0870272	-0.92851997
0.043	-3.146555163	227	0.61873	0.3022	0.0129928	0.0912995	-0.95075686
0.043	-3.146555163	228	0.62146	0.3093	0.0133011	0.0956833	-0.973314803
0.04318	-3.142377854	229	0.62419	0.3165	0.013667	0.1001799	-0.994600658
0.0432	-3.141914784	230	0.62692	0.3237	0.0139845	0.1047909	-1.017082354
0.04392	-3.125385482	231	0.62965	0.3309	0.0145345	0.1095161	-1.034290546
0.044	-3.123565645	232	0.63238	0.3382	0.0148794	0.1143578	-1.056290947
0.04452	-3.111816753	233	0.63511	0.3454	0.0153782	0.119316	-1.074888536
0.045	-3.101092789	234	0.63784	0.3527	0.0158712	0.1243923	-1.093733565
0.046	-3.079113882	235	0.64057	0.3600	0.0165592	0.1295883	-1.108430769
0.046	-3.079113882	236	0.64330	0.3673	0.0168955	0.1349039	-1.130935787
0.046	-3.079113882	237	0.64603	0.3746	0.0172326	0.1403416	-1.153503815
0.047488	-3.047278231	238	0.64876	0.3820	0.0181391	0.1459025	-1.16397453
0.0475	-3.047025568	239	0.65149	0.3893	0.0184937	0.1515864	-1.186332102
0.049	-3.015934981	240	0.65422	0.3967	0.0194399	0.157397	-1.196520805
0.0494	-3.007804855	241	0.65695	0.4041	0.0199648	0.1633335	-1.215590314
0.04995	-2.996732774	242	0.65968	0.4116	0.0205585	0.1693994	-1.233400056
0.05	-2.995732274	243	0.66241	0.4190	0.020952	0.1755941	-1.25533001
0.05088	-2.97828536	244	0.66514	0.4265	0.0217014	0.1819203	-1.270301794
0.05088	-2.97828536	245	0.66787	0.4340	0.0220833	0.1883793	-1.292655628

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.05088	-2.97828536	246	0.67059	0.4416	0.0224664	0.1949719	-1.315080566
0.05088	-2.97828536	247	0.67332	0.4491	0.0228508	0.2017015	-1.33758338
0.05088	-2.97828536	248	0.67605	0.4567	0.0232365	0.2085681	-1.360160684
0.05088	-2.97828536	249	0.67878	0.4643	0.0236235	0.2155739	-1.382815864
0.051	-2.975929646	250	0.68151	0.4719	0.0240687	0.2227222	-1.40444395
0.051	-2.975929646	251	0.68424	0.4796	0.0244593	0.2300111	-1.427240223
0.0511	-2.973970782	252	0.68697	0.4873	0.0249003	0.2374473	-1.449173317
0.0512	-2.972015747	253	0.68970	0.4950	0.0253442	0.2450288	-1.471159267
0.052	-2.95651156	254	0.69243	0.5028	0.0261431	0.2527603	-1.486394332
0.052	-2.95651156	255	0.69516	0.5105	0.0265476	0.2606421	-1.50939142
0.05238	-2.94923044	256	0.69789	0.5183	0.0271507	0.2686779	-1.528708513
0.0529	-2.93935194	257	0.70062	0.5262	0.0278351	0.2768692	-1.546638821
0.053	-2.937463365	258	0.70335	0.5341	0.0283051	0.2852175	-1.568774525
0.0538	-2.922481812	259	0.70608	0.5420	0.0291578	0.2937267	-1.583884664
0.054	-2.918771232	260	0.70881	0.5499	0.0296949	0.3023961	-1.605048377
0.05544	-2.892453924	261	0.71154	0.5579	0.030929	0.3112321	-1.613647333
0.056	-2.882403588	262	0.71427	0.5659	0.0316901	0.3202365	-1.63113612
0.056	-2.882403588	263	0.71700	0.5739	0.0321408	0.3294111	-1.654336668
0.05616	-2.879550519	264	0.71973	0.5820	0.0326867	0.3387576	-1.675981508
0.05768	-2.852844786	265	0.72246	0.5902	0.03404	0.3482805	-1.683614687
0.059	-2.830217835	266	0.72519	0.5983	0.0353006	0.3579816	-1.693363587
0.05936	-2.82413468	267	0.72791	0.6065	0.036003	0.3678656	-1.712892131
0.05936	-2.82413468	268	0.73064	0.6148	0.0364923	0.3779332	-1.736172695
0.05936	-2.82413468	269	0.73337	0.6230	0.0369842	0.3881905	-1.759575264
0.05936	-2.82413468	270	0.73610	0.6314	0.0374786	0.3986382	-1.783096628
0.05936	-2.82413468	271	0.73883	0.6398	0.0379756	0.4092814	-1.806743208
0.05936	-2.82413468	272	0.74156	0.6482	0.0384753	0.4201238	-1.830518215
0.05968	-2.818758323	273	0.74429	0.6566	0.039188	0.4311691	-1.850894557
0.061	-2.796881415	274	0.74702	0.6651	0.0405739	0.4424183	-1.860332549
0.0636	-2.755141809	275	0.74975	0.6737	0.0428477	0.4538797	-1.856155365
0.06392	-2.750122978	276	0.75248	0.6823	0.0436137	0.4655559	-1.876454471
0.06392	-2.750122978	277	0.75521	0.6910	0.0441673	0.4774495	-1.90027236
0.064	-2.748872196	278	0.75794	0.6997	0.0447802	0.4895664	-1.923358909
0.06412	-2.746998951	279	0.76067	0.7085	0.0454262	0.5019091	-1.946126366
0.06416	-2.746375315	280	0.76340	0.7173	0.0460205	0.5144871	-1.969913341

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.0652	-2.73029581	281	0.76613	0.7262	0.0473453	0.5272999	-1.982615803
0.06544	-2.726621587	282	0.76886	0.7351	0.0481043	0.5403573	-2.004312256
0.066	-2.718100537	283	0.77159	0.7441	0.0491095	0.553659	-2.022491387
0.06645333	-2.711255332	284	0.77432	0.7531	0.0500486	0.5672182	-2.041951913
0.06784	-2.690603287	285	0.77705	0.7623	0.0517113	0.5810317	-2.050924008
0.06784	-2.690603287	286	0.77978	0.7714	0.0523342	0.595113	-2.075627376
0.06784	-2.690603287	287	0.78251	0.7807	0.0529614	0.6094623	-2.10050204
0.06784	-2.690603287	288	0.78523	0.7900	0.0535932	0.6240904	-2.125560236
0.06784	-2.690603287	289	0.78796	0.7994	0.0542298	0.6390046	-2.150808081
0.06784	-2.690603287	290	0.79069	0.8088	0.054871	0.6542052	-2.176239458
0.06784	-2.690603287	291	0.79342	0.8184	0.0555173	0.6697074	-2.20187272
0.06892	-2.674808867	292	0.79615	0.8280	0.0570628	0.6855134	-2.214627701
0.0723	-2.62693115	293	0.79888	0.8376	0.060561	0.7016333	-2.200410854
0.07414	-2.601800081	294	0.80161	0.8474	0.0628257	0.7180734	-2.204744912
0.07632	-2.572820252	295	0.80434	0.8572	0.0654238	0.7348443	-2.205500219
0.07632	-2.572820252	296	0.80707	0.8672	0.0661811	0.7519546	-2.231029252
0.07632	-2.572820252	297	0.80980	0.8772	0.0669448	0.7694095	-2.256774733
0.07632	-2.572820252	298	0.81253	0.8873	0.0677155	0.787226	-2.282754209
0.07632	-2.572820252	299	0.81526	0.8974	0.0684931	0.8054096	-2.308967683
0.080136	-2.524030088	300	0.81799	0.9077	0.0727417	0.8239701	-2.291132804
0.0814	-2.508380006	301	0.82072	0.9181	0.0747338	0.8429174	-2.302957085
0.0848	-2.467459736	302	0.82345	0.9286	0.078744	0.8622701	-2.291246088
0.0848	-2.467459736	303	0.82618	0.9392	0.0796414	0.8820346	-2.317356675
0.0848	-2.467459736	304	0.82891	0.9499	0.0805476	0.9022217	-2.343725338
0.0848	-2.467459736	305	0.83164	0.9607	0.0814632	0.9228513	-2.370368909
0.0848	-2.467459736	306	0.83437	0.9716	0.0823886	0.943935	-2.397292997
0.0848	-2.467459736	307	0.83710	0.9826	0.0833237	0.9654847	-2.424503214
0.09328	-2.372149556	308	0.83983	0.9937	0.092696	0.987517	-2.357297344
0.09328	-2.372149556	309	0.84255	1.0050	0.0937475	1.0100493	-2.384039029
0.09328	-2.372149556	310	0.84528	1.0164	0.0948112	1.0330992	-2.411088152
0.09328	-2.372149556	311	0.84801	1.0280	0.0958873	1.056685	-2.438455499
0.09328	-2.372149556	312	0.85074	1.0396	0.0969762	1.0808206	-2.466146466
0.09328	-2.372149556	313	0.85347	1.0514	0.0980787	1.1055347	-2.494182625
0.09936	-2.309005661	314	0.85620	1.0634	0.1056605	1.1308425	-2.455421474
0.10176	-2.285138179	315	0.85893	1.0755	0.1094461	1.1567692	-2.457739361

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.10176	-2.285138179	316	0.86166	1.0878	0.1106958	1.183336	-2.485801891
0.10176	-2.285138179	317	0.86439	1.1003	0.1119626	1.2105747	-2.514248911
0.10176	-2.285138179	318	0.86712	1.1129	0.1132467	1.2385029	-2.543085616
0.10176	-2.285138179	319	0.86985	1.1257	0.1145494	1.267159	-2.572337985
0.10176	-2.285138179	320	0.87258	1.1387	0.115871	1.2965675	-2.602016409
0.10176	-2.285138179	321	0.87531	1.1519	0.1172125	1.3267637	-2.632141673
0.11024	-2.205095472	322	0.87804	1.1652	0.1284556	1.3577738	-2.569455562
0.11024	-2.205095472	323	0.88077	1.1788	0.1299547	1.3896513	-2.599443139
0.11024	-2.205095472	324	0.88350	1.1927	0.131478	1.4224194	-2.629912042
0.11024	-2.205095472	325	0.88623	1.2067	0.133027	1.4561344	-2.660897367
0.11024	-2.205095472	326	0.88896	1.2210	0.1346027	1.4908328	-2.692414156
0.111936	-2.189828	327	0.89169	1.2355	0.1383019	1.526569	-2.705628857
0.11194	-2.189792266	328	0.89442	1.2504	0.139965	1.5633936	-2.738022963
0.11872	-2.1309875	329	0.89714	1.2655	0.1502343	1.6013649	-2.696659121
0.11872	-2.1309875	330	0.89987	1.2808	0.1520609	1.640543	-2.729447297
0.11872	-2.1309875	331	0.90260	1.2965	0.1539243	1.6809964	-2.762894435
0.11872	-2.1309875	332	0.90533	1.3126	0.1558266	1.7228019	-2.797039296
0.11872	-2.1309875	333	0.90806	1.3289	0.1577696	1.7660332	-2.831915799
0.125504	-2.075417648	334	0.91079	1.3457	0.1688847	1.8107793	-2.79278987
0.1272	-2.061994628	335	0.91352	1.3628	0.1733442	1.8571385	-2.810021679
0.1272	-2.061994628	336	0.91625	1.3803	0.1755729	1.9052007	-2.846150744
0.13568	-1.997456107	337	0.91898	1.3983	0.1897149	1.9551104	-2.792948209
0.13568	-1.997456107	338	0.92171	1.4167	0.1922144	2.0069664	-2.829744976
0.13568	-1.997456107	339	0.92444	1.4356	0.1947805	2.0609111	-2.867522748
0.13568	-1.997456107	340	0.92717	1.4550	0.1974188	2.1171192	-2.906363276
0.14016	-1.964970652	341	0.92990	1.4750	0.2067418	2.1757467	-2.898412756
0.14416	-1.936831485	342	0.93263	1.4957	0.2156143	2.2369973	-2.89684039
0.14416	-1.936831485	343	0.93536	1.5169	0.218681	2.3010844	-2.938042764
0.14416	-1.936831485	344	0.93809	1.5389	0.22185	2.3682596	-2.980619137
0.14416	-1.936831485	345	0.94082	1.5617	0.2251304	2.4388151	-3.024692817
0.14416	-1.936831485	346	0.94355	1.5853	0.2285315	2.5130585	-3.070387112
0.147	-1.917322692	347	0.94628	1.6098	0.2366367	2.5913717	-3.086455817
0.147	-1.917322692	348	0.94901	1.6353	0.2403876	2.6741723	-3.135377981
0.15264	-1.879673071	349	0.95174	1.6619	0.2536754	2.761977	-3.123865648
0.1536	-1.873403458	350	0.95446	1.6898	0.2595498	2.855348	-3.165634996

Table 90. Uranium Near Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.155	-1.864330162	351	0.95719	1.7190	0.2664478	2.955022	-3.204816633
0.16112	-1.82560585	352	0.95992	1.7498	0.2819284	3.0618145	-3.194452677
0.16114	-1.825481727	353	0.96265	1.7823	0.2872072	3.1767568	-3.253639802
0.162	-1.820158944	354	0.96538	1.8169	0.2943359	3.3010837	-3.3070258
0.163	-1.814005078	355	0.96811	1.8538	0.3021613	3.4363901	-3.362712442
0.1696	-1.774312556	356	0.97084	1.8933	0.3211059	3.5846353	-3.359329579
0.1696	-1.774312556	357	0.97357	1.9361	0.3283603	3.7484323	-3.4352232
0.175	-1.742969305	358	0.97630	1.9827	0.346977	3.9312013	-3.455830096
0.17544	-1.740458175	359	0.97903	2.0341	0.3568662	4.1376494	-3.540303011
0.17808	-1.725522391	360	0.98176	2.0915	0.3724594	4.3744918	-3.608979407
0.182	-1.703748592	361	0.98449	2.1568	0.3925381	4.6517993	-3.674650109
0.1861	-1.681471115	362	0.98722	2.2328	0.4155258	4.9854382	-3.754404668
0.188	-1.671313316	363	0.98995	2.3244	0.4369898	5.4028995	-3.884823735
0.20352	-1.591990999	364	0.99268	2.4411	0.4968057	5.9588012	-3.886154446
0.31376	-1.159126917	365	0.99541	2.6051	0.8173711	6.7864619	-3.019622827
0.7208	-0.327393573	366	0.99811	2.8956	2.0871577	8.3845738	-0.948005037

Figure 10. Uranium Near Upgradient Background Data Set, Histogram (normal)

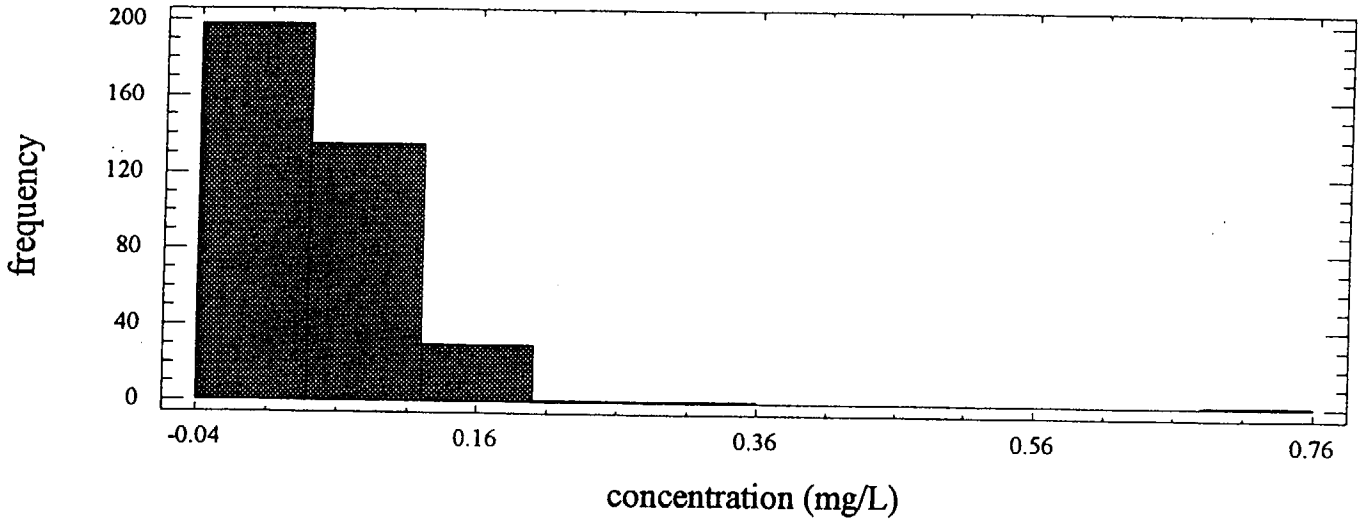


Figure 11. Uranium Near Upgradient Background Data Set, Histogram (lognormal)

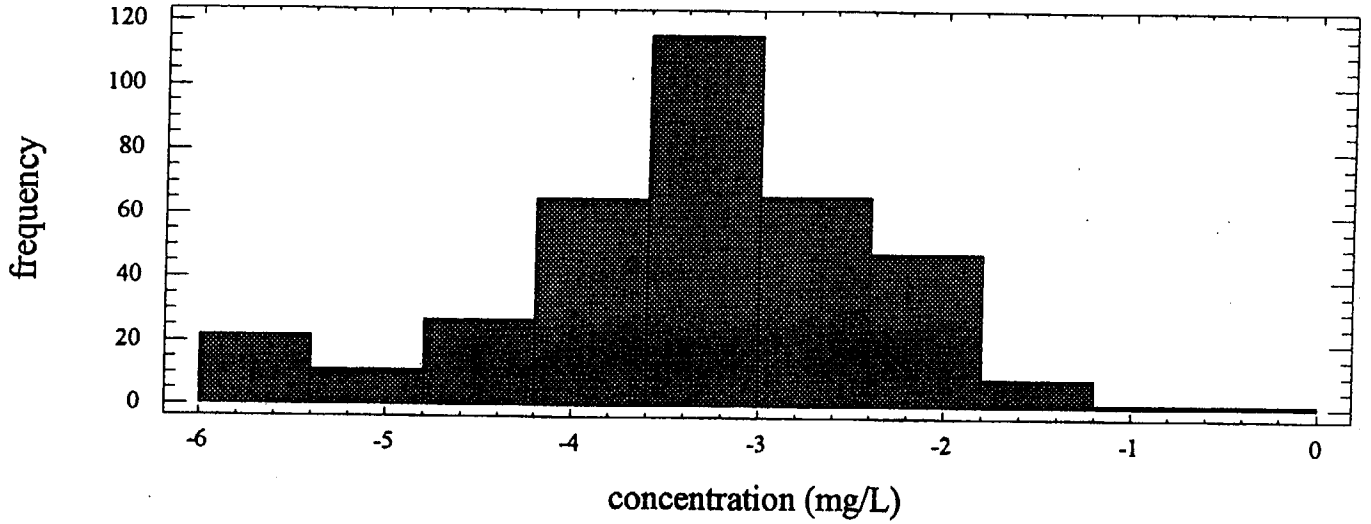


Figure 12. Uranium Near Upgradient Data Set, Probability Plot (normal)

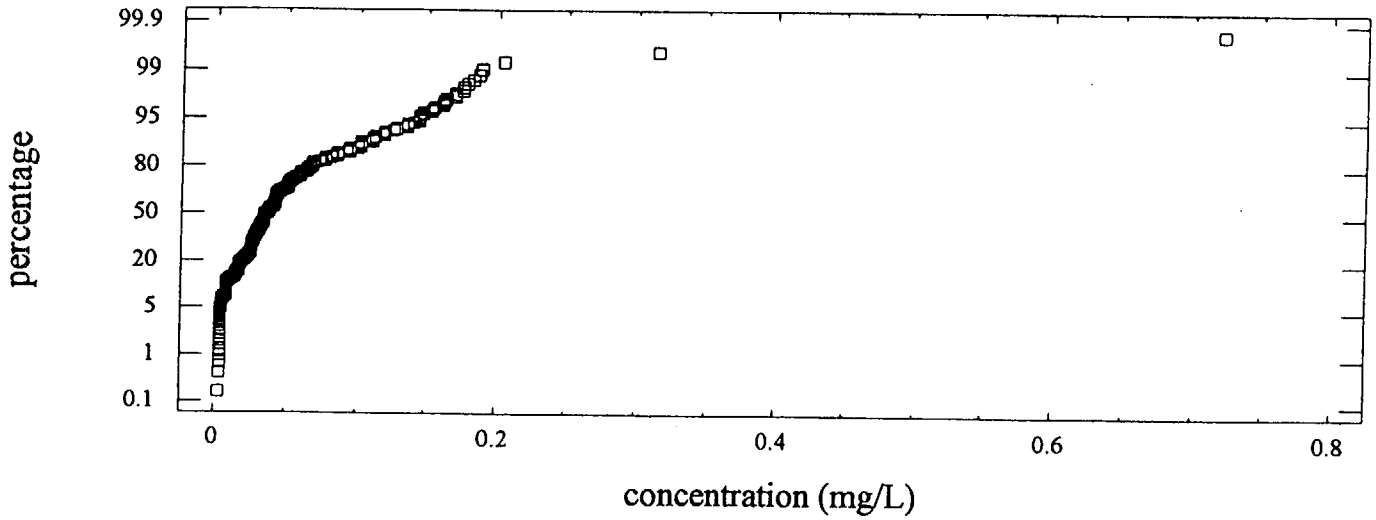


Figure 13. Uranium Near Upgradient Data Set, Probability Plot (lognormal)

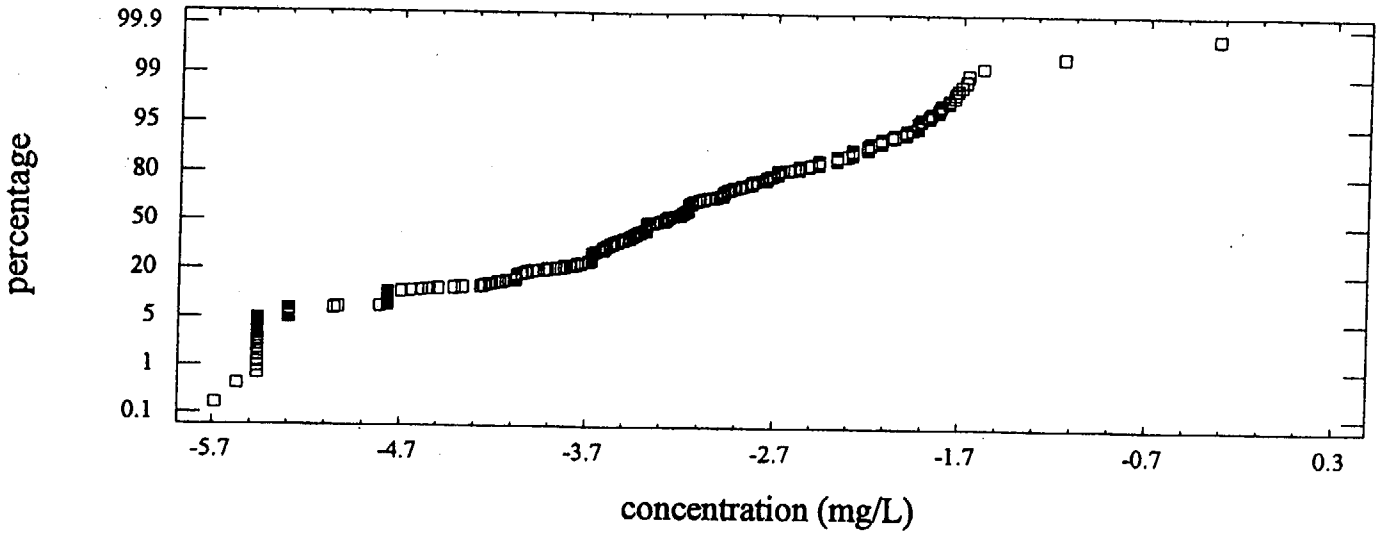


Table 91. Uranium Near Upgradient Background Data Set, Distribution Summary

Parameter	Distribution Type (tested)	Coefficient of Variation	Studentized Range Test	Geary's Test	Coefficient of Skewness (-1 to 1)	Shapiro-Francia Test	Filliben's Statistic	Histogram	Probability Plot	Number of Samples	Distribution Type (determined)
Uranium	Normal	Fail	Fail	Fail	Fail	Fail	Fail	Nonparametric	Nonparametric	366	Nonparametric
Uranium	Lognormal	Pass	NA	Fail	Pass	Fail	Fail	Lognormal	Nonparametric	366	

NA - not applicable

Table 92. Uranium Near Upgradient Background Data Set, T_n Statisitic Analysis

Parameter	Distribution	Maximum Observation	Mean	Standard Deviation	T_n Statistic	N	Upper 5% Critical Value	Pass or Fail T_n Statistic
Uranium	Lognormal	-0.327393573	-3.378415952	0.96410562	3.165	366	3.34+	Pass

N - number of samples

Table 93. Uranium Near Upgradient Background Data Set, 95th Percentile Calculation

Parameter	Distribution	95th Percentile (mg/L)	Sample #
Uranium	Nonparametric	0.147	366

SD = standard deviation

Table 94. Uranium Near Upgradient Background Data Set, Summary Table

Parameter	Distribution	95th Percentile (mg/L)	Range (normal)	Sample #
Uranium	Nonparametric	0.147	0.003392 to 0.7208	366

SD = standard deviation

ND = non-detect, concentration reported as the minimum detecatable activity (MDA)

Table 95. Uranium Far Upgradient Background Data Set (data not corrected for non-detects or duplicates)

Well Name	Sample_Date	Parameter_Code	Lab_Code	Remark_Code	Value
0914	10-Jan-83	Uranium	Homestake	Less Than	0.00848
0914	14-Mar-94	Uranium	Energy Laboratories	Less Than	0.01
0914	12-May-94	Uranium	Energy Laboratories	Less Than	0.01
0914	24-Jan-96	Uranium	Energy Laboratories	Less Than	0.01
0914	22-May-97	Uranium	Energy Laboratories	None	0.001
0914	12-May-98	Uranium	Energy Laboratories	None	0.0013
0916	21-Feb-94	Uranium	Energy Laboratories	None	0.009
0916	26-Apr-94	Uranium	Energy Laboratories	None	0.007
0916	29-Jan-96	Uranium	Energy Laboratories	Less Than	0.01
0916	28-May-97	Uranium	Energy Laboratories	None	0.008
0916	12-May-98	Uranium	Energy Laboratories	None	0.0083
0920	03-Nov-81	Uranium	Homestake	Less Than	0.00848
0920	30-Aug-82	Uranium	Homestake	None	0.01696
0920	05-Jan-83	Uranium	Homestake	None	0.0424
0920	31-Aug-83	Uranium	Homestake	None	0.054272
0920	14-Dec-89	Uranium	Homestake	None	0.05936
0920	09-May-90	Uranium	Homestake	None	0.09328
0920	21-May-91	Uranium	Homestake	None	0.0848
0920	06-May-92	Uranium	Homestake	None	0.11024
0920	06-May-93	Uranium	Homestake	None	0.11024
0920	28-Feb-94	Uranium	Energy Laboratories	None	0.132
0920	29-Apr-94	Uranium	Energy Laboratories	None	0.024
0920	29-Apr-94	Uranium	Energy Laboratories	None	0.026
0920	11-May-94	Uranium	Energy Laboratories	None	0.073
0920	10-May-95	Uranium	Energy Laboratories	None	0.141
0920	24-Jan-96	Uranium	Energy Laboratories	None	0.164
0920	20-May-96	Uranium	Energy Laboratories	None	0.185
0920	23-May-97	Uranium	Energy Laboratories	None	0.123
0920	12-May-98	Uranium	Energy Laboratories	None	0.146
0921	28-Feb-94	Uranium	Energy Laboratories	None	0.182
0921	16-May-94	Uranium	Energy Laboratories	None	0.164
0921	24-Jan-96	Uranium	Energy Laboratories	None	0.192
0921	23-May-97	Uranium	Energy Laboratories	None	0.148
0921	12-May-98	Uranium	Energy Laboratories	None	0.184
0922	03-Nov-81	Uranium	Homestake	Less Than	0.00848
0922	04-Mar-94	Uranium	Energy Laboratories	None	0.019
0922	16-May-94	Uranium	Energy Laboratories	None	0.014
0922	24-Jan-96	Uranium	Energy Laboratories	None	0.01
0922	23-May-97	Uranium	Energy Laboratories	None	0.003
0922	12-May-98	Uranium	Energy Laboratories	Quality Control	0.0059
0922	12-May-98	Uranium	Energy Laboratories	None	0.0062
0950	28-Feb-94	Uranium	Energy Laboratories	None	0.093
0950	11-May-94	Uranium	Energy Laboratories	None	0.06
0950	25-Jan-96	Uranium	Energy Laboratories	None	0.166

Table 96. Uranium Far Upgradient Background Data Set for Well 0914.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
10-Jan-83	Uranium	0.00424
14-Mar-94	Uranium	0.005
12-May-94	Uranium	0.005
24-Jan-96	Uranium	0.005
22-May-97	Uranium	0.001
12-May-98	Uranium	0.0013

Table 97. Uranium Far Upgradient Background Data Set for Well 0916.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
21-Feb-94	Uranium	0.009
26-Apr-94	Uranium	0.007
29-Jan-96	Uranium	0.005
28-May-97	Uranium	0.008
12-May-98	Uranium	0.0083

Table 98. Uranium Far Upgradient Background Data Set for Well 0920.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
03-Nov-81	Uranium	0.00424
30-Aug-82	Uranium	0.01696
05-Jan-83	Uranium	0.0424
31-Aug-83	Uranium	0.054272
14-Dec-89	Uranium	0.05936
09-May-90	Uranium	0.09328
21-May-91	Uranium	0.0848
06-May-92	Uranium	0.11024
06-May-93	Uranium	0.11024
28-Feb-94	Uranium	0.132
29-Apr-94	Uranium	0.025
11-May-94	Uranium	0.073
10-May-95	Uranium	0.141
24-Jan-96	Uranium	0.164
20-May-96	Uranium	0.185
23-May-97	Uranium	0.123
12-May-98	Uranium	0.146

Table 99. Uranium Far Upgradient Background Data Set for Well 0921.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
28-Feb-94	Uranium	0.182
16-May-94	Uranium	0.164
24-Jan-96	Uranium	0.192
23-May-97	Uranium	0.148
12-May-98	Uranium	0.184

Table 100. Uranium Far Upgradient Background Data Set for Well 0922.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
03-Nov-81	Uranium	0.00424
04-Mar-94	Uranium	0.019
16-May-94	Uranium	0.014
24-Jan-96	Uranium	0.01
23-May-97	Uranium	0.003
12-May-98	Uranium	0.0062

Table 101. Uranium Far Upgradient Background Data Set for Well 0950.
(corrected for non-detects and duplicates)

Sample Date	Parameter Code	Final Data Set
28-Feb-94	Uranium	0.093
11-May-94	Uranium	0.06
25-Jan-96	Uranium	0.166

Table 102. Uranium Far Upgradient Background Groundwater Data Set Used in Statistical Analysis (all concentrations in mg/L)

Well ID					
914	**916**	**920**	**921**	**922**	**950**
0.005	0.009	0.185	0.192	0.019	0.166
0.005	0.0083	0.164	0.184	0.014	0.093
0.005	0.008	0.146	0.182	0.01	0.06
0.00424	0.007	0.141	0.164	0.0062	
0.0013	0.005	0.132	0.148	0.00424	
0.001		0.123		0.003	
		0.11024			
		0.11024			
		0.09328			
		0.0848			
		0.073			
		0.05936			
		0.054272			
		0.0424			
		0.025			
		0.01696			
		0.00424			

Table 103. Uranium Far Upgradient Background Data Set, A Priori Screening

Parameter	Maximum Value	Next Maximum Value	Multiplicative Factor	Results
Uranium	0.192	0.185	1.0	**PASS**

Table 104. Uranium Far Upgradient Background Data Set, Coefficient of Variation Analysis

Parameter	Mean	Standard Deviation	Coefficient of Variation	Results
Uranium.normal	0.0683112	0.067564	0.99	**PASS**
Uranium, lognormal	-3.569943	1.6045214	-0.45	**PASS**

Table 105. Uranium Far Upgradient Background Data Set, Studentized Range Test Analysis

Parameter	Range		Standard Deviation	Critical Values		W/S	Results
	Maximum	Minimum		Maximum	Minimum		
Uranium, normal	0.192	0.001	0.07	5.26	3.75	2.83	**FAIL**

w = range of values
s = standard deviation

Table 106. Uranium Far Upgradient Background Data Set, Geary's Test Analysis

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.192	0.036864	0.1236888	0.123688762
0.185	0.034225	0.1166888	0.116688762
0.184	0.033856	0.1156888	0.115688762
0.182	0.033124	0.1136888	0.113688762
0.166	0.027556	0.0976888	0.097688762
0.164	0.026896	0.0956888	0.095688762
0.164	0.026896	0.0956888	0.095688762
0.148	0.021904	0.0796888	0.079688762
0.146	0.021316	0.0776888	0.077688762
0.141	0.019881	0.0726888	0.072688762
0.132	0.017424	0.0636888	0.063688762
0.123	0.015129	0.0546888	0.054688762
0.11024	0.0121529	0.0419288	0.041928762
0.11024	0.0121529	0.0419288	0.041928762
0.09328	0.0087012	0.0249688	0.024968762
0.093	0.008649	0.0246888	0.024688762
0.0848	0.007191	0.0164888	0.016488762
0.073	0.005329	0.0046888	0.004688762
0.06	0.0036	-0.0083112	0.008311238
0.05936	0.0035236	-0.0089512	0.008951238
0.054272	0.0029454	-0.0140392	0.014039238
0.0424	0.0017978	-0.0259112	0.025911238
0.025	0.000625	-0.0433112	0.043311238
0.019	0.000361	-0.0493112	0.049311238
0.01696	0.0002876	-0.0513512	0.051351238
0.014	0.000196	-0.0543112	0.054311238
0.01	0.0001	-0.0583112	0.058311238
0.009	0.000081	-0.0593112	0.059311238
0.0083	6.889E-05	-0.0600112	0.060011238
0.008	0.000064	-0.0603112	0.060311238
0.007	0.000049	-0.0613112	0.061311238
0.0062	3.844E-05	-0.0621112	0.062111238
0.005	0.000025	-0.0633112	0.063311238
0.005	0.000025	-0.0633112	0.063311238
0.005	0.000025	-0.0633112	0.063311238
0.005	0.000025	-0.0633112	0.063311238
0.00424	1.798E-05	-0.0640712	0.064071238
0.00424	1.798E-05	-0.0640712	0.064071238
0.00424	1.798E-05	-0.0640712	0.064071238
0.003	0.000009	-0.0653112	0.065311238
0.0013	1.69E-06	-0.0670112	0.067011238
0.001	0.000001	-0.0673112	0.067311238

0.0683112 =mean
2.869072 = sum of Xi
0.3831503 = sum of Xi^2
42 = count

0.1871605 = SSS
2.5239154 = SAD

0.9002085 = alpha

3.1 = Z

Critical value = 1.645

abs(Z)>critical value, thus failed test.

Table 106. Uranium Far Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-1.6502599	2.7233578	1.9196836	1.919683585
-1.6873995	2.8473169	1.882544	1.882544038
-1.6928195	2.8656379	1.877124	1.87712397
-1.7037486	2.9027593	1.8661949	1.8661949
-1.7957675	3.2247809	1.774176	1.774176001
-1.8078889	3.2684621	1.7620546	1.76205464
-1.8078889	3.2684621	1.7620546	1.76205464
-1.910543	3.6501746	1.6594005	1.659400486
-1.9241487	3.7023481	1.6457948	1.645794834
-1.9589954	3.8376629	1.6109481	1.610948103
-2.0249534	4.1004361	1.5449901	1.544990135
-2.0955709	4.3914175	1.4743726	1.474372568
-2.2050955	4.862446	1.364848	1.36484802
-2.2050955	4.862446	1.364848	1.36484802
-2.3721496	5.6270935	1.1977939	1.197793935
-2.3751558	5.641365	1.1947877	1.194787706
-2.4674597	6.0883575	1.1024838	1.102483755
-2.6172958	6.8502375	0.9526477	0.952647654
-2.8134107	7.9152799	0.7565328	0.756532775
-2.8241347	7.9757367	0.7458088	0.745808811
-2.9137468	8.4899206	0.6561967	0.656196653
-3.1606069	9.9894361	0.4093366	0.409336575
-3.6888795	13.607832	-0.118936	0.118935963
-3.9633163	15.707876	-0.3933728	0.393372808
-4.0768976	16.621094	-0.5069542	0.506954157
-4.2686979	18.221782	-0.6987545	0.698754458
-4.6051702	21.207592	-1.0352267	1.035226694
-4.7105307	22.189099	-1.1405872	1.14058721
-4.7914998	22.95847	-1.2215563	1.221556273
-4.8283137	23.312614	-1.2583702	1.258370246
-4.9618451	24.619907	-1.3919016	1.391901638
-5.083206	25.838983	-1.5132625	1.513262495
-5.2983174	28.072167	-1.7283739	1.728373875
-5.2983174	28.072167	-1.7283739	1.728373875
-5.2983174	28.072167	-1.7283739	1.728373875
-5.2983174	28.072167	-1.7283739	1.728373875
-5.463192	29.846467	-1.8932485	1.893248518
-5.463192	29.846467	-1.8932485	1.893248518
-5.463192	29.846467	-1.8932485	1.893248518
-5.809143	33.746142	-2.2391995	2.239199499
-6.645391	44.161222	-3.0754475	3.075447523
-6.9077553	47.717083	-3.3378118	3.337811787

-3.5699435 =mean
-149.93763 = sum of Xi
640.8229 = sum of Xi^2
42 = count

105.55405 = SSS
61.049244 = SAD

0.916892 = alpha

3.6 = Z

Critical value = 1.645

abs(Z)>critical value, thus failed test.

Table 107. Uranium Far Upgradient Background Data Set, Coefficient of Skewness Analysis

Uranium	Normal (xi-avg)^3
0.192	0.001892303
0.185	0.001588865
0.184	0.001548366
0.182	0.001469443
0.166	0.000932253
0.164	0.000876159
0.164	0.000876159
0.148	0.000506047
0.146	0.000468894
0.141	0.000384062
0.132	0.000258338
0.123	0.000163566
0.11024	7.37116E-05
0.11024	7.37116E-05
0.09328	1.55665E-05
0.093	1.50487E-05
0.0848	4.48295E-06
0.073	1.0308E-07
0.06	-5.74113E-07
0.05936	-7.17215E-07
0.054272	-2.76714E-06
0.0424	-1.73966E-05
0.025	-8.1246E-05
0.019	-0.000119905
0.01696	-0.000135411
0.014	-0.000160202
0.01	-0.00019827
0.009	-0.000208646
0.0083	-0.000216121
0.008	-0.000219379
0.007	-0.000230473
0.0062	-0.000239613
0.005	-0.000253771
0.005	-0.000253771
0.005	-0.000253771
0.005	-0.000253771
0.00424	-0.00026302
0.00424	-0.00026302
0.00424	-0.00026302
0.003	-0.000278589
0.0013	-0.000300914
0.001	-0.000304974

Normal	
standard deviation =	0.067564
mean =	0.068
count =	42
sum of (xi-avg)^3 =	0.0066277
1/n =	0.0238095
standard deviation cubed =	0.0003084
((n-1)/n)^(3/2) =	0.9644992
coef. of skewness =	0.5
acceptable range -1 to 1	PASS

Table 107. Uranium Far Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-1.650259907	7.074389276
-1.687399454	6.67168346
-1.692819521	6.614223509
-1.703748592	6.499366005
-1.795767491	5.584574654
-1.807888851	5.470891661
-1.807888851	5.470891661
-1.910543005	4.569341731
-1.924148657	4.457866768
-1.958995389	4.180658076
-2.024953356	3.687882983
-2.095570924	3.204953446
-2.205095472	2.5424527
-2.205095472	2.5424527
-2.372149556	1.71848731
-2.375155786	1.705580552
-2.467459736	1.340036405
-2.617295838	0.86456352
-2.813410717	0.43299536
-2.82413468	0.414841819
-2.913746839	0.282554372
-3.160606917	0.068586976
-3.688879454	-0.00168244
-3.9633163	-0.06087136
-4.076897649	-0.130288495
-4.268697949	-0.341172309
-4.605170186	-1.109446557
-4.710530702	-1.483834594
-4.791499764	-1.822805937
-4.828313737	-1.992623842
-4.96184513	-2.696656553
-5.083205987	-3.465315698
-5.298317367	-5.16313023
-5.298317367	-5.16313023
-5.298317367	-5.16313023
-5.298317367	-5.16313023
-5.46319201	-6.786140964
-5.46319201	-6.786140964
-5.46319201	-6.786140964
-5.80914299	-11.22737852
-6.645391015	-29.08874355
-6.907755279	-37.18651949

Lognormal	
standard deviation =	1.6045214
mean =	-3.570
count =	42
sum of (xi-avg)^3 =	-56.21901
1/n =	0.0238095
standard deviation cubed =	4.1308226
((n-1)/n)^(3/2) =	0.9644992
coef. of skewness =	-0.3
acceptable range -1 to 1	**PASS**

Table 108. Uranium Far Upgradient Background Data Set, Shapiro-Wilk Test of Normality Analysis

Uranium - raw data				
X(i)	**X(n-i+1)**	**X(n-i+1)-X(i)**	**An-i+1**	**Bi**
0.001	0.192	0.191	0.3917	0.0748147
0.0013	0.185	0.1837	0.2701	0.04961737
0.003	0.184	0.181	0.2345	0.0424445
0.00424	0.182	0.17776	0.2085	0.03706296
0.00424	0.166	0.16176	0.1874	0.030313824
0.00424	0.164	0.15976	0.1694	0.027063344
0.005	0.164	0.159	0.1535	0.0244065
0.005	0.148	0.143	0.1392	0.0199056
0.005	0.146	0.141	0.1259	0.0177519
0.005	0.141	0.136	0.1136	0.0154496
0.0062	0.132	0.1258	0.102	0.0128316
0.007	0.123	0.116	0.0909	0.0105444
0.008	0.11024	0.10224	0.0804	0.008220096
0.0083	0.11024	0.10194	0.0701	0.007145994
0.009	0.09328	0.08428	0.0602	0.005073656
0.01	0.093	0.083	0.0506	0.0041998
0.014	0.0848	0.0708	0.0411	0.00290988
0.01696	0.073	0.05604	0.0318	0.001782072
0.019	0.06	0.041	0.0227	0.0009307
0.025	0.05936	0.03436	0.0136	0.000467296
0.0424	0.054272	0.011872	0.0045	0.000053424
0.054272	0.0424	-0.011872		
0.05936	0.025	-0.03436		
0.06	0.019	-0.041		
0.073	0.01696	-0.05604		
0.0848	0.014	-0.0708		
0.093	0.01	-0.083		
0.09328	0.009	-0.08428		
0.11024	0.0083	-0.10194		
0.11024	0.008	-0.10224		
0.123	0.007	-0.116		
0.132	0.0062	-0.1258		
0.141	0.005	-0.136		
0.146	0.005	-0.141		
0.148	0.005	-0.143		
0.164	0.005	-0.159		
0.164	0.00424	-0.15976		
0.166	0.00424	-0.16176		
0.182	0.00424	-0.17776		
0.184	0.003	-0.181		
0.185	0.0013	-0.1837		
0.192	0.001	-0.191		

0.392989216 =sum of B
0.067563966 = standard deviation
41 = count - 1

0.82517706 = W statistic
.942 is acceptable low value
Fails Shapiro-Wilk test

Table 108. Uranium Far Upgradient Background Data Set, Shapiro-Wilk Test of Normality Analysis (continued)

Uranium - lognormal data				
X(i)	X(n-i+1)	X(n-i+1)-X(i)	An-i+1	Bi
-6.9077553	-1.65025991	5.257495372	0.3917	2.059360937
-6.645391	-1.68739945	4.957991561	0.2701	1.339153521
-5.809143	-1.69281952	4.116323469	0.2345	0.965277853
-5.463192	-1.70374859	3.759443418	0.2085	0.783843953
-5.463192	-1.79576749	3.667424519	0.1874	0.687275355
-5.463192	-1.80788885	3.655303159	0.1694	0.619208355
-5.2983174	-1.80788885	3.490428515	0.1535	0.535780777
-5.2983174	-1.91054301	3.387774361	0.1392	0.471578191
-5.2983174	-1.92414866	3.374168709	0.1259	0.42480784
-5.2983174	-1.95899539	3.339321978	0.1136	0.379346977
-5.083206	-2.02495336	3.058252631	0.102	0.311941768
-4.9618451	-2.09557092	2.866274206	0.0909	0.260544325
-4.8283137	-2.20509547	2.623218266	0.0804	0.210906749
-4.7914998	-2.20509547	2.586404292	0.0701	0.181306941
-4.7105307	-2.37214956	2.338381145	0.0602	0.140770545
-4.6051702	-2.37515579	2.2300144	0.0506	0.112838729
-4.2686979	-2.46745974	1.801238213	0.0411	0.074030891
-4.0768976	-2.61729584	1.459601811	0.0318	0.046415338
-3.9633163	-2.81341072	1.149905583	0.0227	0.026102857
-3.6888795	-2.82413468	0.864744774	0.0136	0.011760529
-3.1606069	-2.91374684	0.246860078	0.0045	0.00111087
-2.9137468	-3.16060692	-0.246860078		
-2.8241347	-3.68887945	-0.864744774		
-2.8134107	-3.9633163	-1.149905583		
-2.6172958	-4.07689765	-1.459601811		
-2.4674597	-4.26869795	-1.801238213		
-2.3751558	-4.60517019	-2.2300144		
-2.3721496	-4.7105307	-2.338381145		
-2.2050955	-4.79149976	-2.586404292		
-2.2050955	-4.82831374	-2.623218266		
-2.0955709	-4.96184513	-2.866274206		
-2.0249534	-5.08320599	-3.058252631		
-1.9589954	-5.29831737	-3.339321978		
-1.9241487	-5.29831737	-3.374168709		
-1.910543	-5.29831737	-3.387774361		
-1.8078889	-5.29831737	-3.490428515		
-1.8078889	-5.46319201	-3.655303159		
-1.7957675	-5.46319201	-3.667424519		
-1.7037486	-5.46319201	-3.759443418		
-1.6928195	-5.80914299	-4.116323469		
-1.6873995	-6.64539101	-4.957991561		
-1.6502599	-6.90775528	-5.257495372		

9.6433633 =sum of B
1.604521402 = standard deviation
41 = count - 1

0.881012705 = W statistic
.942 is acceptable low value
Fails Shapiro-Wilk test

Table 109. Uranium Far Upgradient Background Data Set, Filliben's Statistic Analysis

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.001	-6.907755279	1	0.01637	-2.1353	-0.002135	4.559517	14.75014757
0.0013	-6.645391015	2	0.03971	-1.7540	-0.00228	3.076553	11.65608598
0.003	-5.80914299	3	0.06332	-1.5275	-0.004582	2.3332451	8.873444724
0.00424	-5.46319201	4	0.08692	-1.3599	-0.005766	1.8494619	7.429663809
0.00424	-5.46319201	5	0.11053	-1.2237	-0.005189	1.4975087	6.685457726
0.00424	-5.46319201	6	0.13413	-1.1071	-0.004694	1.2256013	6.048129331
0.005	-5.298317367	7	0.15774	-1.0038	-0.005019	1.007624	5.318476165
0.005	-5.298317367	8	0.18134	-0.9103	-0.004551	0.8285874	4.822887546
0.005	-5.298317367	9	0.20495	-0.8241	-0.00412	0.6791183	4.366270904
0.005	-5.298317367	10	0.22855	-0.7436	-0.003718	0.5529892	3.940000601
0.0062	-5.083205987	11	0.25215	-0.6677	-0.00414	0.445858	3.394188795
0.007	-4.96184513	12	0.27576	-0.5955	-0.004168	0.3546076	2.954726091
0.008	-4.828313737	13	0.29936	-0.5262	-0.00421	0.2769218	2.540821086
0.0083	-4.791499764	14	0.32297	-0.4594	-0.003813	0.2110645	2.201299352
0.009	-4.710530702	15	0.34657	-0.3946	-0.003551	0.1557039	1.85874419
0.01	-4.605170186	16	0.37018	-0.3314	-0.003314	0.109818	1.526098308
0.014	-4.268697949	17	0.39378	-0.2695	-0.003773	0.0726194	1.150328166
0.01696	-4.076897649	18	0.41738	-0.2086	-0.003538	0.0435095	0.850396816
0.019	-3.9633163	19	0.44099	-0.1485	-0.002821	0.0220408	0.588399358
0.025	-3.688879454	20	0.46459	-0.0889	-0.002222	0.0078975	0.327822838
0.0424	-3.160606917	21	0.48820	-0.0296	-0.001255	0.0008755	0.093516469
0.054272	-2.913746839	22	0.51180	0.0296	0.0016058	0.0008755	-0.086212339
0.05936	-2.82413468	23	0.53541	0.0889	0.0052752	0.0078975	-0.250974817
0.06	-2.813410717	24	0.55901	0.1485	0.0089077	0.0220408	-0.417682803
0.073	-2.617295838	25	0.58262	0.2086	0.015227	0.0435095	-0.545939643
0.0848	-2.467459736	26	0.60622	0.2695	0.0228519	0.0726194	-0.664930728
0.093	-2.375155786	27	0.62982	0.3314	0.0308191	0.109818	-0.787098213
0.09328	-2.372149556	28	0.65343	0.3946	0.0368077	0.1557039	-0.936034491
0.11024	-2.205095472	29	0.67703	0.4594	0.0506462	0.2110645	-1.013059683
0.11024	-2.205095472	30	0.70064	0.5262	0.058012	0.2769218	-1.160395404
0.123	-2.095570924	31	0.72424	0.5955	0.0732452	0.3546076	-1.247890235
0.132	-2.024953356	32	0.74785	0.6677	0.0881398	0.445858	-1.352114003
0.141	-1.958995389	33	0.77145	0.7436	0.1048522	0.5529892	-1.456772495
0.146	-1.924148657	34	0.79505	0.8241	0.1203166	0.6791183	-1.585664602
0.148	-1.910543005	35	0.81866	0.9103	0.1347196	0.8285874	-1.739105725
0.164	-1.807888851	36	0.84226	1.0038	0.164624	1.007624	-1.814767425
0.164	-1.807888851	37	0.86587	1.1071	0.1815593	1.2256013	-2.001457311
0.166	-1.795767491	38	0.88947	1.2237	0.2031387	1.4975087	-2.197529873
0.182	-1.703748592	39	0.91308	1.3599	0.2475108	1.8494619	-2.317011599
0.184	-1.692819521	40	0.93668	1.5275	0.2810593	2.3332451	-2.585775643
0.185	-1.687399454	41	0.96029	1.7540	0.324492	3.076553	-2.959716452
0.192	-1.650259907	42	0.98363	2.1353	0.4099781	4.559517	-3.523804214

Normal

2.485	=sum X(i)*M(i)
38.622	=sum M(i)^2
0.07	= standard deviation
6.2147	= square root of sum Mi^2
0.924	= Fillibens's Statistic

Lognormal

60.733	=sum X(i)*M(i)
38.622	=sum M(i)^2
1.60	= standard deviation
6.2147	= square root of sum Mi^2
0.951	= Fillibens's Statistic

.973 is acceptable value

Normal - Fail
Lognormal - Fail

Figure 14. Uranium Far Upgradient Background Data Set, Histogram (normal)

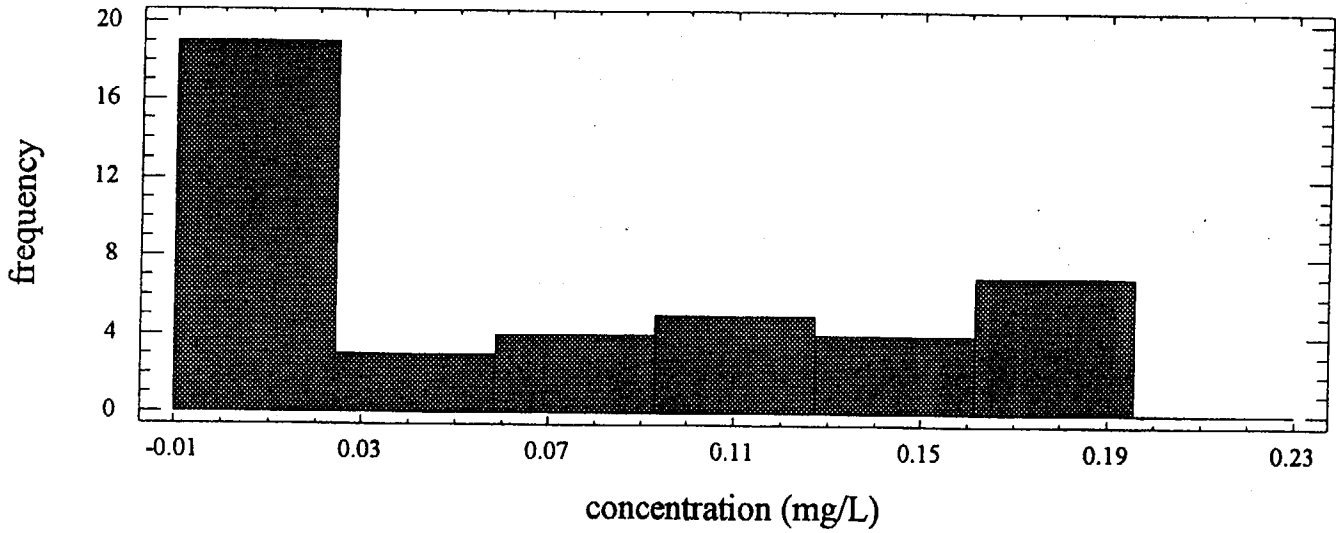


Figure 15. Uranium Far Upgradient Background Data Set, Histogram (lognormal)

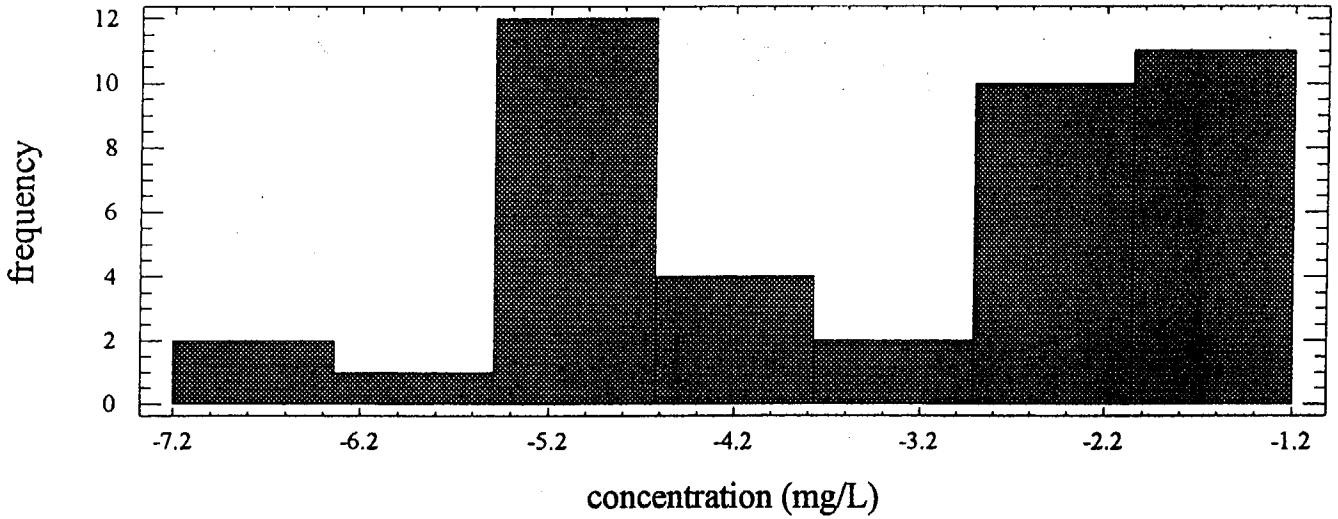


Figure 16. Uranium Far Upgradient Data Set, Probability Plot (normal)

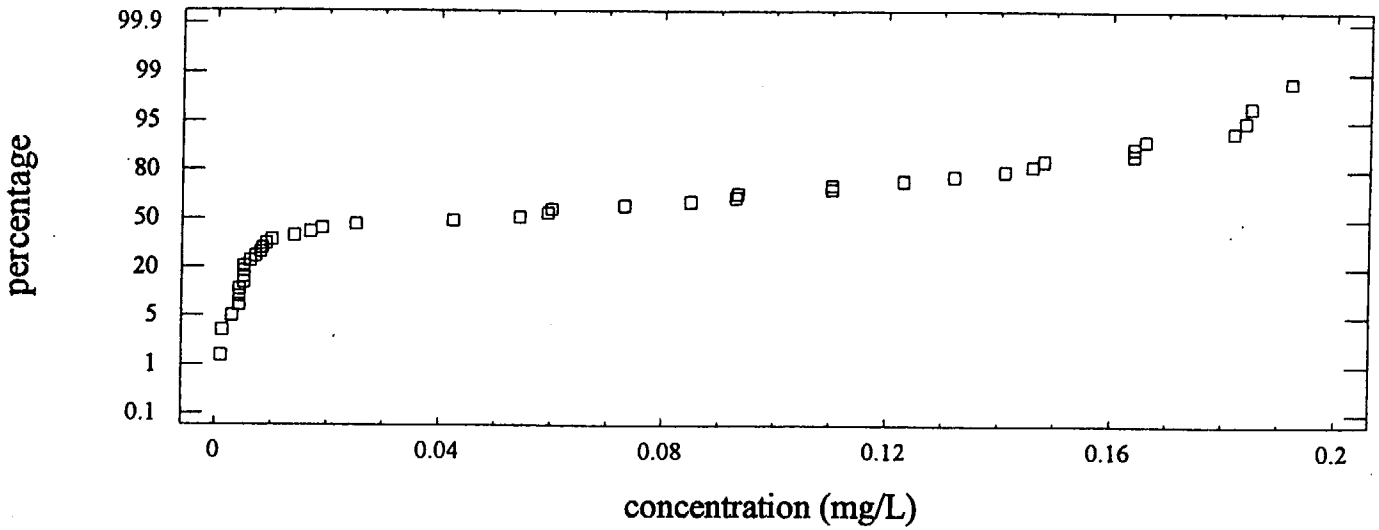


Figure 17. Uranium Far Upgradient Data Set, Probability Plot (lognormal)

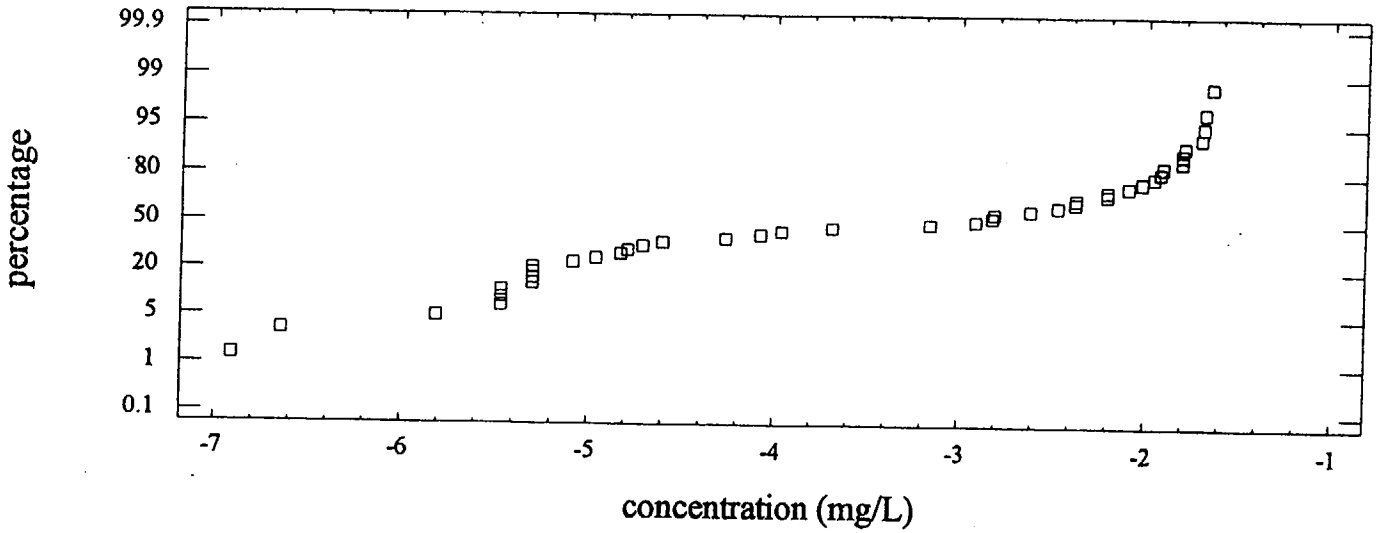


Table 110. Uranium Far Upgradient Background Data Set, Distribution Summary

Parameter	Distribution Type (tested)	Coefficient of Variation	Studentized Range Test	Geary's Test	Coefficient of Skewness (-1 to 1)	Shapiro-Wilk Test	Filliben's Statistic	Histogram	Probability Plot	Number of Samples	Distribution Type (determined)
Uranium	Normal	Pass	Fail	Fail	Pass	Fail	Fail	Nonparametric	Nonparametric	42	Nonparametric
Uranium	Lognormal	Pass	NA	Fail	Pass	Fail	Fail	Nonparametric	Nonparametric	42	

NA - not applicable

Table 111. Uranium Far Upgradient Background Data Set, T_n Statisitic Analysis

Parameter	Distribution	Maximum Observation	Mean	Standard Deviation	T_n Statistic	N	Upper 5% Critical Value	Pass or Fail T_n Statistic
Uranium	Lognormal	-1.650259907	-3.569943492	1.604521402	1.196	42	2.857	Pass

N - number of samples

Table 112. Uranium Far Upgradient Background Data Set, 95th Percentile Calculation

Parameter	Distribution	95th Percentile (mg/L)	Sample #
Uranium	Nonparametric	0.18	42

Table 113. Uranium Far Upgradient Background Data Set, Summary Table

Parameter	Distribution	95th Percentile (mg/L)	Range	Sample #
Uranium	Nonparametric	0.18	0.001 to 0.192	42

Table 114. Uranium Upgradient Background Data, Comparison Statistics Results

Comparison of Medians

Median of sample 1: 0.048336
Median of sample 2: 0.036232

Mann-Whitney (Wilcoxon) W test to compare medians

Null hypothesis: median1 = median2
Alt. hypothesis: median1 NE median2

Average rank of sample 1: 206.298
Average rank of sample 2: 204.294

W = 7610.5
P-value = 0.91745

The StatAdvisor

This option runs a Mann-Whitney W test option to compare the medians of the two samples. This test is constructed by combining the two samples, sorting the data from smallest to largest, and comparing the average ranks of the two samples in the combined data. Since the P-value is greater than or equal to 0.05, there is not a statistically significant difference between the medians at the 95.0% confidence level.

Table 115. Uranium Combined Upgradient Background Groundwater Data Set Used in Statistical Analysis
(all concentrations in mg/L)

Well ID														
Near Upgradient Wells									Far Upgradient Wells					
DD	ND	P	P1	P2	P3	P4	Q	R	914	916	920	921	922	950
0.20352	0.11872	0.7208	0.0416	0.0494	0.024	0.022	0.31376	0.11024	0.005	0.009	0.185	0.192	0.019	0.166
0.188	0.10176	0.17544	0.041	0.0432			0.1696	0.09328	0.005	0.0083	0.164	0.184	0.014	0.093
0.1861	0.0723	0.1696	0.0383	0.041			0.09936	0.0848	0.005	0.008	0.146	0.182	0.01	0.06
0.182	0.06784	0.14416	0.038	0.03816			0.09328	0.0814	0.00424	0.007	0.141	0.164	0.0062	
0.17808	0.064	0.11024	0.036	0.035			0.09328	0.080136	0.0013	0.005	0.132	0.148	0.00424	
0.175	0.05936	0.10176	0.035	0.033			0.0848	0.07632	0.001		0.123		0.003	
0.163	0.056	0.0848	0.0335	0.0316			0.0848	0.06784			0.11024			
0.162	0.0529	0.0848	0.033	0.031			0.07632	0.06784			0.11024			
0.16114	0.0424	0.07632	0.032	0.03			0.07414	0.04392			0.09328			
0.16112	0.038	0.07632	0.0315	0.029			0.06892	0.04318			0.0848			
0.155	0.028	0.06784	0.03115	0.029			0.06784	0.0424			0.073			
0.1536	0.02544	0.06784	0.031	0.0286			0.06784	0.0424			0.05936			
0.15264	0.00424	0.0664533	0.03	0.0275			0.066	0.0424			0.054272			
0.147		0.06544	0.03	0.0274			0.06392	0.0424			0.0424			
0.147		0.0652	0.0297	0.027			0.05936	0.03744			0.025			
0.14416		0.06416	0.029	0.027			0.05936	0.03392			0.01696			
0.14416		0.06392	0.0285	0.0265			0.05768	0.03392			0.00424			
0.14416		0.0636	0.0285	0.026			0.0538	0.0327						
0.14416		0.061	0.028	0.025			0.05238	0.03096						
0.14016		0.05968	0.028	0.025			0.052	0.02812						
0.13568		0.05936	0.026	0.02			0.051	0.026925						
0.13568		0.05936	0.024	0.01908			0.05088	0.02544						
0.13568		0.059	0.021624	0.00848			0.05088	0.025						
0.13568		0.05616	0.01696	0.005			0.05088	0.02272						
0.1272		0.056	0.00848	0.00424			0.05088	0.0219893						
0.1272		0.05544	0.00848				0.046	0.021						
0.125504		0.054					0.046	0.02						
0.11872		0.053					0.043	0.0197						
0.11872		0.052					0.043	0.018						
0.11872		0.0512					0.04256	0.018						
0.11872		0.0511					0.0424	0.0178						

Table 115. Uranium Combined Upgradient Background Groundwater Data Set Used in Statistical Analysis (continued)
(all concentrations in mg/L)

Well ID														
Near Upgradient Wells									Far Upgradient Wells					
DD	ND	P	P1	P2	P3	P4	Q	R	914	916	920	921	922	950
0.11194		0.051					0.0424	0.0175						
0.111936		0.05088					0.0424	0.01748						
0.11024		0.05088					0.0424	0.01696						
0.11024		0.05					0.0424	0.01696						
0.11024		0.04995					0.0424	0.01696						
0.10176		0.049					0.04222	0.01696						
0.10176		0.0475					0.0413	0.01693						
0.10176		0.047488					0.0407	0.01683						
0.10176		0.046					0.04046	0.016						
0.10176		0.045					0.03777	0.01545						
0.09328		0.04452					0.03772	0.01522						
0.09328		0.044					0.03772	0.01474						
0.09328		0.04296					0.037312	0.01462						
0.0848		0.0424					0.037312	0.01424						
0.07632		0.0424					0.03392	0.0142						
0.06412		0.0424					0.03392	0.014						
0.05936		0.04196					0.03392	0.012676						
0.03392		0.0417					0.03392	0.01212						
0.03392		0.04115					0.03392	0.01112						
		0.0409					0.03392	0.0106						
		0.0407					0.03392	0.01017						
		0.04					0.03362	0.00962						
		0.0393					0.03112	0.00912						
		0.03816					0.02862	0.00848						
		0.03672					0.027516	0.00848						
		0.036464					0.026	0.00848						
		0.0344					0.02562	0.00812						
		0.03392					0.02544	0.0065						
		0.03392					0.02544	0.00636						
		0.03392					0.02544	0.005						
		0.03392					0.02544	0.005						

Table 115. Uranium Combined Upgradient Background Groundwater Data Set Used in Statistical Analysis (continued)
(all concentrations in mg/L)

Well ID														
Near Upgradient Wells									Far Upgradient Wells					
DD	ND	P	P1	P2	P3	P4	Q	R	914	916	920	921	922	950
		0.03392					0.02544	0.005						
		0.03272					0.02544	0.005						
		0.03248					0.02544	0.005						
		0.03227					0.02346	0.005						
		0.03212					0.02316	0.005						
		0.032					0.01696	0.00424						
		0.03173					0.00848	0.00424						
		0.03112					0.00848	0.00424						
		0.027136					0.00848	0.00424						
		0.027136					0.00848	0.00424						
		0.02713					0.00424	0.00424						
		0.02712					0.00424	0.00424						
		0.02562					0.00424	0.003816						
		0.02544					0.00424	0.003392						
		0.02544					0.00424							
		0.02544												
		0.02544												
		0.02544												
		0.02362												
		0.02348												
		0.01848												
		0.01696												
		0.01696												
		0.01572												
		0.00848												
		0.00848												
		0.00848												
		0.00848												
		0.00848												
		0.00424												
		0.00424												

Table 115. Uranium Combined Upgradient Background Groundwater Data Set Used in Statistical Analysis (continued)
(all concentrations in mg/L)

Well ID														
Near Upgradient Wells									Far Upgradient Wells					
DD	ND	P	P1	P2	P3	P4	Q	R	914	916	920	921	922	950
		0.00424												
		0.00424												
		0.00424												
		0.00424												

Table 116. Uranium Combined Upgradient Background Data Set, A Priori Screening

Parameter	Maximum Value	Next Maximum Value	Multiplicative Factor	Results
Uranium	0.7208	0.31376	2.3	**PASS**

Table 117. Uranium Combined Upgradient Background Data Set, Coefficient of Variation Analysis

Parameter	Mean	Standard Deviation	Coefficient of Variation	Results
Uranium.normal	0.05337759	0.05779003	1.08	**FAIL**
Uranium, lognormal	-3.398132	1.04705448	-0.31	**PASS**

Table 118. Uranium Combined Upgradient Background Data Set, Studentized Range Test Analysis

Parameter	Range		Standard Deviation	Critical Values		W/S	Results
	Maximum	Minimum		Maximum	Minimum		
Uranium, normal	0.7208	0.001	0.057790033	6.94	5.47	12.46	**FAIL**

w = range of values
s = standard deviation

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.001	0.000001	-0.0523776	0.052377592
0.0013	1.69E-06	-0.0520776	0.052077592
0.003	0.000009	-0.0503776	0.050377592
0.003392	1.151E-05	-0.0499856	0.049985592
0.003816	1.456E-05	-0.0495616	0.049561592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.00424	1.798E-05	-0.0491376	0.049137592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.005	0.000025	-0.0483776	0.048377592
0.0062	3.844E-05	-0.0471776	0.047177592
0.00636	4.045E-05	-0.0470176	0.047017592
0.0065	4.225E-05	-0.0468776	0.046877592
0.007	0.000049	-0.0463776	0.046377592
0.008	0.000064	-0.0453776	0.045377592
0.00812	6.593E-05	-0.0452576	0.045257592
0.0083	6.889E-05	-0.0450776	0.045077592

0.0533776 =mean
21.778058 = sum of Xi
2.5217133 = sum of Xi^2
408 = count

1.359253 = SSS
15.362824 = SAD

0.6523652 = alpha

-13.8 = Z

Critical value = 1.645

abs(Z)>critical value, thus failed test.

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.00848	7.191E-05	-0.044898	0.044897592
0.009	0.000081	-0.044378	0.044377592
0.00912	8.317E-05	-0.044258	0.044257592
0.00962	9.254E-05	-0.043758	0.043757592
0.01	0.0001	-0.043378	0.043377592
0.01017	0.0001034	-0.043208	0.043207592
0.0106	0.0001124	-0.042778	0.042777592
0.01112	0.0001237	-0.042258	0.042257592
0.01212	0.0001469	-0.041258	0.041257592
0.012676	0.0001607	-0.040702	0.040701592
0.014	0.000196	-0.039378	0.039377592
0.014	0.000196	-0.039378	0.039377592
0.0142	0.0002016	-0.039178	0.039177592
0.01424	0.0002028	-0.039138	0.039137592
0.01462	0.0002137	-0.038758	0.038757592
0.01474	0.0002173	-0.038638	0.038637592
0.01522	0.0002316	-0.038158	0.038157592
0.01545	0.0002387	-0.037928	0.037927592
0.01572	0.0002471	-0.037658	0.037657592
0.016	0.000256	-0.037378	0.037377592
0.01683	0.0002832	-0.036548	0.036547592
0.01693	0.0002866	-0.036448	0.036447592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01696	0.0002876	-0.036418	0.036417592
0.01748	0.0003056	-0.035898	0.035897592
0.0175	0.0003063	-0.035878	0.035877592

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.0178	0.0003168	-0.035578	0.035577592
0.018	0.000324	-0.035378	0.035377592
0.018	0.000324	-0.035378	0.035377592
0.01848	0.0003415	-0.034898	0.034897592
0.019	0.000361	-0.034378	0.034377592
0.01908	0.000364	-0.034298	0.034297592
0.0197	0.0003881	-0.033678	0.033677592
0.02	0.0004	-0.033378	0.033377592
0.02	0.0004	-0.033378	0.033377592
0.021	0.000441	-0.032378	0.032377592
0.021624	0.0004676	-0.031754	0.031753592
0.0219893	0.0004835	-0.031388	0.031388259
0.022	0.000484	-0.031378	0.031377592
0.02272	0.0005162	-0.030658	0.030657592
0.02316	0.0005364	-0.030218	0.030217592
0.02346	0.0005504	-0.029918	0.029917592
0.02348	0.0005513	-0.029898	0.029897592
0.02362	0.0005579	-0.029758	0.029757592
0.024	0.000576	-0.029378	0.029377592
0.024	0.000576	-0.029378	0.029377592
0.025	0.000625	-0.028378	0.028377592
0.025	0.000625	-0.028378	0.028377592
0.025	0.000625	-0.028378	0.028377592
0.025	0.000625	-0.028378	0.028377592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02544	0.0006472	-0.027938	0.027937592
0.02562	0.0006564	-0.027758	0.027757592
0.02562	0.0006564	-0.027758	0.027757592
0.026	0.000676	-0.027378	0.027377592
0.026	0.000676	-0.027378	0.027377592
0.026	0.000676	-0.027378	0.027377592
0.0265	0.0007023	-0.026878	0.026877592
0.026925	0.000725	-0.026453	0.026452592
0.027	0.000729	-0.026378	0.026377592
0.027	0.000729	-0.026378	0.026377592

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.02712	0.0007355	-0.026258	0.026257592
0.02713	0.000736	-0.026248	0.026247592
0.027136	0.0007364	-0.026242	0.026241592
0.027136	0.0007364	-0.026242	0.026241592
0.0274	0.0007508	-0.025978	0.025977592
0.0275	0.0007563	-0.025878	0.025877592
0.027516	0.0007571	-0.025862	0.025861592
0.028	0.000784	-0.025378	0.025377592
0.028	0.000784	-0.025378	0.025377592
0.028	0.000784	-0.025378	0.025377592
0.02812	0.0007907	-0.025258	0.025257592
0.0285	0.0008123	-0.024878	0.024877592
0.0285	0.0008123	-0.024878	0.024877592
0.0286	0.000818	-0.024778	0.024777592
0.02862	0.0008191	-0.024758	0.024757592
0.029	0.000841	-0.024378	0.024377592
0.029	0.000841	-0.024378	0.024377592
0.029	0.000841	-0.024378	0.024377592
0.0297	0.0008821	-0.023678	0.023677592
0.03	0.0009	-0.023378	0.023377592
0.03	0.0009	-0.023378	0.023377592
0.03	0.0009	-0.023378	0.023377592
0.03096	0.0009585	-0.022418	0.022417592
0.031	0.000961	-0.022378	0.022377592
0.031	0.000961	-0.022378	0.022377592
0.03112	0.0009685	-0.022258	0.022257592
0.03112	0.0009685	-0.022258	0.022257592
0.03115	0.0009703	-0.022228	0.022227592
0.0315	0.0009923	-0.021878	0.021877592
0.0316	0.0009986	-0.021778	0.021777592
0.03173	0.0010068	-0.021648	0.021647592
0.032	0.001024	-0.021378	0.021377592
0.032	0.001024	-0.021378	0.021377592
0.03212	0.0010317	-0.021258	0.021257592
0.03227	0.0010414	-0.021108	0.021107592
0.03248	0.001055	-0.020898	0.020897592
0.0327	0.0010693	-0.020678	0.020677592
0.03272	0.0010706	-0.020658	0.020657592
0.033	0.001089	-0.020378	0.020377592
0.033	0.001089	-0.020378	0.020377592
0.0335	0.0011223	-0.019878	0.019877592
0.03362	0.0011303	-0.019758	0.019757592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.03392	0.0011506	-0.019458	0.019457592
0.0344	0.0011834	-0.018978	0.018977592
0.035	0.001225	-0.018378	0.018377592
0.035	0.001225	-0.018378	0.018377592
0.036	0.001296	-0.017378	0.017377592
0.036464	0.0013296	-0.016914	0.016913592
0.03672	0.0013484	-0.016658	0.016657592
0.037312	0.0013922	-0.016066	0.016065592
0.037312	0.0013922	-0.016066	0.016065592
0.03744	0.0014018	-0.015938	0.015937592
0.03772	0.0014228	-0.015658	0.015657592
0.03772	0.0014228	-0.015658	0.015657592
0.03777	0.0014266	-0.015608	0.015607592
0.038	0.001444	-0.015378	0.015377592
0.038	0.001444	-0.015378	0.015377592
0.03816	0.0014562	-0.015218	0.015217592
0.03816	0.0014562	-0.015218	0.015217592
0.0383	0.0014669	-0.015078	0.015077592
0.0393	0.0015445	-0.014078	0.014077592
0.04	0.0016	-0.013378	0.013377592
0.04046	0.001637	-0.012918	0.012917592
0.0407	0.0016565	-0.012678	0.012677592
0.0407	0.0016565	-0.012678	0.012677592
0.0409	0.0016728	-0.012478	0.012477592
0.041	0.001681	-0.012378	0.012377592
0.041	0.001681	-0.012378	0.012377592
0.04115	0.0016933	-0.012228	0.012227592
0.0413	0.0017057	-0.012078	0.012077592
0.0416	0.0017306	-0.011778	0.011777592
0.0417	0.0017389	-0.011678	0.011677592
0.04196	0.0017606	-0.011418	0.011417592
0.04222	0.0017825	-0.011158	0.011157592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.0424	0.0017978	-0.010978	0.010977592
0.04256	0.0018114	-0.010818	0.010817592
0.04296	0.0018456	-0.010418	0.010417592
0.043	0.001849	-0.010378	0.010377592
0.043	0.001849	-0.010378	0.010377592
0.04318	0.0018645	-0.010198	0.010197592
0.0432	0.0018662	-0.010178	0.010177592
0.04392	0.001929	-0.009458	0.009457592
0.044	0.001936	-0.009378	0.009377592
0.04452	0.001982	-0.008858	0.008857592
0.045	0.002025	-0.008378	0.008377592
0.046	0.002116	-0.007378	0.007377592
0.046	0.002116	-0.007378	0.007377592
0.046	0.002116	-0.007378	0.007377592
0.047488	0.0022551	-0.00589	0.005889592
0.0475	0.0022563	-0.005878	0.005877592
0.049	0.002401	-0.004378	0.004377592
0.0494	0.0024404	-0.003978	0.003977592
0.04995	0.002495	-0.003428	0.003427592
0.05	0.0025	-0.003378	0.003377592
0.05088	0.0025888	-0.002498	0.002497592
0.05088	0.0025888	-0.002498	0.002497592
0.05088	0.0025888	-0.002498	0.002497592
0.05088	0.0025888	-0.002498	0.002497592
0.05088	0.0025888	-0.002498	0.002497592
0.05088	0.0025888	-0.002498	0.002497592
0.051	0.002601	-0.002378	0.002377592
0.051	0.002601	-0.002378	0.002377592
0.0511	0.0026112	-0.002278	0.002277592
0.0512	0.0026214	-0.002178	0.002177592
0.052	0.002704	-0.001378	0.001377592
0.052	0.002704	-0.001378	0.001377592
0.05238	0.0027437	-0.000998	0.000997592
0.0529	0.0027984	-0.000478	0.000477592
0.053	0.002809	-0.000378	0.000377592
0.0538	0.0028944	0.0004224	0.000422408
0.054	0.002916	0.0006224	0.000622408
0.054272	0.0029454	0.0008944	0.000894408

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.05544	0.0030736	0.0020624	0.002062408
0.056	0.003136	0.0026224	0.002622408
0.056	0.003136	0.0026224	0.002622408
0.05616	0.0031539	0.0027824	0.002782408
0.05768	0.003327	0.0043024	0.004302408
0.059	0.003481	0.0056224	0.005622408
0.05936	0.0035236	0.0059824	0.005982408
0.05936	0.0035236	0.0059824	0.005982408
0.05936	0.0035236	0.0059824	0.005982408
0.05936	0.0035236	0.0059824	0.005982408
0.05936	0.0035236	0.0059824	0.005982408
0.05936	0.0035236	0.0059824	0.005982408
0.05936	0.0035236	0.0059824	0.005982408
0.05968	0.0035617	0.0063024	0.006302408
0.06	0.0036	0.0066224	0.006622408
0.061	0.003721	0.0076224	0.007622408
0.0636	0.004045	0.0102224	0.010222408
0.06392	0.0040858	0.0105424	0.010542408
0.06392	0.0040858	0.0105424	0.010542408
0.064	0.004096	0.0106224	0.010622408
0.06412	0.0041114	0.0107424	0.010742408
0.06416	0.0041165	0.0107824	0.010782408
0.0652	0.004251	0.0118224	0.011822408
0.06544	0.0042824	0.0120624	0.012062408
0.066	0.004356	0.0126224	0.012622408
0.0664533	0.004416	0.0130757	0.013075741
0.06784	0.0046023	0.0144624	0.014462408
0.06784	0.0046023	0.0144624	0.014462408
0.06784	0.0046023	0.0144624	0.014462408
0.06784	0.0046023	0.0144624	0.014462408
0.06784	0.0046023	0.0144624	0.014462408
0.06784	0.0046023	0.0144624	0.014462408
0.06784	0.0046023	0.0144624	0.014462408
0.06892	0.00475	0.0155424	0.015542408
0.0723	0.0052273	0.0189224	0.018922408
0.073	0.005329	0.0196224	0.019622408
0.07414	0.0054967	0.0207624	0.020762408
0.07632	0.0058247	0.0229424	0.022942408
0.07632	0.0058247	0.0229424	0.022942408
0.07632	0.0058247	0.0229424	0.022942408
0.07632	0.0058247	0.0229424	0.022942408
0.07632	0.0058247	0.0229424	0.022942408
0.080136	0.0064218	0.0267584	0.026758408
0.0814	0.006626	0.0280224	0.028022408
0.0848	0.007191	0.0314224	0.031422408
0.0848	0.007191	0.0314224	0.031422408
0.0848	0.007191	0.0314224	0.031422408

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	Xi^2	Xi-Mean	abs(Xi-mean)
0.0848	0.007191	0.0314224	0.031422408
0.0848	0.007191	0.0314224	0.031422408
0.0848	0.007191	0.0314224	0.031422408
0.0848	0.007191	0.0314224	0.031422408
0.093	0.008649	0.0396224	0.039622408
0.09328	0.0087012	0.0399024	0.039902408
0.09328	0.0087012	0.0399024	0.039902408
0.09328	0.0087012	0.0399024	0.039902408
0.09328	0.0087012	0.0399024	0.039902408
0.09328	0.0087012	0.0399024	0.039902408
0.09328	0.0087012	0.0399024	0.039902408
0.09328	0.0087012	0.0399024	0.039902408
0.09936	0.0098724	0.0459824	0.045982408
0.10176	0.0103551	0.0483824	0.048382408
0.10176	0.0103551	0.0483824	0.048382408
0.10176	0.0103551	0.0483824	0.048382408
0.10176	0.0103551	0.0483824	0.048382408
0.10176	0.0103551	0.0483824	0.048382408
0.10176	0.0103551	0.0483824	0.048382408
0.10176	0.0103551	0.0483824	0.048382408
0.11024	0.0121529	0.0568624	0.056862408
0.11024	0.0121529	0.0568624	0.056862408
0.11024	0.0121529	0.0568624	0.056862408
0.11024	0.0121529	0.0568624	0.056862408
0.11024	0.0121529	0.0568624	0.056862408
0.11024	0.0121529	0.0568624	0.056862408
0.11024	0.0121529	0.0568624	0.056862408
0.111936	0.0125297	0.0585584	0.058558408
0.11194	0.0125306	0.0585624	0.058562408
0.11872	0.0140944	0.0653424	0.065342408
0.11872	0.0140944	0.0653424	0.065342408
0.11872	0.0140944	0.0653424	0.065342408
0.11872	0.0140944	0.0653424	0.065342408
0.11872	0.0140944	0.0653424	0.065342408
0.123	0.015129	0.0696224	0.069622408
0.125504	0.0157513	0.0721264	0.072126408
0.1272	0.0161798	0.0738224	0.073822408
0.1272	0.0161798	0.0738224	0.073822408
0.132	0.017424	0.0786224	0.078622408
0.13568	0.0184091	0.0823024	0.082302408
0.13568	0.0184091	0.0823024	0.082302408
0.13568	0.0184091	0.0823024	0.082302408
0.13568	0.0184091	0.0823024	0.082302408
0.14016	0.0196448	0.0867824	0.086782408
0.141	0.019881	0.0876224	0.087622408
0.14416	0.0207821	0.0907824	0.090782408
0.14416	0.0207821	0.0907824	0.090782408

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - raw data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
0.14416	0.0207821	0.0907824	0.090782408
0.14416	0.0207821	0.0907824	0.090782408
0.14416	0.0207821	0.0907824	0.090782408
0.146	0.021316	0.0926224	0.092622408
0.147	0.021609	0.0936224	0.093622408
0.147	0.021609	0.0936224	0.093622408
0.148	0.021904	0.0946224	0.094622408
0.15264	0.023299	0.0992624	0.099262408
0.1536	0.023593	0.1002224	0.100222408
0.155	0.024025	0.1016224	0.101622408
0.16112	0.0259597	0.1077424	0.107742408
0.16114	0.0259661	0.1077624	0.107762408
0.162	0.026244	0.1086224	0.108622408
0.163	0.026569	0.1096224	0.109622408
0.164	0.026896	0.1106224	0.110622408
0.164	0.026896	0.1106224	0.110622408
0.166	0.027556	0.1126224	0.112622408
0.1696	0.0287642	0.1162224	0.116222408
0.1696	0.0287642	0.1162224	0.116222408
0.175	0.030625	0.1216224	0.121622408
0.17544	0.0307792	0.1220624	0.122062408
0.17808	0.0317125	0.1247024	0.124702408
0.182	0.033124	0.1286224	0.128622408
0.182	0.033124	0.1286224	0.128622408
0.184	0.033856	0.1306224	0.130622408
0.185	0.034225	0.1316224	0.131622408
0.1861	0.0346332	0.1327224	0.132722408
0.188	0.035344	0.1346224	0.134622408
0.192	0.036864	0.1386224	0.138622408
0.20352	0.0414204	0.1501424	0.150142408
0.31376	0.0984453	0.2603824	0.260382408
0.7208	0.5195526	0.6674224	0.667422408

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-6.907755	47.717083	-3.509623	3.509623257
-6.645391	44.161222	-3.247259	3.247258992
-5.809143	33.746142	-2.411011	2.411010968
-5.686336	32.334412	-2.288204	2.288203539
-5.568553	31.008777	-2.170421	2.170420503
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.463192	29.846467	-2.06506	2.065059987
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.298317	28.072167	-1.900185	1.900185344
-5.083206	25.838983	-1.685074	1.685073964
-5.057727	25.580601	-1.659595	1.659594879
-5.035953	25.360824	-1.637821	1.63782108
-4.961845	24.619907	-1.563713	1.563713107
-4.828314	23.312614	-1.430182	1.430181715
-4.813425	23.169061	-1.415293	1.415293102
-4.7915	22.95847	-1.393368	1.393367742

-3.398132 =mean
-1386.438 = sum of Xi
5157.5024 = sum of Xi^2
408 = count

446.2035 = SSS
327.42426 = SAD

0.7673867 = alpha

-2.9 = Z

Critical value = 1.645

abs(Z)>critical value, thus failed t

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.770045	22.753328	-1.371913	1.371912807
-4.710531	22.189099	-1.312399	1.312398679
-4.697285	22.064491	-1.299153	1.299153452
-4.643911	21.56591	-1.245779	1.245778992
-4.60517	21.207592	-1.207038	1.207038164
-4.588313	21.052617	-1.190181	1.190181046
-4.546901	20.674311	-1.148769	1.148769255
-4.49901	20.241091	-1.100878	1.100877968
-4.412898	19.473671	-1.014766	1.014766276
-4.368045	19.079816	-0.969913	0.969912815
-4.268698	18.221782	-0.870566	0.870565927
-4.268698	18.221782	-0.870566	0.870565927
-4.254513	18.100884	-0.856381	0.856381292
-4.2517	18.076956	-0.853568	0.853568351
-4.225365	17.853708	-0.827233	0.827232802
-4.21719	17.784695	-0.819058	0.81905837
-4.185145	17.515438	-0.787013	0.787012904
-4.170146	17.39012	-0.772014	0.772014253
-4.152821	17.245926	-0.754689	0.75468947
-4.135167	17.099602	-0.737035	0.737034534
-4.084592	16.683894	-0.68646	0.686460248
-4.078668	16.635533	-0.680536	0.68053606
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.076898	16.621094	-0.678766	0.678765626
-4.046698	16.375764	-0.648566	0.648565886
-4.045554	16.36651	-0.647422	0.647422376

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-4.028557	16.22927	-0.630425	0.630424799
-4.017384	16.13937	-0.619251	0.619251499
-4.017384	16.13937	-0.619251	0.619251499
-3.991066	15.92861	-0.592934	0.59293419
-3.963316	15.707876	-0.565184	0.565184277
-3.959115	15.674589	-0.560983	0.560982591
-3.927137	15.422402	-0.529005	0.529004621
-3.912023	15.303924	-0.513891	0.513890983
-3.912023	15.303924	-0.513891	0.513890983
-3.863233	14.924568	-0.465101	0.465100819
-3.833951	14.699184	-0.435819	0.435819448
-3.817198	14.570999	-0.419066	0.419065769
-3.816713	14.567297	-0.418581	0.418580803
-3.78451	14.322514	-0.386378	0.386377663
-3.765329	14.1777	-0.367197	0.367196604
-3.752458	14.080944	-0.354326	0.354326413
-3.751606	14.07455	-0.353474	0.353474262
-3.745661	14.02998	-0.347529	0.347529446
-3.729701	13.910673	-0.331569	0.331569426
-3.729701	13.910673	-0.331569	0.331569426
-3.688879	13.607832	-0.290747	0.290747432
-3.688879	13.607832	-0.290747	0.290747432
-3.688879	13.607832	-0.290747	0.290747432
-3.688879	13.607832	-0.290747	0.290747432
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.671433	13.479417	-0.273301	0.273300518
-3.664382	13.427695	-0.26625	0.26624996
-3.664382	13.427695	-0.26625	0.26624996
-3.649659	13.320009	-0.251527	0.251526719
-3.649659	13.320009	-0.251527	0.251526719
-3.649659	13.320009	-0.251527	0.251526719
-3.630611	13.181333	-0.232479	0.232478524
-3.6147	13.066056	-0.216568	0.216568033
-3.611918	13.045955	-0.213786	0.213786391
-3.611918	13.045955	-0.213786	0.213786391

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-3.607484	13.013939	-0.209352	0.209351793
-3.607115	13.01128	-0.208983	0.20898313
-3.606894	13.009684	-0.208762	0.208761997
-3.606894	13.009684	-0.208762	0.208761997
-3.597212	12.939936	-0.19908	0.199080243
-3.593569	12.91374	-0.195437	0.195437252
-3.592988	12.90956	-0.194856	0.194855603
-3.575551	12.784563	-0.177419	0.177418746
-3.575551	12.784563	-0.177419	0.177418746
-3.575551	12.784563	-0.177419	0.177418746
-3.571274	12.753999	-0.173142	0.17314219
-3.557851	12.658305	-0.159719	0.159719169
-3.557851	12.658305	-0.159719	0.159719169
-3.554349	12.633394	-0.156217	0.156216539
-3.55365	12.628425	-0.155517	0.155517482
-3.540459	12.534853	-0.142327	0.142327427
-3.540459	12.534853	-0.142327	0.142327427
-3.540459	12.534853	-0.142327	0.142327427
-3.516608	12.366533	-0.118476	0.118476211
-3.506558	12.295948	-0.108426	0.108425875
-3.506558	12.295948	-0.108426	0.108425875
-3.506558	12.295948	-0.108426	0.108425875
-3.475059	12.076037	-0.076927	0.076927208
-3.473768	12.067065	-0.075636	0.075636052
-3.473768	12.067065	-0.075636	0.075636052
-3.469905	12.040238	-0.071773	0.071772557
-3.469905	12.040238	-0.071773	0.071772557
-3.468941	12.033552	-0.070809	0.070809011
-3.457768	11.956158	-0.059636	0.059635711
-3.454598	11.934248	-0.056466	0.056466136
-3.450493	11.9059	-0.052361	0.052360651
-3.442019	11.847497	-0.043887	0.043887354
-3.442019	11.847497	-0.043887	0.043887354
-3.438276	11.821745	-0.040144	0.040144367
-3.433617	11.789728	-0.035485	0.03548525
-3.427131	11.745225	-0.028999	0.028998741
-3.42038	11.699001	-0.022248	0.022248179
-3.419769	11.694818	-0.021637	0.021636745
-3.411248	11.636611	-0.013116	0.013115695
-3.411248	11.636611	-0.013116	0.013115695
-3.39621	11.534241	0.0019222	0.001922182
-3.392634	11.509966	0.0054979	0.005497871
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.38375	11.449767	0.0143816	0.014381554
-3.369699	11.354869	0.0284333	0.028433308
-3.352407	11.238634	0.0457248	0.045724805
-3.352407	11.238634	0.0457248	0.045724805
-3.324236	11.050547	0.0738957	0.073895682
-3.31143	10.965567	0.0867022	0.086702216
-3.304434	10.919282	0.0936983	0.093698309
-3.28844	10.81384	0.1096917	0.109691734
-3.28844	10.81384	0.1096917	0.109691734
-3.285016	10.791328	0.1131164	0.113116395
-3.277565	10.742431	0.1205672	0.120567201
-3.277565	10.742431	0.1205672	0.120567201
-3.27624	10.733749	0.1218919	0.12189188
-3.270169	10.694006	0.1279629	0.127962903
-3.270169	10.694006	0.1279629	0.127962903
-3.265967	10.666543	0.1321646	0.13216459
-3.265967	10.666543	0.1321646	0.13216459
-3.262305	10.642636	0.1358266	0.13582664
-3.236531	10.475131	0.1616013	0.161601262
-3.218876	10.361162	0.1792562	0.179256198
-3.207441	10.287681	0.1906906	0.190690575
-3.201527	10.249776	0.1966048	0.196604836
-3.201527	10.249776	0.1966048	0.196604836
-3.196625	10.218413	0.2015068	0.201506807
-3.194183	10.202806	0.2039488	0.20394881
-3.194183	10.202806	0.2039488	0.20394881
-3.190531	10.17949	0.2076007	0.207600671
-3.186893	10.156286	0.2112392	0.211239243
-3.179655	10.110207	0.2184769	0.218476911
-3.177254	10.094944	0.2208779	0.220877872
-3.171038	10.055485	0.2270935	0.227093527
-3.164861	10.016347	0.2332708	0.233270786
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.160607	9.9894361	0.2375251	0.237525106
-3.15684	9.9656415	0.2412916	0.241291589
-3.147486	9.906667	0.2506462	0.250646194
-3.146555	9.9008094	0.2515769	0.251576859
-3.146555	9.9008094	0.2515769	0.251576859
-3.142378	9.8745386	0.2557542	0.255754169
-3.141915	9.8716285	0.2562172	0.256217239
-3.125385	9.7680344	0.2727465	0.272746541
-3.123566	9.7566623	0.2745664	0.274566377
-3.111817	9.6834035	0.2863153	0.28631527
-3.101093	9.6167765	0.2970392	0.297039233
-3.079114	9.4809423	0.3190181	0.31901814
-3.079114	9.4809423	0.3190181	0.31901814
-3.079114	9.4809423	0.3190181	0.31901814
-3.047278	9.2859046	0.3508538	0.350853791
-3.047026	9.2843648	0.3511065	0.351106455
-3.015935	9.0958638	0.382197	0.382197042
-3.007805	9.04689	0.3903272	0.390327168
-2.996733	8.9804073	0.4013992	0.401399249
-2.995732	8.9744119	0.4023997	0.402399749
-2.978285	8.8701837	0.4198467	0.419846663
-2.978285	8.8701837	0.4198467	0.419846663
-2.978285	8.8701837	0.4198467	0.419846663
-2.978285	8.8701837	0.4198467	0.419846663
-2.978285	8.8701837	0.4198467	0.419846663
-2.978285	8.8701837	0.4198467	0.419846663
-2.97593	8.8561573	0.4222024	0.422202376
-2.97593	8.8561573	0.4222024	0.422202376
-2.973971	8.8445022	0.4241612	0.424161241
-2.972016	8.8328776	0.4261163	0.426116276
-2.956512	8.7409606	0.4416205	0.441620462
-2.956512	8.7409606	0.4416205	0.441620462
-2.94923	8.6979602	0.4489016	0.448901583
-2.939352	8.6397898	0.4587801	0.458780082
-2.937463	8.628691	0.4606687	0.460668657
-2.922482	8.5408999	0.4756502	0.475650211
-2.918771	8.5192255	0.4793608	0.47936079
-2.913747	8.4899206	0.4843852	0.484385184

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	Xi^2	Xi-Mean	abs(Xi-mean)
-2.892454	8.3662897	0.5056781	0.505678098
-2.882404	8.3082504	0.5157284	0.515728434
-2.882404	8.3082504	0.5157284	0.515728434
-2.879551	8.2918112	0.5185815	0.518581503
-2.852845	8.1387234	0.5452872	0.545287236
-2.830218	8.010133	0.5679142	0.567914187
-2.824135	7.9757367	0.5739973	0.573997342
-2.824135	7.9757367	0.5739973	0.573997342
-2.824135	7.9757367	0.5739973	0.573997342
-2.824135	7.9757367	0.5739973	0.573997342
-2.824135	7.9757367	0.5739973	0.573997342
-2.824135	7.9757367	0.5739973	0.573997342
-2.824135	7.9757367	0.5739973	0.573997342
-2.818758	7.9453985	0.5793737	0.579373699
-2.813411	7.9152799	0.5847213	0.584721306
-2.796881	7.8225456	0.6012506	0.601250608
-2.755142	7.5908064	0.6429902	0.642990214
-2.750123	7.5631764	0.648009	0.648009045
-2.750123	7.5631764	0.648009	0.648009045
-2.748872	7.5562983	0.6492598	0.649259827
-2.746999	7.5460032	0.6511331	0.651133071
-2.746375	7.5425774	0.6517567	0.651756707
-2.730296	7.4545152	0.6678362	0.667836212
-2.726622	7.4344653	0.6715104	0.671510436
-2.718101	7.3880705	0.6800315	0.680031486
-2.711255	7.3509055	0.6868767	0.68687669
-2.690603	7.2393461	0.7075287	0.707528735
-2.690603	7.2393461	0.7075287	0.707528735
-2.690603	7.2393461	0.7075287	0.707528735
-2.690603	7.2393461	0.7075287	0.707528735
-2.690603	7.2393461	0.7075287	0.707528735
-2.690603	7.2393461	0.7075287	0.707528735
-2.690603	7.2393461	0.7075287	0.707528735
-2.674809	7.1546025	0.7233232	0.723323155
-2.626931	6.9007673	0.7712009	0.771200873
-2.617296	6.8502375	0.7808362	0.780836185
-2.6018	6.7693637	0.7963319	0.796331941
-2.57282	6.619404	0.8253118	0.825311771
-2.57282	6.619404	0.8253118	0.825311771
-2.57282	6.619404	0.8253118	0.825311771
-2.57282	6.619404	0.8253118	0.825311771
-2.57282	6.619404	0.8253118	0.825311771
-2.52403	6.3707279	0.8741019	0.874101935
-2.50838	6.2919703	0.889752	0.889752016
-2.46746	6.0883575	0.9306723	0.930672286
-2.46746	6.0883575	0.9306723	0.930672286
-2.46746	6.0883575	0.9306723	0.930672286

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	Xi^2	Xi-Mean	abs(Xi-mean)
-2.46746	6.0883575	0.9306723	0.930672286
-2.46746	6.0883575	0.9306723	0.930672286
-2.46746	6.0883575	0.9306723	0.930672286
-2.46746	6.0883575	0.9306723	0.930672286
-2.375156	5.641365	1.0229762	1.022976237
-2.37215	5.6270935	1.0259825	1.025982466
-2.37215	5.6270935	1.0259825	1.025982466
-2.37215	5.6270935	1.0259825	1.025982466
-2.37215	5.6270935	1.0259825	1.025982466
-2.37215	5.6270935	1.0259825	1.025982466
-2.37215	5.6270935	1.0259825	1.025982466
-2.37215	5.6270935	1.0259825	1.025982466
-2.309006	5.3315071	1.0891264	1.089126362
-2.285138	5.2218565	1.1129938	1.112993843
-2.285138	5.2218565	1.1129938	1.112993843
-2.285138	5.2218565	1.1129938	1.112993843
-2.285138	5.2218565	1.1129938	1.112993843
-2.285138	5.2218565	1.1129938	1.112993843
-2.285138	5.2218565	1.1129938	1.112993843
-2.285138	5.2218565	1.1129938	1.112993843
-2.205095	4.862446	1.1930366	1.193036551
-2.205095	4.862446	1.1930366	1.193036551
-2.205095	4.862446	1.1930366	1.193036551
-2.205095	4.862446	1.1930366	1.193036551
-2.205095	4.862446	1.1930366	1.193036551
-2.205095	4.862446	1.1930366	1.193036551
-2.205095	4.862446	1.1930366	1.193036551
-2.189828	4.7953467	1.208304	1.208304023
-2.189792	4.7951902	1.2083398	1.208339757
-2.130987	4.5411077	1.2671445	1.267144523
-2.130987	4.5411077	1.2671445	1.267144523
-2.130987	4.5411077	1.2671445	1.267144523
-2.130987	4.5411077	1.2671445	1.267144523
-2.130987	4.5411077	1.2671445	1.267144523
-2.095571	4.3914175	1.3025611	1.302561099
-2.075418	4.3073584	1.3227144	1.322714374
-2.061995	4.2518218	1.3361374	1.336137394
-2.061995	4.2518218	1.3361374	1.336137394
-2.024953	4.1004361	1.3731787	1.373178666
-1.997456	3.9898309	1.4006759	1.400675916
-1.997456	3.9898309	1.4006759	1.400675916
-1.997456	3.9898309	1.4006759	1.400675916
-1.997456	3.9898309	1.4006759	1.400675916
-1.964971	3.8611097	1.4331614	1.433161371
-1.958995	3.8376629	1.4391366	1.439136634
-1.936831	3.7513162	1.4613005	1.461300537
-1.936831	3.7513162	1.4613005	1.461300537

Table 119. Uranium Combined Upgradient Background Data Set, Geary's Test Analysis (continued)

Uranium - lognormal data			
Xi	**Xi^2**	**Xi-Mean**	**abs(Xi-mean)**
-1.936831	3.7513162	1.4613005	1.461300537
-1.936831	3.7513162	1.4613005	1.461300537
-1.936831	3.7513162	1.4613005	1.461300537
-1.924149	3.7023481	1.4739834	1.473983365
-1.917323	3.6761263	1.4808093	1.48080933
-1.917323	3.6761263	1.4808093	1.48080933
-1.910543	3.6501746	1.487589	1.487589017
-1.879673	3.5331709	1.518459	1.518458951
-1.873403	3.5096405	1.5247286	1.524728564
-1.86433	3.475727	1.5338019	1.53380186
-1.825606	3.3328367	1.5725262	1.572526172
-1.825482	3.3323835	1.5726503	1.572650296
-1.820159	3.3129786	1.5779731	1.577973079
-1.814005	3.2906144	1.5841269	1.584126944
-1.807889	3.2684621	1.5902432	1.590243171
-1.807889	3.2684621	1.5902432	1.590243171
-1.795767	3.2247809	1.6023645	1.602364532
-1.774313	3.148185	1.6238195	1.623819467
-1.774313	3.148185	1.6238195	1.623819467
-1.742969	3.037942	1.6551627	1.655162717
-1.740458	3.0291947	1.6576738	1.657673848
-1.725522	2.9774275	1.6726096	1.672609631
-1.703749	2.9027593	1.6943834	1.694383431
-1.703749	2.9027593	1.6943834	1.694383431
-1.69282	2.8656379	1.7053125	1.705312501
-1.687399	2.8473169	1.7107326	1.710732569
-1.681471	2.8273451	1.7166609	1.716660907
-1.671313	2.7932882	1.7268187	1.726818706
-1.65026	2.7233578	1.7478721	1.747872116
-1.591991	2.5344353	1.806141	1.806141024
-1.159127	1.3435752	2.2390051	2.239005106
-0.327394	0.1071866	3.0707384	3.07073845

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis

Uranium	Normal (xi-avg)^3
0.001	-0.000143693
0.0013	-0.000141238
0.003	-0.000127853
0.003392	-0.000124892
0.003816	-0.000121741
0.00424	-0.000118643
0.00424	-0.000118643
0.00424	-0.000118643

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.00848	-9.05043E-05
0.009	-8.73959E-05
0.00912	-8.66889E-05
0.00962	-8.37838E-05
0.01	-8.162E-05
0.01017	-8.06641E-05
0.0106	-7.82797E-05
0.01112	-7.54596E-05
0.01212	-7.02282E-05
0.012676	-6.74271E-05
0.014	-6.10587E-05
0.014	-6.10587E-05
0.0142	-6.0133E-05
0.01424	-5.99491E-05
0.01462	-5.82198E-05
0.01474	-5.76807E-05
0.01522	-5.55575E-05
0.01545	-5.45589E-05
0.01572	-5.3402E-05
0.016	-5.22197E-05
0.01683	-4.88176E-05
0.01693	-4.8418E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01696	-4.82985E-05
0.01748	-4.6259E-05
0.0175	-4.61817E-05
0.0178	-4.50329E-05
0.018	-4.42777E-05
0.018	-4.42777E-05
0.01848	-4.24998E-05
0.019	-4.06281E-05
0.01908	-4.03451E-05
0.0197	-3.81965E-05
0.02	-3.71848E-05

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.02	-3.71848E-05
0.021	-3.39417E-05
0.021624	-3.20168E-05
0.0219893	-3.09244E-05
0.022	-3.08929E-05
0.02272	-2.88147E-05
0.02316	-2.75918E-05
0.02346	-2.67781E-05
0.02348	-2.67244E-05
0.02362	-2.63508E-05
0.024	-2.53541E-05
0.024	-2.53541E-05
0.025	-2.28521E-05
0.025	-2.28521E-05
0.025	-2.28521E-05
0.025	-2.28521E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02544	-2.18055E-05
0.02562	-2.13868E-05
0.02562	-2.13868E-05
0.026	-2.05204E-05
0.026	-2.05204E-05
0.026	-2.05204E-05
0.0265	-1.94165E-05
0.026925	-1.85099E-05
0.027	-1.83529E-05
0.027	-1.83529E-05
0.02712	-1.81036E-05
0.02713	-1.80829E-05
0.027136	-1.80705E-05
0.027136	-1.80705E-05
0.0274	-1.75306E-05
0.0275	-1.73289E-05
0.027516	-1.72968E-05
0.028	-1.63437E-05
0.028	-1.63437E-05
0.028	-1.63437E-05
0.02812	-1.6113E-05
0.0285	-1.53966E-05
0.0285	-1.53966E-05
0.0286	-1.52117E-05

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.02862	-1.51749E-05
0.029	-1.44868E-05
0.029	-1.44868E-05
0.029	-1.44868E-05
0.0297	-1.32743E-05
0.03	-1.27761E-05
0.03	-1.27761E-05
0.03	-1.27761E-05
0.03096	-1.12659E-05
0.031	-1.12057E-05
0.031	-1.12057E-05
0.03112	-1.10264E-05
0.03112	-1.10264E-05
0.03115	-1.09819E-05
0.0315	-1.04713E-05
0.0316	-1.03283E-05
0.03173	-1.01445E-05
0.032	-9.76959E-06
0.032	-9.76959E-06
0.03212	-9.60599E-06
0.03227	-9.40408E-06
0.03248	-9.12617E-06
0.0327	-8.84097E-06
0.03272	-8.81534E-06
0.033	-8.46172E-06
0.033	-8.46172E-06
0.0335	-7.85401E-06
0.03362	-7.71262E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.03392	-7.3666E-06
0.0344	-6.83476E-06
0.035	-6.20677E-06
0.035	-6.20677E-06
0.036	-5.2477E-06
0.036464	-4.83846E-06
0.03672	-4.62207E-06
0.037312	-4.14658E-06
0.037312	-4.14658E-06
0.03744	-4.04826E-06

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.03772	-3.83862E-06
0.03772	-3.83862E-06
0.03777	-3.80196E-06
0.038	-3.63634E-06
0.038	-3.63634E-06
0.03816	-3.52402E-06
0.03816	-3.52402E-06
0.0383	-3.42765E-06
0.0393	-2.78988E-06
0.04	-2.39405E-06
0.04046	-2.15548E-06
0.0407	-2.03756E-06
0.0407	-2.03756E-06
0.0409	-1.94264E-06
0.041	-1.89631E-06
0.041	-1.89631E-06
0.04115	-1.8282E-06
0.0413	-1.76174E-06
0.0416	-1.63369E-06
0.0417	-1.59243E-06
0.04196	-1.48841E-06
0.04222	-1.38903E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.0424	-1.32288E-06
0.04256	-1.26588E-06
0.04296	-1.13058E-06
0.043	-1.11761E-06
0.043	-1.11761E-06
0.04318	-1.06046E-06
0.0432	-1.05423E-06
0.04392	-8.45944E-07
0.044	-8.24658E-07
0.04452	-6.9494E-07
0.045	-5.87973E-07
0.046	-4.01554E-07
0.046	-4.01554E-07
0.046	-4.01554E-07
0.047488	-2.04294E-07
0.0475	-2.03048E-07
0.049	-8.38892E-08

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.0494	-6.29304E-08
0.04995	-4.02687E-08
0.05	-3.8532E-08
0.05088	-1.55799E-08
0.05088	-1.55799E-08
0.05088	-1.55799E-08
0.05088	-1.55799E-08
0.05088	-1.55799E-08
0.05088	-1.55799E-08
0.051	-1.34404E-08
0.051	-1.34404E-08
0.0511	-1.18148E-08
0.0512	-1.03259E-08
0.052	-2.61434E-09
0.052	-2.61434E-09
0.05238	-9.92794E-10
0.0529	-1.08936E-10
0.053	-5.38356E-11
0.0538	7.53695E-11
0.054	2.41115E-10
0.054272	7.15495E-10
0.05544	8.7725E-09
0.056	1.80344E-08
0.056	1.80344E-08
0.05616	2.15408E-08
0.05768	7.96406E-08
0.059	1.77733E-07
0.05936	2.14106E-07
0.05936	2.14106E-07
0.05936	2.14106E-07
0.05936	2.14106E-07
0.05936	2.14106E-07
0.05936	2.14106E-07
0.05936	2.14106E-07
0.05968	2.50334E-07
0.06	2.90434E-07
0.061	4.4287E-07
0.0636	1.06822E-06
0.06392	1.17171E-06
0.06392	1.17171E-06
0.064	1.19859E-06
0.06412	1.23967E-06
0.06416	1.25357E-06
0.0652	1.65241E-06
0.06544	1.7551E-06
0.066	2.01107E-06
0.0664533	2.23562E-06
0.06784	3.02498E-06
0.06784	3.02498E-06
0.06784	3.02498E-06
0.06784	3.02498E-06
0.06784	3.02498E-06
0.06784	3.02498E-06

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.06784	3.02498E-06
0.06892	3.75452E-06
0.0723	6.77531E-06
0.073	7.55539E-06
0.07414	8.95021E-06
0.07632	1.20758E-05
0.07632	1.20758E-05
0.07632	1.20758E-05
0.07632	1.20758E-05
0.07632	1.20758E-05
0.080136	1.91594E-05
0.0814	2.20047E-05
0.0848	3.10255E-05
0.0848	3.10255E-05
0.0848	3.10255E-05
0.0848	3.10255E-05
0.0848	3.10255E-05
0.0848	3.10255E-05
0.0848	3.10255E-05
0.093	6.22046E-05
0.09328	6.35327E-05
0.09328	6.35327E-05
0.09328	6.35327E-05
0.09328	6.35327E-05
0.09328	6.35327E-05
0.09328	6.35327E-05
0.09328	6.35327E-05
0.09936	9.72244E-05
0.10176	0.000113256
0.10176	0.000113256
0.10176	0.000113256
0.10176	0.000113256
0.10176	0.000113256
0.10176	0.000113256
0.10176	0.000113256
0.11024	0.000183855
0.11024	0.000183855
0.11024	0.000183855
0.11024	0.000183855
0.11024	0.000183855
0.11024	0.000183855
0.11024	0.000183855
0.111936	0.000200802
0.11194	0.000200843
0.11872	0.000278988
0.11872	0.000278988
0.11872	0.000278988
0.11872	0.000278988
0.11872	0.000278988
0.123	0.000337479
0.125504	0.000375217
0.1272	0.000402314
0.1272	0.000402314

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Normal (xi-avg)^3
0.132	0.000486003
0.13568	0.000557491
0.13568	0.000557491
0.13568	0.000557491
0.13568	0.000557491
0.14016	0.000653574
0.141	0.000672737
0.14416	0.000748178
0.14416	0.000748178
0.14416	0.000748178
0.14416	0.000748178
0.14416	0.000748178
0.146	0.000794599
0.147	0.000820615
0.147	0.000820615
0.148	0.000847192
0.15264	0.000978035
0.1536	0.001006687
0.155	0.001049466
0.16112	0.00125072
0.16114	0.001251416
0.162	0.001281617
0.163	0.00131734
0.164	0.001353721
0.164	0.001353721
0.166	0.001428481
0.1696	0.001569891
0.1696	0.001569891
0.175	0.00179904
0.17544	0.001818636
0.17808	0.001939209
0.182	0.002127894
0.182	0.002127894
0.184	0.002228707
0.185	0.002280287
0.1861	0.002337937
0.188	0.002439788
0.192	0.002663792
0.20352	0.003384622
0.31376	0.017653666
0.7208	0.297305094

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-6.907755	-43.22962794
-6.645391	-34.24134254
-5.809143	-14.0151438
-5.686336	-11.9807487
-5.568553	-10.22425447
-5.463192	-8.806392045
-5.463192	-8.806392045
-5.463192	-8.806392045

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.770045	-2.582138486
-4.710531	-2.260462746
-4.697285	-2.192710798
-4.643911	-1.933405762
-4.60517	-1.758583544
-4.588313	-1.685928257
-4.546901	-1.515997245
-4.49901	-1.334189567
-4.412898	-1.044956176
-4.368045	-0.912426924
-4.268698	-0.659788886
-4.268698	-0.659788886
-4.254513	-0.628060548
-4.2517	-0.621891915
-4.225365	-0.566087078
-4.21719	-0.549470724
-4.185145	-0.487467381
-4.170146	-0.460125132
-4.152821	-0.429838063
-4.135167	-0.400371829
-4.084592	-0.323479065
-4.078668	-0.315176209
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.076898	-0.312722783
-4.046698	-0.272811268
-4.045554	-0.2713708
-4.028557	-0.25055315
-4.017384	-0.23746587
-4.017384	-0.23746587
-3.991066	-0.208458439
-3.963316	-0.18053866
-3.959115	-0.176542044
-3.927137	-0.148039768
-3.912023	-0.135710357

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-3.912023	-0.135710357
-3.863233	-0.100610038
-3.833951	-0.082778932
-3.817198	-0.073594704
-3.816713	-0.073339496
-3.78451	-0.057681432
-3.765329	-0.049510347
-3.752458	-0.044484692
-3.751606	-0.044164507
-3.745661	-0.041973465
-3.729701	-0.036452174
-3.729701	-0.036452174
-3.688879	-0.024578063
-3.688879	-0.024578063
-3.688879	-0.024578063
-3.688879	-0.024578063
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.671433	-0.020413683
-3.664382	-0.018874204
-3.664382	-0.018874204
-3.649659	-0.015913011
-3.649659	-0.015913011
-3.649659	-0.015913011
-3.630611	-0.012564596
-3.6147	-0.010157412
-3.611918	-0.009771026
-3.611918	-0.009771026
-3.607484	-0.009175507
-3.607115	-0.009127118
-3.606894	-0.009098176
-3.606894	-0.009098176
-3.597212	-0.007890136
-3.593569	-0.007464866
-3.592988	-0.007398415
-3.575551	-0.005584683
-3.575551	-0.005584683
-3.575551	-0.005584683
-3.571274	-0.005190494
-3.557851	-0.00407447
-3.557851	-0.00407447
-3.554349	-0.003812247

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-3.55365	-0.003761297
-3.540459	-0.00288314
-3.540459	-0.00288314
-3.540459	-0.00288314
-3.516608	-0.001663005
-3.506558	-0.001274673
-3.506558	-0.001274673
-3.506558	-0.001274673
-3.475059	-0.000455239
-3.473768	-0.0004327
-3.473768	-0.0004327
-3.469905	-0.000369722
-3.469905	-0.000369722
-3.468941	-0.00035503
-3.457768	-0.00021209
-3.454598	-0.000180038
-3.450493	-0.000143554
-3.442019	-8.45314E-05
-3.442019	-8.45314E-05
-3.438276	-6.46955E-05
-3.433617	-4.46831E-05
-3.427131	-2.43858E-05
-3.42038	-1.10124E-05
-3.419769	-1.01292E-05
-3.411248	-2.25618E-06
-3.411248	-2.25618E-06
-3.39621	7.10205E-09
-3.392634	1.66182E-07
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.38375	2.97452E-06
-3.369699	2.2987E-05
-3.352407	9.55995E-05
-3.352407	9.55995E-05
-3.324236	0.000403513
-3.31143	0.000651764
-3.304434	0.000822612
-3.28844	0.001319841
-3.28844	0.001319841
-3.285016	0.00144736

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-3.277565	0.001752619
-3.277565	0.001752619
-3.27624	0.001811025
-3.270169	0.002095329
-3.270169	0.002095329
-3.265967	0.002308582
-3.265967	0.002308582
-3.262305	0.002505849
-3.236531	0.004220212
-3.218876	0.005760001
-3.207441	0.006934061
-3.201527	0.007599457
-3.201527	0.007599457
-3.196625	0.008182182
-3.194183	0.008483275
-3.194183	0.008483275
-3.190531	0.008947182
-3.186893	0.009425921
-3.179655	0.010428375
-3.177254	0.010775976
-3.171038	0.011711547
-3.164861	0.01269349
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.160607	0.013400733
-3.15684	0.01404839
-3.147486	0.015746475
-3.146555	0.01592253
-3.146555	0.01592253
-3.142378	0.01672893
-3.141915	0.016819963
-3.125385	0.020289799
-3.123566	0.020698652
-3.111817	0.023471105
-3.101093	0.026208457
-3.079114	0.032467297
-3.079114	0.032467297
-3.079114	0.032467297
-3.047278	0.043189534
-3.047026	0.043282909
-3.015935	0.055829272

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-3.007805	0.059468412
-2.996733	0.064673992
-2.995732	0.065158804
-2.978285	0.074006883
-2.978285	0.074006883
-2.978285	0.074006883
-2.978285	0.074006883
-2.978285	0.074006883
-2.978285	0.074006883
-2.97593	0.07525962
-2.97593	0.07525962
-2.973971	0.076312019
-2.972016	0.077372097
-2.956512	0.086128635
-2.956512	0.086128635
-2.94923	0.090459339
-2.939352	0.096563648
-2.937463	0.097761081
-2.922482	0.107612589
-2.918771	0.110150766
-2.913747	0.113650814
-2.892454	0.129307118
-2.882404	0.137171292
-2.882404	0.137171292
-2.879551	0.139460451
-2.852845	0.162134709
-2.830218	0.183167389
-2.824135	0.189116597
-2.824135	0.189116597
-2.824135	0.189116597
-2.824135	0.189116597
-2.824135	0.189116597
-2.824135	0.189116597
-2.824135	0.189116597
-2.818758	0.19448062
-2.813411	0.199915633
-2.796881	0.217353473
-2.755142	0.265835569
-2.750123	0.272109186
-2.750123	0.272109186
-2.748872	0.273687898
-2.746999	0.276063673
-2.746375	0.276857649
-2.730296	0.297858428
-2.726622	0.302801693
-2.718101	0.314475679
-2.711255	0.324068139
-2.690603	0.354186699
-2.690603	0.354186699
-2.690603	0.354186699
-2.690603	0.354186699
-2.690603	0.354186699
-2.690603	0.354186699

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-2.690603	0.354186699
-2.674809	0.378440061
-2.626931	0.458672325
-2.617296	0.476079841
-2.6018	0.504989569
-2.57282	0.562152462
-2.57282	0.562152462
-2.57282	0.562152462
-2.57282	0.562152462
-2.57282	0.562152462
-2.52403	0.667861248
-2.50838	0.704379881
-2.46746	0.806102642
-2.46746	0.806102642
-2.46746	0.806102642
-2.46746	0.806102642
-2.46746	0.806102642
-2.46746	0.806102642
-2.46746	0.806102642
-2.375156	1.070524562
-2.37215	1.079990204
-2.37215	1.079990204
-2.37215	1.079990204
-2.37215	1.079990204
-2.37215	1.079990204
-2.37215	1.079990204
-2.37215	1.079990204
-2.309006	1.291917586
-2.285138	1.378727016
-2.285138	1.378727016
-2.285138	1.378727016
-2.285138	1.378727016
-2.285138	1.378727016
-2.285138	1.378727016
-2.285138	1.378727016
-2.205095	1.698092124
-2.205095	1.698092124
-2.205095	1.698092124
-2.205095	1.698092124
-2.205095	1.698092124
-2.205095	1.698092124
-2.205095	1.698092124
-2.189828	1.764122196
-2.189792	1.764278716
-2.130987	2.034597245
-2.130987	2.034597245
-2.130987	2.034597245
-2.130987	2.034597245
-2.130987	2.034597245
-2.095571	2.210010369
-2.075418	2.314185773
-2.061995	2.385356836
-2.061995	2.385356836

Table 120. Uranium Combined Upgradient Background Data Set, Coefficient of Skewness Analysis (continued)

Uranium	Lognormal (xi-avg)^3
-2.024953	2.589292674
-1.997456	2.747976302
-1.997456	2.747976302
-1.997456	2.747976302
-1.997456	2.747976302
-1.964971	2.943643968
-1.958995	2.980616391
-1.936831	3.120460087
-1.936831	3.120460087
-1.936831	3.120460087
-1.936831	3.120460087
-1.936831	3.120460087
-1.924149	3.202415999
-1.917323	3.24711318
-1.917323	3.24711318
-1.910543	3.291917101
-1.879673	3.501137508
-1.873403	3.544684688
-1.86433	3.608342724
-1.825606	3.888603361
-1.825482	3.889524244
-1.820159	3.929151447
-1.814005	3.975300312
-1.807889	4.021523566
-1.807889	4.021523566
-1.795767	4.114186455
-1.774313	4.281670381
-1.774313	4.281670381
-1.742969	4.534423568
-1.740458	4.555093097
-1.725522	4.679331136
-1.703749	4.86446505
-1.703749	4.86446505
-1.69282	4.95920347
-1.687399	5.006640065
-1.681471	5.058870377
-1.671313	5.149205612
-1.65026	5.339848823
-1.591991	5.891894627
-1.159127	11.22445471
-0.327394	28.95532747

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.001	1	0.002445	-2.814195	-0.002814195	7.9196929
0.0013	2	0.00489	-2.583511	-0.003358564	6.6745273
0.003	3	0.007335	-2.440429	-0.007321287	5.9556934
0.003392	4	0.00978	-2.334673	-0.00791921	5.4506975
0.003816	5	0.0122249	-2.249981	-0.008585927	5.0624134
0.00424	6	0.0146699	-2.178895	-0.009238513	4.7475819
0.00424	7	0.0171149	-2.117358	-0.008977599	4.4832059
0.00424	8	0.0195599	-2.062925	-0.008746802	4.2556595
0.00424	9	0.0220049	-2.013994	-0.008539335	4.0561725
0.00424	10	0.0244499	-1.969465	-0.008350533	3.8787936
0.00424	11	0.0268949	-1.928529	-0.008176963	3.7192239
0.00424	12	0.0293399	-1.890585	-0.00801608	3.574311
0.00424	13	0.0317848	-1.855187	-0.007865994	3.4417199
0.00424	14	0.0342298	-1.821968	-0.007725144	3.3195674
0.00424	15	0.0366748	-1.79065	-0.007592354	3.2064258
0.00424	16	0.0391198	-1.760991	-0.007466602	3.101089
0.00424	17	0.0415648	-1.732806	-0.007347096	3.0026155
0.00424	18	0.0440098	-1.705939	-0.007233182	2.9102286
0.00424	19	0.0464548	-1.680246	-0.007124243	2.8232266
0.00424	20	0.0488998	-1.655617	-0.007019816	2.7410672
0.00424	21	0.0513447	-1.631952	-0.006919476	2.6632667
0.00424	22	0.0537897	-1.609169	-0.006822876	2.5894248
0.00424	23	0.0562347	-1.587191	-0.00672969	2.5191754
0.00424	24	0.0586797	-1.565954	-0.006639646	2.452213
0.00424	25	0.0611247	-1.5454	-0.006552495	2.3882604
0.00424	26	0.0635697	-1.525482	-0.006468043	2.3270948
0.00424	27	0.0660147	-1.506146	-0.006386059	2.2684757
0.00424	28	0.0684597	-1.48736	-0.006306408	2.2122408
0.005	29	0.0709046	-1.469089	-0.007345443	2.1582213
0.005	30	0.0733496	-1.45129	-0.007256449	2.1062421
0.005	31	0.0757946	-1.433941	-0.007169706	2.0561873
0.005	32	0.0782396	-1.417013	-0.007085066	2.0079264
0.005	33	0.0806846	-1.400481	-0.007002404	1.9613467
0.005	34	0.0831296	-1.384324	-0.006921618	1.9163521
0.005	35	0.0855746	-1.368521	-0.006842606	1.8728503
0.005	36	0.0880196	-1.353051	-0.006765254	1.8307463
0.005	37	0.0904645	-1.337899	-0.006689493	1.7899725
0.005	38	0.0929095	-1.323051	-0.006615255	1.750464
0.005	39	0.0953545	-1.308485	-0.006542427	1.7121343
0.005	40	0.0977995	-1.294193	-0.006470964	1.6749349
0.0062	41	0.1002445	-1.280159	-0.007936987	1.6388078
0.00636	42	0.1026895	-1.266376	-0.008054151	1.6037079
0.0065	43	0.1051345	-1.252827	-0.008143373	1.5695747
0.007	44	0.1075795	-1.239505	-0.008676534	1.5363723
0.008	45	0.1100244	-1.226399	-0.009811192	1.5040546
0.00812	46	0.1124694	-1.2135	-0.009853621	1.4725826
0.0083	47	0.1149144	-1.200801	-0.009966651	1.4419238
0.00848	48	0.1173594	-1.188291	-0.010076709	1.412036
0.00848	49	0.1198044	-1.175965	-0.009972186	1.3828943
0.00848	50	0.1222494	-1.163817	-0.009869166	1.3544693
0.00848	51	0.1246944	-1.151836	-0.009767573	1.3267271
0.00848	52	0.1271394	-1.14002	-0.009667368	1.2996451
0.00848	53	0.1295844	-1.128358	-0.009568474	1.2731913
0.00848	54	0.1320293	-1.11685	-0.009470891	1.2473548
0.00848	55	0.1344743	-1.105486	-0.009374524	1.2220999
0.00848	56	0.1369193	-1.094265	-0.00927937	1.1974167
0.00848	57	0.1393643	-1.083181	-0.009185374	1.1732809
0.00848	58	0.1418093	-1.072226	-0.009092477	1.1496687
0.00848	59	0.1442543	-1.061399	-0.009000659	1.1265668

Uranium - normal
359.78793 = (sum of Mi*Xi)^2
407 = count -1
0.0033397 = standard deviation ^2
397.70301 = sum of Mi^2

0.67 = W statistic

FAIL

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.00848	60	0.1466993	-1.050696	-0.008909902	1.1039621
0.00848	61	0.1491443	-1.040112	-0.008820148	1.0818325
0.00848	62	0.1515892	-1.029641	-0.008731358	1.0601611
0.009	63	0.1540342	-1.019284	-0.009173559	1.0389406
0.00912	64	0.1564792	-1.009034	-0.009202393	1.0181503
0.00962	65	0.1589242	-0.998889	-0.009609312	0.9977791
0.01	66	0.1613692	-0.988846	-0.009888458	0.9778161
0.01017	67	0.1638142	-0.978903	-0.009955441	0.9582507
0.0106	68	0.1662592	-0.969053	-0.010271961	0.9390636
0.01112	69	0.1687042	-0.959299	-0.010667401	0.9202539
0.01212	70	0.1711491	-0.949633	-0.011509552	0.9018028
0.012676	71	0.1735941	-0.940056	-0.01191615	0.8837053
0.014	72	0.1760391	-0.930565	-0.013027916	0.865952
0.014	73	0.1784841	-0.921157	-0.012896194	0.8485297
0.0142	74	0.1809291	-0.91183	-0.012947984	0.8314336
0.01424	75	0.1833741	-0.90258	-0.012852743	0.8146511
0.01462	76	0.1858191	-0.893408	-0.013061625	0.7981779
0.01474	77	0.1882641	-0.884311	-0.013034741	0.7820056
0.01522	78	0.190709	-0.875286	-0.013321858	0.7661262
0.01545	79	0.193154	-0.866332	-0.013384835	0.7505318
0.01572	80	0.195599	-0.857447	-0.01347906	0.7352147
0.016	81	0.198044	-0.848629	-0.013578065	0.7201713
0.01683	82	0.200489	-0.839875	-0.014135099	0.7053903
0.01693	83	0.202934	-0.831187	-0.014071999	0.6908722
0.01696	84	0.205379	-0.822561	-0.013950629	0.676606
0.01696	85	0.207824	-0.813995	-0.013805363	0.6625886
0.01696	86	0.2102689	-0.805487	-0.013661062	0.6488096
0.01696	87	0.2127139	-0.79704	-0.013517802	0.6352731
0.01696	88	0.2151589	-0.788648	-0.013375468	0.6219655
0.01696	89	0.2176039	-0.78031	-0.013234059	0.6088838
0.01696	90	0.2200489	-0.772027	-0.013093575	0.5960255
0.01696	91	0.2224939	-0.763798	-0.012954017	0.5833877
0.01696	92	0.2249389	-0.75562	-0.012815308	0.5709609
0.01748	93	0.2273839	-0.74749	-0.013066122	0.558741
0.0175	94	0.2298289	-0.73941	-0.012939677	0.5467273
0.0178	95	0.2322738	-0.731379	-0.013018551	0.5349156
0.018	96	0.2347188	-0.723394	-0.01302109	0.5232987
0.018	97	0.2371638	-0.715455	-0.012878193	0.5118761
0.01848	98	0.2396088	-0.707562	-0.013075743	0.5006438
0.019	99	0.2420538	-0.699711	-0.013294502	0.489595
0.01908	100	0.2444988	-0.691904	-0.013201524	0.4787308
0.0197	101	0.2469438	-0.684138	-0.013477515	0.4680446
0.02	102	0.2493888	-0.676414	-0.013528279	0.4575358
0.02	103	0.2518337	-0.668731	-0.01337462	0.4472011
0.021	104	0.2542787	-0.661084	-0.013882773	0.4370326
0.021624	105	0.2567237	-0.653479	-0.014130825	0.4270345
0.0219893	106	0.2591687	-0.645909	-0.014203119	0.4171991
0.022	107	0.2616137	-0.638379	-0.014044335	0.4075276
0.02272	108	0.2640587	-0.630882	-0.014333647	0.3980126
0.02316	109	0.2665037	-0.623422	-0.014438459	0.3886553
0.02346	110	0.2689487	-0.615996	-0.014451271	0.3794513
0.02348	111	0.2713936	-0.608603	-0.014290002	0.3703978
0.02362	112	0.2738386	-0.601244	-0.014201388	0.3614946
0.024	113	0.2762836	-0.593918	-0.014254038	0.3527389
0.024	114	0.2787286	-0.586622	-0.014078923	0.3441251
0.025	115	0.2811736	-0.579358	-0.014483959	0.3356561
0.025	116	0.2836186	-0.572124	-0.014303112	0.3273264
0.025	117	0.2860636	-0.564921	-0.014123032	0.319136
0.025	118	0.2885086	-0.557748	-0.013943691	0.3110824

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.02544	119	0.2909535	-0.550601	-0.014007296	0.3031618
0.02544	120	0.2933985	-0.543483	-0.013826216	0.2953741
0.02544	121	0.2958435	-0.536393	-0.01364583	0.2877171
0.02544	122	0.2982885	-0.529329	-0.013466138	0.2801895
0.02544	123	0.3007335	-0.522292	-0.013287111	0.2727891
0.02544	124	0.3031785	-0.515281	-0.01310875	0.2655146
0.02544	125	0.3056235	-0.508294	-0.012930996	0.2583626
0.02544	126	0.3080685	-0.501333	-0.012753907	0.2513346
0.02544	127	0.3105134	-0.494396	-0.012577425	0.244427
0.02544	128	0.3129584	-0.487482	-0.012401551	0.237639
0.02544	129	0.3154034	-0.480592	-0.012226255	0.2309685
0.02544	130	0.3178484	-0.473724	-0.012051537	0.2244144
0.02544	131	0.3202934	-0.466878	-0.01187737	0.2179748
0.02544	132	0.3227384	-0.460054	-0.01170378	0.2116499
0.02562	133	0.3251834	-0.453254	-0.011612355	0.2054387
0.02562	134	0.3276284	-0.446471	-0.011438586	0.1993363
0.026	135	0.3300733	-0.439711	-0.011432489	0.1933459
0.026	136	0.3325183	-0.43297	-0.011257207	0.1874626
0.026	137	0.3349633	-0.426248	-0.011082457	0.1816876
0.0265	138	0.3374083	-0.419546	-0.011117982	0.1760193
0.026925	139	0.3398533	-0.412863	-0.011116332	0.1704557
0.027	140	0.3422983	-0.406199	-0.01096736	0.1649972
0.027	141	0.3447433	-0.399552	-0.010787915	0.1596421
0.02712	142	0.3471883	-0.392922	-0.010656049	0.1543878
0.02713	143	0.3496333	-0.38631	-0.010480594	0.1492355
0.027136	144	0.3520782	-0.379716	-0.010303982	0.1441845
0.027136	145	0.3545232	-0.373137	-0.010125453	0.1392314
0.0274	146	0.3569682	-0.366574	-0.010044131	0.1343766
0.0275	147	0.3594132	-0.360028	-0.009900771	0.1296202
0.027516	148	0.3618582	-0.353497	-0.009726816	0.1249599
0.028	149	0.3643032	-0.34698	-0.009715445	0.1203953
0.028	150	0.3667482	-0.340478	-0.009533396	0.1159256
0.028	151	0.3691932	-0.333991	-0.009351761	0.1115503
0.02812	152	0.3716381	-0.327518	-0.00920981	0.1072681
0.0285	153	0.3740831	-0.321058	-0.009150166	0.1030785
0.0285	154	0.3765281	-0.314612	-0.008966454	0.098981
0.0286	155	0.3789731	-0.308179	-0.008813916	0.0949742
0.02862	156	0.3814181	-0.301759	-0.008636342	0.0910585
0.029	157	0.3838631	-0.29535	-0.008565163	0.0872319
0.029	158	0.3863081	-0.288954	-0.008379678	0.0834947
0.029	159	0.3887531	-0.282571	-0.008194556	0.0798463
0.0297	160	0.391198	-0.276198	-0.008203069	0.0762851
0.03	161	0.393643	-0.269837	-0.008095105	0.0728119
0.03	162	0.396088	-0.263486	-0.007904589	0.069425
0.03	163	0.398533	-0.257146	-0.00771438	0.0661241
0.03096	164	0.400978	-0.250816	-0.00776526	0.0629086
0.031	165	0.403423	-0.244497	-0.007579413	0.0597789
0.031	166	0.405868	-0.238188	-0.007383815	0.0567333
0.03112	167	0.408313	-0.231887	-0.007216325	0.0537716
0.03112	168	0.4107579	-0.225596	-0.007020535	0.0508934
0.03115	169	0.4132029	-0.219313	-0.006831609	0.0480983
0.0315	170	0.4156479	-0.21304	-0.006710761	0.0453861
0.0316	171	0.4180929	-0.206775	-0.006534082	0.0427558
0.03173	172	0.4205379	-0.200517	-0.006362418	0.0402072
0.032	173	0.4229829	-0.194268	-0.006216578	0.0377401
0.032	174	0.4254279	-0.188027	-0.006016853	0.035354
0.03212	175	0.4278729	-0.181792	-0.005839161	0.0330484
0.03227	176	0.4303178	-0.175564	-0.00566546	0.0308228
0.03248	177	0.4327628	-0.169345	-0.005500309	0.0286776

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.0327	178	0.4352078	-0.16313	-0.005334363	0.0266115
0.03272	179	0.4376528	-0.156923	-0.005134523	0.0246249
0.033	180	0.4400978	-0.150721	-0.004973808	0.022717
0.033	181	0.4425428	-0.144526	-0.004769342	0.0208876
0.0335	182	0.4449878	-0.138335	-0.004634232	0.0191366
0.03362	183	0.4474328	-0.13215	-0.004442869	0.0174635
0.03392	184	0.4498778	-0.12597	-0.004272888	0.0158683
0.03392	185	0.4523227	-0.119795	-0.004063454	0.0143509
0.03392	186	0.4547677	-0.113624	-0.003854137	0.0129105
0.03392	187	0.4572127	-0.107458	-0.003644973	0.0115472
0.03392	188	0.4596577	-0.101296	-0.003435964	0.0102609
0.03392	189	0.4621027	-0.095138	-0.003227071	0.0090512
0.03392	190	0.4645477	-0.088983	-0.003018293	0.0079179
0.03392	191	0.4669927	-0.082832	-0.002809669	0.0068612
0.03392	192	0.4694377	-0.076684	-0.002601123	0.0058804
0.03392	193	0.4718826	-0.070538	-0.002392654	0.0049756
0.03392	194	0.4743276	-0.064396	-0.0021843	0.0041468
0.03392	195	0.4767726	-0.058255	-0.001976023	0.0033937
0.03392	196	0.4792176	-0.052117	-0.001767824	0.0027162
0.03392	197	0.4816626	-0.045982	-0.001559702	0.0021143
0.03392	198	0.4841076	-0.039847	-0.001351618	0.0015878
0.03392	199	0.4865526	-0.033714	-0.001143573	0.0011366
0.0344	200	0.4889976	-0.027583	-0.000948845	0.0007608
0.035	201	0.4914425	-0.021452	-0.000750805	0.0004602
0.035	202	0.4938875	-0.015323	-0.000536295	0.0002348
0.036	203	0.4963325	-0.009193	-0.000330938	8.451E-05
0.036464	204	0.4987775	-0.003065	-0.000111762	9.394E-06
0.03672	205	0.5012225	0.003065	0.000112547	9.394E-06
0.037312	206	0.5036675	0.0091927	0.000342999	8.451E-05
0.037312	207	0.5061125	0.0153227	0.000571721	0.0002348
0.03744	208	0.5085575	0.0214516	0.000803147	0.0004602
0.03772	209	0.5110024	0.0275827	0.001040419	0.0007608
0.03772	210	0.5134474	0.0337138	0.001271686	0.0011366
0.03777	211	0.5158924	0.0398472	0.00150503	0.0015878
0.038	212	0.5183374	0.0459818	0.001747308	0.0021143
0.038	213	0.5207824	0.0521175	0.001980463	0.0027162
0.03816	214	0.5232274	0.0582554	0.002223026	0.0033937
0.03816	215	0.5256724	0.0643956	0.002457337	0.0041468
0.0383	216	0.5281174	0.0705381	0.002701611	0.0049756
0.0393	217	0.5305623	0.076684	0.003013683	0.0058804
0.04	218	0.5330073	0.0828322	0.003313289	0.0068612
0.04046	219	0.5354523	0.0889827	0.00360024	0.0079179
0.0407	220	0.5378973	0.0951377	0.003872104	0.0090512
0.0407	221	0.5403423	0.1012961	0.004122752	0.0102609
0.0409	222	0.5427873	0.1074579	0.00439503	0.0115472
0.041	223	0.5452323	0.1136243	0.004658597	0.0129105
0.041	224	0.5476773	0.1197952	0.004911604	0.0143509
0.04115	225	0.5501222	0.1259696	0.005183648	0.0158683
0.0413	226	0.5525672	0.1321496	0.005457778	0.0174635
0.0416	227	0.5550122	0.1383353	0.005754748	0.0191366
0.0417	228	0.5574572	0.1445255	0.006026715	0.0208876
0.04196	229	0.5599022	0.1507215	0.006324273	0.022717
0.04222	230	0.5623472	0.1569231	0.006625292	0.0246249
0.0424	231	0.5647922	0.1631304	0.006916728	0.0266115
0.0424	232	0.5672372	0.1693445	0.007180207	0.0286776
0.0424	233	0.5696822	0.1755643	0.007443927	0.0308228
0.0424	234	0.5721271	0.1817921	0.007707984	0.0330484
0.0424	235	0.5745721	0.1880267	0.00797233	0.035354
0.0424	236	0.5770171	0.1942681	0.008236966	0.0377401

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.0424	237	0.5794621	0.2005174	0.008501939	0.0402072
0.0424	238	0.5819071	0.2067748	0.00876725	0.0427558
0.0424	239	0.5843521	0.21304	0.009032898	0.0453861
0.0424	240	0.5867971	0.2193133	0.009298883	0.0480983
0.0424	241	0.5892421	0.2255956	0.009565254	0.0508934
0.0424	242	0.591687	0.231887	0.009832011	0.0537716
0.0424	243	0.594132	0.2381876	0.010099153	0.0567333
0.0424	244	0.596577	0.2444972	0.010366681	0.0597789
0.0424	245	0.599022	0.2508159	0.010634594	0.0629086
0.04256	246	0.601467	0.257146	0.010944133	0.0661241
0.04296	247	0.603912	0.2634863	0.011319371	0.069425
0.043	248	0.606357	0.2698368	0.011602984	0.0728119
0.043	249	0.608802	0.2761976	0.011876498	0.0762851
0.04318	250	0.6112469	0.2825709	0.012201412	0.0798463
0.0432	251	0.6136919	0.2889544	0.012482831	0.0834947
0.04392	252	0.6161369	0.2953504	0.012971792	0.0872319
0.044	253	0.6185819	0.301759	0.013277395	0.0910585
0.04452	254	0.6210269	0.3081789	0.013720123	0.0949742
0.045	255	0.6234719	0.3146124	0.014157558	0.098981
0.046	256	0.6259169	0.3210585	0.014768689	0.1030785
0.046	257	0.6283619	0.3275181	0.015065834	0.1072681
0.046	258	0.6308068	0.3339915	0.015363607	0.1115503
0.047488	259	0.6332518	0.3404784	0.01616864	0.1159256
0.0475	260	0.6356968	0.3469802	0.016481559	0.1203953
0.049	261	0.6381418	0.3534967	0.017321339	0.1249599
0.0494	262	0.6405868	0.360028	0.017785384	0.1296202
0.04995	263	0.6430318	0.3665741	0.018310377	0.1343766
0.05	264	0.6454768	0.3731373	0.018656863	0.1392314
0.05088	265	0.6479218	0.3797163	0.019319966	0.1441845
0.05088	266	0.6503667	0.3863101	0.01965546	0.1492355
0.05088	267	0.6528117	0.3929222	0.01999188	0.1543878
0.05088	268	0.6552567	0.3995524	0.020329226	0.1596421
0.05088	269	0.6577017	0.4061985	0.020667381	0.1649972
0.05088	270	0.6601467	0.4128628	0.021006462	0.1704557
0.051	271	0.6625917	0.4195465	0.021396871	0.1760193
0.051	272	0.6650367	0.4262483	0.021738665	0.1816876
0.0511	273	0.6674817	0.4329695	0.022124741	0.1874626
0.0512	274	0.6699267	0.4397111	0.02251321	0.1933459
0.052	275	0.6723716	0.4464709	0.023216489	0.1993363
0.052	276	0.6748166	0.4532535	0.023569182	0.2054387
0.05238	277	0.6772616	0.4600543	0.024097642	0.2116499
0.0529	278	0.6797066	0.4668777	0.024697832	0.2179748
0.053	279	0.6821516	0.473724	0.02510737	0.2244144
0.0538	280	0.6845966	0.4805918	0.025855838	0.2309685
0.054	281	0.6870416	0.4874823	0.026324046	0.237639
0.054272	282	0.6894866	0.4943956	0.02683184	0.244427
0.05544	283	0.6919315	0.5013328	0.027793891	0.2513346
0.056	284	0.6943765	0.5082939	0.028464456	0.2583626
0.056	285	0.6968215	0.515281	0.028855738	0.2655146
0.05616	286	0.6992665	0.5222921	0.029331925	0.2727891
0.05768	287	0.7017115	0.5293293	0.030531716	0.2801895
0.059	288	0.7041565	0.5363927	0.031647169	0.2877171
0.05936	289	0.7066015	0.5434833	0.032261171	0.2953741
0.05936	290	0.7090465	0.5506013	0.032683691	0.3031618
0.05936	291	0.7114914	0.5577476	0.033107899	0.3110824
0.05936	292	0.7139364	0.5649213	0.033533726	0.319136
0.05936	293	0.7163814	0.5721245	0.033961308	0.3273264
0.05936	294	0.7188264	0.5793584	0.034390712	0.3356561
0.05936	295	0.7212714	0.5866218	0.034821871	0.3441251

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.05968	296	0.7237164	0.5939182	0.03544504	0.3527389
0.06	297	0.7261614	0.6012442	0.036074653	0.3614946
0.061	298	0.7286064	0.6086032	0.037124793	0.3703978
0.0636	299	0.7310513	0.6159962	0.039177359	0.3794513
0.06392	300	0.7334963	0.6234222	0.039849149	0.3886553
0.06392	301	0.7359413	0.6308824	0.040326001	0.3980126
0.064	302	0.7383863	0.6383789	0.040856248	0.4075276
0.06412	303	0.7408313	0.6459095	0.041415717	0.4171991
0.06416	304	0.7432763	0.6534788	0.041927198	0.4270345
0.0652	305	0.7457213	0.6610844	0.043102704	0.4370326
0.06544	306	0.7481663	0.668731	0.043761756	0.4472011
0.066	307	0.7506112	0.6764139	0.044643321	0.4575358
0.0664533	308	0.7530562	0.6841378	0.045463239	0.4680446
0.06784	309	0.7555012	0.6919038	0.046938752	0.4787308
0.06784	310	0.7579462	0.6997107	0.047468371	0.489595
0.06784	311	0.7603912	0.7075619	0.048000997	0.5006438
0.06784	312	0.7628362	0.7154551	0.048536477	0.5118761
0.06784	313	0.7652812	0.7233939	0.049075042	0.5232987
0.06784	314	0.7677262	0.7313793	0.049616769	0.5349156
0.06784	315	0.7701711	0.7394101	0.050161581	0.5467273
0.06892	316	0.7726161	0.7474898	0.051516998	0.558741
0.0723	317	0.7750611	0.7556196	0.054631295	0.5709609
0.073	318	0.7775061	0.7637982	0.055757268	0.5833877
0.07414	319	0.7799511	0.7720269	0.057238071	0.5960255
0.07632	320	0.7823961	0.7803101	0.059553265	0.6088838
0.07632	321	0.7848411	0.7886479	0.060189605	0.6219655
0.07632	322	0.7872861	0.7970402	0.06083011	0.6352731
0.07632	323	0.7897311	0.8054872	0.06147478	0.6488096
0.07632	324	0.792176	0.8139955	0.062124135	0.6625886
0.080136	325	0.794621	0.8225607	0.06591672	0.676606
0.0814	326	0.797066	0.8311872	0.067658639	0.6908722
0.0848	327	0.799511	0.8398752	0.071221413	0.7053903
0.0848	328	0.801956	0.848629	0.071963743	0.7201713
0.0848	329	0.804401	0.8574466	0.072711471	0.7352147
0.0848	330	0.806846	0.8663324	0.073464984	0.7505318
0.0848	331	0.809291	0.8752863	0.074224281	0.7661262
0.0848	332	0.8117359	0.8843108	0.074989555	0.7820056
0.0848	333	0.8141809	0.893408	0.075761	0.7981779
0.093	334	0.8166259	0.9025803	0.083939965	0.8146511
0.09328	335	0.8190709	0.9118298	0.085055486	0.8314336
0.09328	336	0.8215159	0.9211567	0.085925497	0.8485297
0.09328	337	0.8239609	0.9305654	0.086803142	0.865952
0.09328	338	0.8264059	0.940056	0.087688423	0.8837053
0.09328	339	0.8288509	0.949633	0.088581764	0.9018028
0.09328	340	0.8312958	0.9592986	0.089483376	0.9202539
0.09328	341	0.8337408	0.969053	0.09039326	0.9390636
0.09936	342	0.8361858	0.9789028	0.097263781	0.9582507
0.10176	343	0.8386308	0.9888458	0.100624953	0.9778161
0.10176	344	0.8410758	0.9988889	0.101646938	0.9977791
0.10176	345	0.8435208	1.0090343	0.102679335	1.0181503
0.10176	346	0.8459658	1.0192844	0.103722376	1.0389406
0.10176	347	0.8484108	1.0296412	0.104776291	1.0601611
0.10176	348	0.8508557	1.0401118	0.105841775	1.0818325
0.10176	349	0.8533007	1.050696	0.106918828	1.1039621
0.11024	350	0.8557457	1.0613985	0.117008571	1.1265668
0.11024	351	0.8581907	1.072226	0.118202199	1.1496687
0.11024	352	0.8606357	1.0831809	0.119409863	1.1732809
0.11024	353	0.8630807	1.0942654	0.120631815	1.1974167
0.11024	354	0.8655257	1.1054863	0.121868806	1.2220999

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	Mi * Xi (normal)	Mi^2
0.11024	355	0.8679707	1.1168504	0.123121588	1.2473548
0.11024	356	0.8704156	1.1283578	0.124390162	1.2731913
0.111936	357	0.8728606	1.1400198	0.127609254	1.2996451
0.11194	358	0.8753056	1.1518364	0.128936565	1.3267271
0.11872	359	0.8777506	1.1638167	0.138168319	1.3544693
0.11872	360	0.8801956	1.1759653	0.139610598	1.3828943
0.11872	361	0.8826406	1.1882912	0.141073932	1.412036
0.11872	362	0.8850856	1.2008013	0.142559131	1.4419238
0.11872	363	0.8875306	1.2135001	0.144066735	1.4725826
0.123	364	0.8899756	1.226399	0.150847081	1.5040546
0.125504	365	0.8924205	1.2395049	0.155562817	1.5363723
0.1272	366	0.8948655	1.2528267	0.159359553	1.5695747
0.1272	367	0.8973105	1.2663759	0.161083011	1.6037079
0.132	368	0.8997555	1.2801593	0.168981023	1.6388078
0.13568	369	0.9022005	1.2941928	0.175596075	1.6749349
0.13568	370	0.9046455	1.3084855	0.17753531	1.7121343
0.13568	371	0.9070905	1.323051	0.179511565	1.750464
0.13568	372	0.9095355	1.3378985	0.181526074	1.7899725
0.14016	373	0.9119804	1.3530507	0.189643589	1.8307463
0.141	374	0.9144254	1.3685212	0.192961493	1.8728503
0.14416	375	0.9168704	1.3843237	0.199564104	1.9163521
0.14416	376	0.9193154	1.4004809	0.201893322	1.9613467
0.14416	377	0.9217604	1.4170132	0.204276624	2.0079264
0.14416	378	0.9242054	1.4339412	0.20671696	2.0561873
0.14416	379	0.9266504	1.4512898	0.209217936	2.1062421
0.146	380	0.9290954	1.4690886	0.214486936	2.1582213
0.147	381	0.9315403	1.4873604	0.218641972	2.2122408
0.147	382	0.9339853	1.506146	0.221403457	2.2684757
0.148	383	0.9364303	1.5254818	0.225771309	2.3270948
0.15264	384	0.9388753	1.5453998	0.235889819	2.3882604
0.1536	385	0.9413203	1.5659543	0.240530586	2.452213
0.155	386	0.9437653	1.587191	0.246014611	2.5191754
0.16112	387	0.9462103	1.609169	0.259269305	2.5894248
0.16114	388	0.9486553	1.6319518	0.262972716	2.6632667
0.162	389	0.9511002	1.6556169	0.268209933	2.7410672
0.163	390	0.9535452	1.680246	0.273880096	2.8232266
0.164	391	0.9559902	1.7059392	0.279774031	2.9102286
0.164	392	0.9584352	1.7328057	0.284180132	3.0026155
0.166	393	0.9608802	1.7609909	0.292324494	3.101089
0.1696	394	0.9633252	1.7906495	0.303694163	3.2064258
0.1696	395	0.9657702	1.821968	0.309005773	3.3195674
0.175	396	0.9682152	1.8551873	0.324657776	3.4417199
0.17544	397	0.9706601	1.8905848	0.331684202	3.574311
0.17808	398	0.9731051	1.9285289	0.343432435	3.7192239
0.182	399	0.9755501	1.9694653	0.358442685	3.8787936
0.182	400	0.9779951	2.0139942	0.366546938	4.0561725
0.184	401	0.9804401	2.062925	0.379578196	4.2556595
0.185	402	0.9828851	2.1173582	0.391711274	4.4832059
0.1861	403	0.9853301	2.1788946	0.405492294	4.7475819
0.188	404	0.9877751	2.2499808	0.422996382	5.0624134
0.192	405	0.99022	2.3346729	0.448257197	5.4506975
0.20352	406	0.992665	2.4404289	0.496676099	5.9556934
0.31376	407	0.99511	2.5835106	0.810602301	6.6745273
0.7208	408	0.997555	2.8141949	2.028471674	7.9196929

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	i * Xi (lognormal	Mi^2
-6.907755	1	0.002445	-2.814195	19.43976958	7.9196929
-6.645391	2	0.00489	-2.583511	17.16843846	6.6745273
-5.809143	3	0.007335	-2.440429	14.17680069	5.9556934
-5.686336	4	0.00978	-2.334673	13.27573353	5.4506975
-5.568553	5	0.0122249	-2.249981	12.529136	5.0624134
-5.463192	6	0.0146699	-2.178895	11.90371983	4.7475819
-5.463192	7	0.0171149	-2.117358	11.56753459	4.4832059
-5.463192	8	0.0195599	-2.062925	11.27015525	4.2556595
-5.463192	9	0.0220049	-2.013994	11.00283682	4.0561725
-5.463192	10	0.0244499	-1.969465	10.7595671	3.8787936
-5.463192	11	0.0268949	-1.928529	10.53592393	3.7192239
-5.463192	12	0.0293399	-1.890585	10.32862792	3.574311
-5.463192	13	0.0317848	-1.855187	10.13524439	3.4417199
-5.463192	14	0.0342298	-1.821968	9.953761012	3.3195674
-5.463192	15	0.0366748	-1.79065	9.782662306	3.2064258
-5.463192	16	0.0391198	-1.760991	9.620631558	3.101089
-5.463192	17	0.0415648	-1.732806	9.466650176	3.0026155
-5.463192	18	0.0440098	-1.705939	9.319873473	2.9102286
-5.463192	19	0.0464548	-1.680246	9.179506449	2.8232266
-5.463192	20	0.0488998	-1.655617	9.044952857	2.7410672
-5.463192	21	0.0513447	-1.631952	8.915666133	2.6632667
-5.463192	22	0.0537897	-1.609169	8.791199091	2.5894248
-5.463192	23	0.0562347	-1.587191	8.671129388	2.5191754
-5.463192	24	0.0586797	-1.565954	8.555109211	2.452213
-5.463192	25	0.0611247	-1.5454	8.442815592	2.3882604
-5.463192	26	0.0635697	-1.525482	8.334000095	2.3270948
-5.463192	27	0.0660147	-1.506146	8.228364593	2.2684757
-5.463192	28	0.0684597	-1.48736	8.125735182	2.2122408
-5.298317	29	0.0709046	-1.469089	7.783697652	2.1582213
-5.298317	30	0.0733496	-1.45129	7.689393901	2.1062421
-5.298317	31	0.0757946	-1.433941	7.597475452	2.0561873
-5.298317	32	0.0782396	-1.417013	7.507785694	2.0079264
-5.298317	33	0.0806846	-1.400481	7.42019211	1.9613467
-5.298317	34	0.0831296	-1.384324	7.334586278	1.9163521
-5.298317	35	0.0855746	-1.368521	7.250859774	1.8728503
-5.298317	36	0.0880196	-1.353051	7.168892129	1.8307463
-5.298317	37	0.0904645	-1.337899	7.088611062	1.7899725
-5.298317	38	0.0929095	-1.323051	7.009944289	1.750464
-5.298317	39	0.0953545	-1.308485	6.932771342	1.7121343
-5.298317	40	0.0977995	-1.294193	6.857044033	1.6749349
-5.083206	41	0.1002445	-1.280159	6.507313253	1.6388078
-5.057727	42	0.1026895	-1.266376	6.404983332	1.6037079
-5.035953	43	0.1051345	-1.252827	6.309176395	1.5695747
-4.961845	44	0.1075795	-1.239505	6.150231125	1.5363723
-4.828314	45	0.1100244	-1.226399	5.921439311	1.5040546
-4.813425	46	0.1124694	-1.2135	5.841092001	1.4725826
-4.7915	47	0.1149144	-1.200801	5.753639181	1.4419238
-4.770045	48	0.1173594	-1.188291	5.668202331	1.412036
-4.770045	49	0.1198044	-1.175965	5.609407107	1.3828943
-4.770045	50	0.1222494	-1.163817	5.551457857	1.3544693
-4.770045	51	0.1246944	-1.151836	5.494311198	1.3267271
-4.770045	52	0.1271394	-1.14002	5.437945439	1.2996451
-4.770045	53	0.1295844	-1.128358	5.382317197	1.2731913
-4.770045	54	0.1320293	-1.11685	5.32742647	1.2473548
-4.770045	55	0.1344743	-1.105486	5.27321903	1.2220999
-4.770045	56	0.1369193	-1.094265	5.219694878	1.1974167
-4.770045	57	0.1393643	-1.083181	5.166821475	1.1732809
-4.770045	58	0.1418093	-1.072226	5.114566284	1.1496687
-4.770045	59	0.1442543	-1.061399	5.062918459	1.1265668

Uranium - lognormal
171435.79 = (sum of Mi*Xi)^2
407 = count -1
1.0963231 = standard deviation ^2
397.70301 = sum of Mi^2

0.966 = W statistic

FAIL

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	i * Xi (lognormal	Mi^2
-4.770045	60	0.1466993	-1.050696	5.011867155	1.1039621
-4.770045	61	0.1491443	-1.040112	4.961379834	1.0818325
-4.770045	62	0.1515892	-1.029641	4.911434804	1.0601611
-4.710531	63	0.1540342	-1.019284	4.801370247	1.0389406
-4.697285	64	0.1564792	-1.009034	4.739722393	1.0181503
-4.643911	65	0.1589242	-0.998889	4.638751332	0.9977791
-4.60517	66	0.1613692	-0.988846	4.553803384	0.9778161
-4.588313	67	0.1638142	-0.978903	4.491512464	0.9582507
-4.546901	68	0.1662592	-0.969053	4.406188153	0.9390636
-4.49901	69	0.1687042	-0.959299	4.315894127	0.9202539
-4.412898	70	0.1711491	-0.949633	4.190633747	0.9018028
-4.368045	71	0.1735941	-0.940056	4.106206746	0.8837053
-4.268698	72	0.1760391	-0.930565	3.972302701	0.865952
-4.268698	73	0.1784841	-0.921157	3.932139706	0.8485297
-4.254513	74	0.1809291	-0.91183	3.87939215	0.8314336
-4.2517	75	0.1833741	-0.90258	3.837500863	0.8146511
-4.225365	76	0.1858191	-0.893408	3.774974797	0.7981779
-4.21719	77	0.1882641	-0.884311	3.729306982	0.7820056
-4.185145	78	0.190709	-0.875286	3.663200153	0.7661262
-4.170146	79	0.193154	-0.866332	3.612732652	0.7505318
-4.152821	80	0.195599	-0.857447	3.560822643	0.7352147
-4.135167	81	0.198044	-0.848629	3.509222436	0.7201713
-4.084592	82	0.200489	-0.839875	3.430547571	0.7053903
-4.078668	83	0.202934	-0.831187	3.390136736	0.6908722
-4.076898	84	0.205379	-0.822561	3.353495583	0.676606
-4.076898	85	0.207824	-0.813995	3.318576276	0.6625886
-4.076898	86	0.2102689	-0.805487	3.283888714	0.6488096
-4.076898	87	0.2127139	-0.79704	3.249451437	0.6352731
-4.076898	88	0.2151589	-0.788648	3.215236635	0.6219655
-4.076898	89	0.2176039	-0.78031	3.181244307	0.6088838
-4.076898	90	0.2200489	-0.772027	3.147474455	0.5960255
-4.076898	91	0.2224939	-0.763798	3.113927078	0.5833877
-4.076898	92	0.2249389	-0.75562	3.080583636	0.5709609
-4.046698	93	0.2273839	-0.74749	3.024865496	0.558741
-4.045554	94	0.2298289	-0.73941	2.991323772	0.5467273
-4.028557	95	0.2322738	-0.731379	2.946402905	0.5349156
-4.017384	96	0.2347188	-0.723394	2.906150717	0.5232987
-4.017384	97	0.2371638	-0.715455	2.874257706	0.5118761
-3.991066	98	0.2396088	-0.707562	2.82392626	0.5006438
-3.963316	99	0.2420538	-0.699711	2.77317464	0.489595
-3.959115	100	0.2444988	-0.691904	2.739326361	0.4787308
-3.927137	101	0.2469438	-0.684138	2.686702744	0.4680446
-3.912023	102	0.2493888	-0.676414	2.646146922	0.4575358
-3.912023	103	0.2518337	-0.668731	2.61609102	0.4472011
-3.863233	104	0.2542787	-0.661084	2.553923019	0.4370326
-3.833951	105	0.2567237	-0.653479	2.50540587	0.4270345
-3.817198	106	0.2591687	-0.645909	2.465564297	0.4171991
-3.816713	107	0.2616137	-0.638379	2.436508854	0.4075276
-3.78451	108	0.2640587	-0.630882	2.387580434	0.3980126
-3.765329	109	0.2665037	-0.623422	2.3473896	0.3886553
-3.752458	110	0.2689487	-0.615996	2.31150019	0.3794513
-3.751606	111	0.2713936	-0.608603	2.283239436	0.3703978
-3.745661	112	0.2738386	-0.601244	2.25205727	0.3614946
-3.729701	113	0.2762836	-0.593918	2.215137683	0.3527389
-3.729701	114	0.2787286	-0.586622	2.18792421	0.3441251
-3.688879	115	0.2811736	-0.579358	2.137183139	0.3356561
-3.688879	116	0.2836186	-0.572124	2.110498178	0.3273264
-3.688879	117	0.2860636	-0.564921	2.083926449	0.319136
-3.688879	118	0.2885086	-0.557748	2.057463758	0.3110824

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	i * Xi (lognormal	Mi^2
-3.671433	119	0.2909535	-0.550601	2.021495424	0.3031618
-3.671433	120	0.2933985	-0.543483	1.995362414	0.2953741
-3.671433	121	0.2958435	-0.536393	1.969329578	0.2877171
-3.671433	122	0.2982885	-0.529329	1.943396916	0.2801895
-3.671433	123	0.3007335	-0.522292	1.917560255	0.2727891
-3.671433	124	0.3031785	-0.515281	1.891819594	0.2655146
-3.671433	125	0.3056235	-0.508294	1.866166586	0.2583626
-3.671433	126	0.3080685	-0.501333	1.840609579	0.2513346
-3.671433	127	0.3105134	-0.494396	1.815140224	0.244427
-3.671433	128	0.3129584	-0.487482	1.789758522	0.237639
-3.671433	129	0.3154034	-0.480592	1.764460299	0.2309685
-3.671433	130	0.3178484	-0.473724	1.739245554	0.2244144
-3.671433	131	0.3202934	-0.466878	1.714110114	0.2179748
-3.671433	132	0.3227384	-0.460054	1.689058153	0.2116499
-3.664382	133	0.3251834	-0.453254	1.66089398	0.2054387
-3.664382	134	0.3276284	-0.446471	1.636040102	0.1993363
-3.649659	135	0.3300733	-0.439711	1.604795568	0.1933459
-3.649659	136	0.3325183	-0.43297	1.580190921	0.1874626
-3.649659	137	0.3349633	-0.426248	1.555660959	0.1816876
-3.630611	138	0.3374083	-0.419546	1.52320993	0.1760193
-3.6147	139	0.3398533	-0.412863	1.492375353	0.1704557
-3.611918	140	0.3422983	-0.406199	1.467155927	0.1649972
-3.611918	141	0.3447433	-0.399552	1.443150639	0.1596421
-3.607484	142	0.3471883	-0.392922	1.417460386	0.1543878
-3.607115	143	0.3496333	-0.38631	1.393465189	0.1492355
-3.606894	144	0.3520782	-0.379716	1.369596494	0.1441845
-3.606894	145	0.3545232	-0.373137	1.345866531	0.1392314
-3.597212	146	0.3569682	-0.366574	1.318644897	0.1343766
-3.593569	147	0.3594132	-0.360028	1.293785649	0.1296202
-3.592988	148	0.3618582	-0.353497	1.270109327	0.1249599
-3.575551	149	0.3643032	-0.34698	1.240645274	0.1203953
-3.575551	150	0.3667482	-0.340478	1.217397936	0.1159256
-3.575551	151	0.3691932	-0.333991	1.194203442	0.1115503
-3.571274	152	0.3716381	-0.327518	1.169657077	0.1072681
-3.557851	153	0.3740831	-0.321058	1.142278192	0.1030785
-3.557851	154	0.3765281	-0.314612	1.119344128	0.098981
-3.554349	155	0.3789731	-0.308179	1.09537512	0.0949742
-3.55365	156	0.3814181	-0.301759	1.072345626	0.0910585
-3.540459	157	0.3838631	-0.29535	1.045676278	0.0872319
-3.540459	158	0.3863081	-0.288954	1.023031424	0.0834947
-3.540459	159	0.3887531	-0.282571	1.000430844	0.0798463
-3.516608	160	0.391198	-0.276198	0.971278841	0.0762851
-3.506558	161	0.393643	-0.269837	0.946198524	0.0728119
-3.506558	162	0.396088	-0.263486	0.923929964	0.069425
-3.506558	163	0.398533	-0.257146	0.901697283	0.0661241
-3.475059	164	0.400978	-0.250816	0.871600113	0.0629086
-3.473768	165	0.403423	-0.244497	0.849326522	0.0597789
-3.473768	166	0.405868	-0.238188	0.827408368	0.0567333
-3.469905	167	0.408313	-0.231887	0.804625912	0.0537716
-3.469905	168	0.4107579	-0.225596	0.782795252	0.0508934
-3.468941	169	0.4132029	-0.219313	0.760784832	0.0480983
-3.457768	170	0.4156479	-0.21304	0.736642973	0.0453861
-3.454598	171	0.4180929	-0.206775	0.714323696	0.0427558
-3.450493	172	0.4205379	-0.200517	0.691883936	0.0402072
-3.442019	173	0.4229829	-0.194268	0.668674455	0.0377401
-3.442019	174	0.4254279	-0.188027	0.64719141	0.035354
-3.438276	175	0.4278729	-0.181792	0.625051398	0.0330484
-3.433617	176	0.4303178	-0.175564	0.602820646	0.0308228
-3.427131	177	0.4327628	-0.169345	0.580365755	0.0286776

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	i * Xi (lognormal	Mi^2
-3.42038	178	0.4352078	-0.16313	0.557967923	0.0266115
-3.419769	179	0.4376528	-0.156923	0.536640644	0.0246249
-3.411248	180	0.4400978	-0.150721	0.514148243	0.022717
-3.411248	181	0.4425428	-0.144526	0.493012382	0.0208876
-3.39621	182	0.4449878	-0.138335	0.469815643	0.0191366
-3.392634	183	0.4474328	-0.13215	0.448335179	0.0174635
-3.38375	184	0.4498778	-0.12597	0.42624957	0.0158683
-3.38375	185	0.4523227	-0.119795	0.405357171	0.0143509
-3.38375	186	0.4547677	-0.113624	0.384476312	0.0129105
-3.38375	187	0.4572127	-0.107458	0.363610841	0.0115472
-3.38375	188	0.4596577	-0.101296	0.342760757	0.0102609
-3.38375	189	0.4621027	-0.095138	0.321922214	0.0090512
-3.38375	190	0.4645477	-0.088983	0.301095212	0.0079179
-3.38375	191	0.4669927	-0.082832	0.280283597	0.0068612
-3.38375	192	0.4694377	-0.076684	0.259479676	0.0058804
-3.38375	193	0.4718826	-0.070538	0.238683448	0.0049756
-3.38375	194	0.4743276	-0.064396	0.217898762	0.0041468
-3.38375	195	0.4767726	-0.058255	0.197121769	0.0033937
-3.38375	196	0.4792176	-0.052117	0.17635247	0.0027162
-3.38375	197	0.4816626	-0.045982	0.155590864	0.0021143
-3.38375	198	0.4841076	-0.039847	0.134833106	0.0015878
-3.38375	199	0.4865526	-0.033714	0.114079194	0.0011366
-3.369699	200	0.4889976	-0.027583	0.092945391	0.0007608
-3.352407	201	0.4914425	-0.021452	0.071914396	0.0004602
-3.352407	202	0.4938875	-0.015323	0.05136797	0.0002348
-3.324236	203	0.4963325	-0.009193	0.030558766	8.451E-05
-3.31143	204	0.4987775	-0.003065	0.010149523	9.394E-06
-3.304434	205	0.5012225	0.003065	-0.01012808	9.394E-06
-3.28844	206	0.5036675	0.0091927	-0.030229703	8.451E-05
-3.28844	207	0.5061125	0.0153227	-0.050387823	0.0002348
-3.285016	208	0.5085575	0.0214516	-0.070468741	0.0004602
-3.277565	209	0.5110024	0.0275827	-0.090404089	0.0007608
-3.277565	210	0.5134474	0.0337138	-0.110499269	0.0011366
-3.27624	211	0.5158924	0.0398472	-0.130549116	0.0015878
-3.270169	212	0.5183374	0.0459818	-0.150368192	0.0021143
-3.270169	213	0.5207824	0.0521175	-0.170432899	0.0027162
-3.265967	214	0.5232274	0.0582554	-0.19026027	0.0033937
-3.265967	215	0.5256724	0.0643956	-0.210314048	0.0041468
-3.262305	216	0.5281174	0.0705381	-0.230116939	0.0049756
-3.236531	217	0.5305623	0.076684	-0.248190273	0.0058804
-3.218876	218	0.5330073	0.0828322	-0.266626663	0.0068612
-3.207441	219	0.5354523	0.0889827	-0.285406761	0.0079179
-3.201527	220	0.5378973	0.0951377	-0.304585911	0.0090512
-3.201527	221	0.5403423	0.1012961	-0.324302248	0.0102609
-3.196625	222	0.5427873	0.1074579	-0.343502747	0.0115472
-3.194183	223	0.5452323	0.1136243	-0.362936863	0.0129105
-3.194183	224	0.5476773	0.1197952	-0.382647917	0.0143509
-3.190531	225	0.5501222	0.1259696	-0.401909842	0.0158683
-3.186893	226	0.5525672	0.1321496	-0.421146543	0.0174635
-3.179655	227	0.5550122	0.1383353	-0.439858483	0.0191366
-3.177254	228	0.5574572	0.1445255	-0.459194338	0.0208876
-3.171038	229	0.5599022	0.1507215	-0.477943558	0.022717
-3.164861	230	0.5623472	0.1569231	-0.49663977	0.0246249
-3.160607	231	0.5647922	0.1631304	-0.515591008	0.0266115
-3.160607	232	0.5672372	0.1693445	-0.535231407	0.0286776
-3.160607	233	0.5696822	0.1755643	-0.554889772	0.0308228
-3.160607	234	0.5721271	0.1817921	-0.574573289	0.0330484
-3.160607	235	0.5745721	0.1880267	-0.594278365	0.035354
-3.160607	236	0.5770171	0.1942681	-0.614005	0.0377401

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	i * Xi (lognormal	Mi^2
-3.160607	237	0.5794621	0.2005174	-0.633756788	0.0402072
-3.160607	238	0.5819071	0.2067748	-0.653533728	0.0427558
-3.160607	239	0.5843521	0.21304	-0.673335821	0.0453861
-3.160607	240	0.5867971	0.2193133	-0.693163065	0.0480983
-3.160607	241	0.5892421	0.2255956	-0.713019056	0.0508934
-3.160607	242	0.591687	0.231887	-0.732903792	0.0537716
-3.160607	243	0.594132	0.2381876	-0.752817273	0.0567333
-3.160607	244	0.596577	0.2444972	-0.7727595	0.0597789
-3.160607	245	0.599022	0.2508159	-0.792730473	0.0629086
-3.15684	246	0.601467	0.257146	-0.811768841	0.0661241
-3.147486	247	0.603912	0.2634863	-0.829319394	0.069425
-3.146555	248	0.606357	0.2698368	-0.849056522	0.0728119
-3.146555	249	0.608802	0.2761976	-0.869071062	0.0762851
-3.142378	250	0.6112469	0.2825709	-0.887944566	0.0798463
-3.141915	251	0.6136919	0.2889544	-0.907870179	0.0834947
-3.125385	252	0.6161369	0.2953504	-0.923083997	0.0872319
-3.123566	253	0.6185819	0.301759	-0.942563962	0.0910585
-3.111817	254	0.6210269	0.3081789	-0.958996168	0.0949742
-3.101093	255	0.6234719	0.3146124	-0.975642267	0.098981
-3.079114	256	0.6259169	0.3210585	-0.988575533	0.1030785
-3.079114	257	0.6283619	0.3275181	-1.008465643	0.1072681
-3.079114	258	0.6308068	0.3339915	-1.028397758	0.1115503
-3.047278	259	0.6332518	0.3404784	-1.037532528	0.1159256
-3.047026	260	0.6356968	0.3469802	-1.057257501	0.1203953
-3.015935	261	0.6381418	0.3534967	-1.066123112	0.1249599
-3.007805	262	0.6405868	0.360028	-1.082894042	0.1296202
-2.996733	263	0.6430318	0.3665741	-1.098524659	0.1343766
-2.995732	264	0.6454768	0.3731373	-1.117819316	0.1392314
-2.978285	265	0.6479218	0.3797163	-1.130903532	0.1441845
-2.978285	266	0.6503667	0.3863101	-1.150541859	0.1492355
-2.978285	267	0.6528117	0.3929222	-1.170234361	0.1543878
-2.978285	268	0.6552567	0.3995524	-1.189981037	0.1596421
-2.978285	269	0.6577017	0.4061985	-1.209775116	0.1649972
-2.978285	270	0.6601467	0.4128628	-1.22962337	0.1704557
-2.97593	271	0.6625917	0.4195465	-1.248540853	0.1760193
-2.97593	272	0.6650367	0.4262483	-1.268485055	0.1816876
-2.973971	273	0.6674817	0.4329695	-1.287638643	0.1874626
-2.972016	274	0.6699267	0.4397111	-1.306828402	0.1933459
-2.956512	275	0.6723716	0.4464709	-1.319996522	0.1993363
-2.956512	276	0.6748166	0.4532535	-1.34004923	0.2054387
-2.94923	277	0.6772616	0.4600543	-1.356806005	0.2116499
-2.939352	278	0.6797066	0.4668777	-1.37231798	0.2179748
-2.937463	279	0.6821516	0.473724	-1.391546771	0.2244144
-2.922482	280	0.6845966	0.4805918	-1.404520735	0.2309685
-2.918771	281	0.6870416	0.4874823	-1.422849427	0.237639
-2.913747	282	0.6894866	0.4943956	-1.44054372	0.244427
-2.892454	283	0.6919315	0.5013328	-1.450082043	0.2513346
-2.882404	284	0.6943765	0.5082939	-1.465108021	0.2583626
-2.882404	285	0.6968215	0.515281	-1.485247932	0.2655146
-2.879551	286	0.6992665	0.5222921	-1.503966522	0.2727891
-2.852845	287	0.7017115	0.5293293	-1.510094411	0.2801895
-2.830218	288	0.7041565	0.5363927	-1.518108159	0.2877171
-2.824135	289	0.7066015	0.5434833	-1.534870144	0.2953741
-2.824135	290	0.7090465	0.5506013	-1.554972145	0.3031618
-2.824135	291	0.7114914	0.5577476	-1.575154413	0.3110824
-2.824135	292	0.7139364	0.5649213	-1.595413737	0.319136
-2.824135	293	0.7163814	0.5721245	-1.615756538	0.3273264
-2.824135	294	0.7188264	0.5793584	-1.636186028	0.3356561
-2.824135	295	0.7212714	0.5866218	-1.656698995	0.3441251

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	i * Xi (lognormal	Mi^2
-2.818758	296	0.7237164	0.5939182	-1.674111954	0.3527389
-2.813411	297	0.7261614	0.6012442	-1.691546904	0.3614946
-2.796881	298	0.7286064	0.6086032	-1.702190864	0.3703978
-2.755142	299	0.7310513	0.6159962	-1.697156923	0.3794513
-2.750123	300	0.7334963	0.6234222	-1.714487822	0.3886553
-2.750123	301	0.7359413	0.6308824	-1.735004098	0.3980126
-2.748872	302	0.7383863	0.6383789	-1.75482195	0.4075276
-2.746999	303	0.7408313	0.6459095	-1.774312705	0.4171991
-2.746375	304	0.7432763	0.6534788	-1.794697948	0.4270345
-2.730296	305	0.7457213	0.6610844	-1.804956005	0.4370326
-2.726622	306	0.7481663	0.668731	-1.823376355	0.4472011
-2.718101	307	0.7506112	0.6764139	-1.838561113	0.4575358
-2.711255	308	0.7530562	0.6841378	-1.854872342	0.4680446
-2.690603	309	0.7555012	0.6919038	-1.861638582	0.4787308
-2.690603	310	0.7579462	0.6997107	-1.882643786	0.489595
-2.690603	311	0.7603912	0.7075619	-1.903768285	0.5006438
-2.690603	312	0.7628362	0.7154551	-1.925005963	0.5118761
-2.690603	313	0.7652812	0.7233939	-1.946365994	0.5232987
-2.690603	314	0.7677262	0.7313793	-1.96785144	0.5349156
-2.690603	315	0.7701711	0.7394101	-1.989459239	0.5467273
-2.674809	316	0.7726161	0.7474898	-1.999392402	0.558741
-2.626931	317	0.7750611	0.7556196	-1.984960578	0.5709609
-2.617296	318	0.7775061	0.7637982	-1.999085845	0.5833877
-2.6018	319	0.7799511	0.7720269	-2.008659525	0.5960255
-2.57282	320	0.7823961	0.7803101	-2.007597562	0.6088838
-2.57282	321	0.7848411	0.7886479	-2.029049204	0.6219655
-2.57282	322	0.7872861	0.7970402	-2.050641244	0.6352731
-2.57282	323	0.7897311	0.8054872	-2.072373681	0.6488096
-2.57282	324	0.792176	0.8139955	-2.094264067	0.6625886
-2.52403	325	0.794621	0.8225607	-2.076167831	0.676606
-2.50838	326	0.797066	0.8311872	-2.084933374	0.6908722
-2.46746	327	0.799511	0.8398752	-2.072358131	0.7053903
-2.46746	328	0.801956	0.848629	-2.093957994	0.7201713
-2.46746	329	0.804401	0.8574466	-2.115714946	0.7352147
-2.46746	330	0.806846	0.8663324	-2.137640209	0.7505318
-2.46746	331	0.809291	0.8752863	-2.159733783	0.7661262
-2.46746	332	0.8117359	0.8843108	-2.182001277	0.7820056
-2.46746	333	0.8141809	0.893408	-2.204448303	0.7981779
-2.375156	334	0.8166259	0.9025803	-2.143768746	0.8146511
-2.37215	335	0.8190709	0.9118298	-2.162996725	0.8314336
-2.37215	336	0.8215159	0.9211567	-2.185121452	0.8485297
-2.37215	337	0.8239609	0.9305654	-2.207440349	0.865952
-2.37215	338	0.8264059	0.940056	-2.229953417	0.8837053
-2.37215	339	0.8288509	0.949633	-2.252671444	0.9018028
-2.37215	340	0.8312958	0.9592986	-2.275599823	0.9202539
-2.37215	341	0.8337408	0.969053	-2.298738555	0.9390636
-2.309006	342	0.8361858	0.9789028	-2.260292083	0.9582507
-2.285138	343	0.8386308	0.9888458	-2.259649384	0.9778161
-2.285138	344	0.8410758	0.9988889	-2.282599245	0.9977791
-2.285138	345	0.8435208	1.0090343	-2.305782916	1.0181503
-2.285138	346	0.8459658	1.0192844	-2.329205595	1.0389406
-2.285138	347	0.8484108	1.0296412	-2.352872476	1.0601611
-2.285138	348	0.8508557	1.0401118	-2.376799147	1.0818325
-2.285138	349	0.8533007	1.050696	-2.400985608	1.1039621
-2.205095	350	0.8557457	1.0613985	-2.340485041	1.1265668
-2.205095	351	0.8581907	1.072226	-2.364360788	1.1496687
-2.205095	352	0.8606357	1.0831809	-2.388517309	1.1732809
-2.205095	353	0.8630807	1.0942654	-2.412959616	1.1974167
-2.205095	354	0.8655257	1.1054863	-2.437702752	1.2220999

Table 121. Uranium Combined Upgradient Background Data Set, Shapiro-Francia Test of Normality Analysis (continued)

Uranium	Count	i/(n+1)	Mi	i * Xi (lognormal	Mi^2
-2.205095	355	0.8679707	1.1168504	-2.462761757	1.2473548
-2.205095	356	0.8704156	1.1283578	-2.488136632	1.2731913
-2.189828	357	0.8728606	1.1400198	-2.496447226	1.2996451
-2.189792	358	0.8753056	1.1518364	-2.52228241	1.3267271
-2.130987	359	0.8777506	1.1638167	-2.480078851	1.3544693
-2.130987	360	0.8801956	1.1759653	-2.505967313	1.3828943
-2.130987	361	0.8826406	1.1882912	-2.532233709	1.412036
-2.130987	362	0.8850856	1.2008013	-2.558892575	1.4419238
-2.130987	363	0.8875306	1.2135001	-2.585953601	1.4725826
-2.095571	364	0.8899756	1.226399	-2.57000616	1.5040546
-2.075418	365	0.8924205	1.2395049	-2.57249025	1.5363723
-2.061995	366	0.8948655	1.2528267	-2.58332188	1.5695747
-2.061995	367	0.8973105	1.2663759	-2.611260252	1.6037079
-2.024953	368	0.8997555	1.2801593	-2.592262805	1.6388078
-1.997456	369	0.9022005	1.2941928	-2.585093253	1.6749349
-1.997456	370	0.9046455	1.3084855	-2.613642313	1.7121343
-1.997456	371	0.9070905	1.323051	-2.642736375	1.750464
-1.997456	372	0.9095355	1.3378985	-2.672393606	1.7899725
-1.964971	373	0.9119804	1.3530507	-2.658704956	1.8307463
-1.958995	374	0.9144254	1.3685212	-2.680926769	1.8728503
-1.936831	375	0.9168704	1.3843237	-2.681201719	1.9163521
-1.936831	376	0.9193154	1.4004809	-2.712495441	1.9613467
-1.936831	377	0.9217604	1.4170132	-2.744515798	2.0079264
-1.936831	378	0.9242054	1.4339412	-2.777302424	2.0561873
-1.936831	379	0.9266504	1.4512898	-2.81090376	2.1062421
-1.924149	380	0.9290954	1.4690886	-2.826744861	2.1582213
-1.917323	381	0.9315403	1.4873604	-2.851749751	2.2122408
-1.917323	382	0.9339853	1.506146	-2.887767834	2.2684757
-1.910543	383	0.9364303	1.5254818	-2.914498622	2.3270948
-1.879673	384	0.9388753	1.5453998	-2.904846304	2.3882604
-1.873403	385	0.9413203	1.5659543	-2.933664267	2.452213
-1.86433	386	0.9437653	1.587191	-2.959048122	2.5191754
-1.825606	387	0.9462103	1.609169	-2.937708296	2.5894248
-1.825482	388	0.9486553	1.6319518	-2.979098223	2.6632667
-1.820159	389	0.9511002	1.6556169	-3.013485854	2.7410672
-1.814005	390	0.9535452	1.680246	-3.047974753	2.8232266
-1.807889	391	0.9559902	1.7059392	-3.084148482	2.9102286
-1.807889	392	0.9584352	1.7328057	-3.13272008	3.0026155
-1.795767	393	0.9608802	1.7609909	-3.162330257	3.101089
-1.774313	394	0.9633252	1.7906495	-3.177171977	3.2064258
-1.774313	395	0.9657702	1.821968	-3.232740696	3.3195674
-1.742969	396	0.9682152	1.8551873	-3.233534506	3.4417199
-1.740458	397	0.9706601	1.8905848	-3.290483817	3.574311
-1.725522	398	0.9731051	1.9285289	-3.327719878	3.7192239
-1.703749	399	0.9755501	1.9694653	-3.355473735	3.8787936
-1.703749	400	0.9779951	2.0139942	-3.431339719	4.0561725
-1.69282	401	0.9804401	2.062925	-3.492159673	4.2556595
-1.687399	402	0.9828851	2.1173582	-3.57282913	4.4832059
-1.681471	403	0.9853301	2.1788946	-3.663748412	4.7475819
-1.671313	404	0.9877751	2.2499808	-3.760422793	5.0624134
-1.65026	405	0.99022	2.3346729	-3.852817082	5.4506975
-1.591991	406	0.992665	2.4404289	-3.885140911	5.9556934
-1.159127	407	0.99511	2.5835106	-2.994616733	6.6745273
-0.327394	408	0.997555	2.8141949	-0.921349318	7.9196929

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.001	-6.907755279	1	0.00170	-2.9295	-0.00293	8.5821	20.23639905
0.0013	-6.645391015	2	0.00412	-2.6420	-0.003435	6.9804	17.55742695
0.003	-5.80914299	3	0.00657	-2.4800	-0.00744	6.1505	14.4067336
0.003392	-5.686335561	4	0.00902	-2.3649	-0.008022	5.5927	13.44753714
0.003816	-5.568552525	5	0.01147	-2.2746	-0.00868	5.1736	12.66598066
0.00424	-5.46319201	6	0.01392	-2.1997	-0.009327	4.8385	12.01720594
0.00424	-5.46319201	7	0.01636	-2.1354	-0.009054	4.5599	11.66611448
0.00424	-5.46319201	8	0.01881	-2.0789	-0.008815	4.3218	11.35745609
0.00424	-5.46319201	9	0.02126	-2.0284	-0.0086	4.1143	11.08134297
0.00424	-5.46319201	10	0.02371	-1.9825	-0.008406	3.9304	10.83086858
0.00424	-5.46319201	11	0.02616	-1.9405	-0.008228	3.7656	10.60136229
0.00424	-5.46319201	12	0.02861	-1.9017	-0.008063	3.6163	10.38909753
0.00424	-5.46319201	13	0.03106	-1.8655	-0.00791	3.48	10.19149058
0.00424	-5.46319201	14	0.03351	-1.8316	-0.007766	3.3547	10.00635517
0.00424	-5.46319201	15	0.03595	-1.7997	-0.007631	3.2389	9.832076467
0.00424	-5.46319201	16	0.03840	-1.7695	-0.007503	3.1312	9.667238379
0.00424	-5.46319201	17	0.04085	-1.7409	-0.007381	3.0307	9.510772624
0.00424	-5.46319201	18	0.04330	-1.7136	-0.007266	2.9364	9.361759986
0.00424	-5.46319201	19	0.04575	-1.6875	-0.007155	2.8478	9.219355778
0.00424	-5.46319201	20	0.04820	-1.6626	-0.007049	2.7642	9.082988594
0.00424	-5.46319201	21	0.05065	-1.6386	-0.006948	2.685	8.952037341
0.00424	-5.46319201	22	0.05310	-1.6155	-0.00685	2.61	8.826054832
0.00424	-5.46319201	23	0.05554	-1.5933	-0.006756	2.5387	8.70459388
0.00424	-5.46319201	24	0.05799	-1.5718	-0.006665	2.4707	8.58728183
0.00424	-5.46319201	25	0.06044	-1.5511	-0.006577	2.4058	8.473795712
0.00424	-5.46319201	26	0.06289	-1.5309	-0.006491	2.3438	8.363862247
0.00424	-5.46319201	27	0.06534	-1.5114	-0.006408	2.2844	8.257208153
0.00424	-5.46319201	28	0.06779	-1.4925	-0.006328	2.2275	8.153634681
0.005	-5.298317367	29	0.07024	-1.4740	-0.00737	2.1728	7.809863691
0.005	-5.298317367	30	0.07269	-1.4561	-0.00728	2.1202	7.714740745
0.005	-5.298317367	31	0.07513	-1.4386	-0.007193	2.0695	7.622051289
0.005	-5.298317367	32	0.07758	-1.4215	-0.007108	2.0207	7.531626665
0.005	-5.298317367	33	0.08003	-1.4049	-0.007024	1.9736	7.443346404
0.005	-5.298317367	34	0.08248	-1.3886	-0.006943	1.9281	7.357102081
0.005	-5.298317367	35	0.08493	-1.3727	-0.006863	1.8842	7.272761182
0.005	-5.298317367	36	0.08738	-1.3571	-0.006785	1.8417	7.190215282
0.005	-5.298317367	37	0.08983	-1.3418	-0.006709	1.8005	7.109380054
0.005	-5.298317367	38	0.09228	-1.3269	-0.006634	1.7606	7.03015912
0.005	-5.298317367	39	0.09473	-1.3122	-0.006561	1.7219	6.9524802
0.005	-5.298317367	40	0.09717	-1.2978	-0.006489	1.6843	6.876271011
0.0062	-5.083205987	41	0.09962	-1.2837	-0.007959	1.6479	6.525331976
0.00636	-5.057726902	42	0.10207	-1.2698	-0.008076	1.6125	6.42248624
0.0065	-5.035953102	43	0.10452	-1.2562	-0.008165	1.5781	6.326203187
0.007	-4.96184513	44	0.10697	-1.2428	-0.0087	1.5446	6.166623769
0.008	-4.828313737	45	0.10942	-1.2296	-0.009837	1.512	5.937028518
0.00812	-4.813425125	46	0.11187	-1.2167	-0.009879	1.4803	5.856304802
0.0083	-4.791499764	47	0.11432	-1.2039	-0.009992	1.4494	5.768455849
0.00848	-4.770044829	48	0.11676	-1.1913	-0.010102	1.4192	5.682638125
0.00848	-4.770044829	49	0.11921	-1.1789	-0.009997	1.3899	5.623539218

Normal

19.144	=sum X(i)*M(i)
403.069	=sum M(i)^2
0.06	= standard deviation
20.0766	= square root of sum Mi
0.818	= Fillibens's Statistic

Lognormal

416.818	=sum X(i)*M(i)
403.069	=sum M(i)^2
1.05	= standard deviation
20.0766	= square root of sum Mi
0.983	= Fillibens's Statistic

.987+ is acceptable value

Normal - Fail
Lognormal - Fail

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.00848	-4.770044829	50	0.12166	-1.1667	-0.009894	1.3612	5.565297131
0.00848	-4.770044829	51	0.12411	-1.1547	-0.009792	1.3333	5.507879327
0.00848	-4.770044829	52	0.12656	-1.1428	-0.009691	1.306	5.451242422
0.00848	-4.770044829	53	0.12901	-1.1311	-0.009592	1.2794	5.39535388
0.00848	-4.770044829	54	0.13146	-1.1195	-0.009494	1.2533	5.340202853
0.00848	-4.770044829	55	0.13391	-1.1081	-0.009397	1.2279	5.285756805
0.00848	-4.770044829	56	0.13635	-1.0968	-0.009301	1.2031	5.231994045
0.00848	-4.770044829	57	0.13880	-1.0857	-0.009207	1.1788	5.178892879
0.00848	-4.770044829	58	0.14125	-1.0747	-0.009114	1.155	5.126409926
0.00848	-4.770044829	59	0.14370	-1.0638	-0.009021	1.1318	5.074556031
0.00848	-4.770044829	60	0.14615	-1.0531	-0.00893	1.109	5.02328781
0.00848	-4.770044829	61	0.14860	-1.0425	-0.00884	1.0867	4.972594418
0.00848	-4.770044829	62	0.15105	-1.0320	-0.008751	1.0649	4.922454164
0.009	-4.710530702	63	0.15350	-1.0216	-0.009194	1.0436	4.812059332
0.00912	-4.697285475	64	0.15595	-1.0113	-0.009223	1.0227	4.750199856
0.00962	-4.643911014	65	0.15839	-1.0011	-0.00963	1.0022	4.648930238
0.01	-4.605170186	66	0.16084	-0.9910	-0.00991	0.9821	4.56372984
0.01017	-4.588313069	67	0.16329	-0.9810	-0.009977	0.9624	4.50122523
0.0106	-4.546901278	68	0.16574	-0.9711	-0.010294	0.9431	4.415658179
0.01112	-4.49900999	69	0.16819	-0.9613	-0.01069	0.9242	4.325110965
0.01212	-4.412898298	70	0.17064	-0.9516	-0.011534	0.9056	4.199523666
0.012676	-4.368044837	71	0.17309	-0.9420	-0.011941	0.8874	4.114867262
0.014	-4.268697949	72	0.17554	-0.9325	-0.013055	0.8696	3.980620654
0.014	-4.268697949	73	0.17798	-0.9231	-0.012923	0.8521	3.940321776
0.0142	-4.254513314	74	0.18043	-0.9137	-0.012975	0.8349	3.887421274
0.01424	-4.251700373	75	0.18288	-0.9044	-0.012879	0.818	3.845399005
0.01462	-4.225364825	76	0.18533	-0.8952	-0.013088	0.8014	3.782699121
0.01474	-4.217190392	77	0.18778	-0.8861	-0.013061	0.7852	3.736891708
0.01522	-4.185144927	78	0.19023	-0.8771	-0.013349	0.7692	3.670603537
0.01545	-4.170146276	79	0.19268	-0.8681	-0.013412	0.7536	3.619995722
0.01572	-4.152821492	80	0.19513	-0.8592	-0.013506	0.7382	3.567942229
0.016	-4.135166557	81	0.19757	-0.8503	-0.013605	0.723	3.516198928
0.01683	-4.084592271	82	0.20002	-0.8415	-0.014163	0.7082	3.437336578
0.01693	-4.078668083	83	0.20247	-0.8328	-0.0141	0.6936	3.396813885
0.01696	-4.076897649	84	0.20492	-0.8242	-0.013978	0.6793	3.360067865
0.01696	-4.076897649	85	0.20737	-0.8156	-0.013832	0.6652	3.325046591
0.01696	-4.076897649	86	0.20982	-0.8071	-0.013688	0.6513	3.290266331
0.01696	-4.076897649	87	0.21227	-0.7986	-0.013544	0.6377	3.255727086
0.01696	-4.076897649	88	0.21472	-0.7902	-0.013401	0.6244	3.221419586
0.01696	-4.076897649	89	0.21716	-0.7818	-0.013259	0.6112	3.187334561
0.01696	-4.076897649	90	0.21961	-0.7735	-0.013119	0.5983	3.15347201
0.01696	-4.076897649	91	0.22206	-0.7652	-0.012979	0.5856	3.119831935
0.01696	-4.076897649	92	0.22451	-0.7570	-0.012839	0.5731	3.086395795
0.01748	-4.046697909	93	0.22696	-0.7489	-0.013091	0.5608	3.030556392
0.0175	-4.045554398	94	0.22941	-0.7408	-0.012964	0.5488	2.996925674
0.0178	-4.028556822	95	0.23186	-0.7327	-0.013043	0.5369	2.951898831
0.018	-4.017383521	96	0.23431	-0.7247	-0.013045	0.5252	2.91154919
0.018	-4.017383521	97	0.23676	-0.7168	-0.012902	0.5138	2.879578536
0.01848	-3.991066213	98	0.23920	-0.7089	-0.0131	0.5025	2.829126026
0.019	-3.9633163	99	0.24165	-0.7010	-0.013319	0.4914	2.778266159
0.01908	-3.959114613	100	0.24410	-0.6932	-0.013226	0.4805	2.744335965
0.0197	-3.927136643	101	0.24655	-0.6854	-0.013502	0.4698	2.691604916
0.02	-3.912023005	102	0.24900	-0.6776	-0.013553	0.4592	2.650954621
0.02	-3.912023005	103	0.25145	-0.6699	-0.013399	0.4488	2.620823112
0.021	-3.863232841	104	0.25390	-0.6623	-0.013908	0.4386	2.558534605
0.021624	-3.83395147	105	0.25635	-0.6547	-0.014156	0.4286	2.509908405

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.0219893	-3.817197792	106	0.25879	-0.6471	-0.014229	0.4187	2.469982062
0.022	-3.816712826	107	0.26124	-0.6395	-0.014069	0.409	2.440856632
0.02272	-3.784509685	108	0.26369	-0.6320	-0.014359	0.3994	2.391831294
0.02316	-3.765328626	109	0.26614	-0.6245	-0.014464	0.39	2.351550424
0.02346	-3.752458436	110	0.26859	-0.6171	-0.014477	0.3808	2.315587067
0.02348	-3.751606284	111	0.27104	-0.6097	-0.014315	0.3717	2.287261409
0.02362	-3.745661468	112	0.27349	-0.6023	-0.014226	0.3628	2.256017512
0.024	-3.729701449	113	0.27594	-0.5950	-0.014279	0.354	2.219013208
0.024	-3.729701449	114	0.27838	-0.5876	-0.014104	0.3453	2.191748853
0.025	-3.688879454	115	0.28083	-0.5804	-0.014509	0.3368	2.140903013
0.025	-3.688879454	116	0.28328	-0.5731	-0.014328	0.3285	2.114163533
0.025	-3.688879454	117	0.28573	-0.5659	-0.014147	0.3202	2.087533091
0.025	-3.688879454	118	0.28818	-0.5587	-0.013968	0.3122	2.061011687
0.02544	-3.671432541	119	0.29063	-0.5515	-0.014031	0.3042	2.024976486
0.02544	-3.671432541	120	0.29308	-0.5444	-0.01385	0.2964	1.998789215
0.02544	-3.671432541	121	0.29553	-0.5373	-0.013669	0.2887	1.972702117
0.02544	-3.671432541	122	0.29797	-0.5302	-0.013489	0.2811	1.946715195
0.02544	-3.671432541	123	0.30042	-0.5232	-0.01331	0.2737	1.920828446
0.02544	-3.671432541	124	0.30287	-0.5162	-0.013131	0.2664	1.895033525
0.02544	-3.671432541	125	0.30532	-0.5092	-0.012953	0.2592	1.869334603
0.02544	-3.671432541	126	0.30777	-0.5022	-0.012776	0.2522	1.843727509
0.02544	-3.671432541	127	0.31022	-0.4952	-0.012599	0.2453	1.818203893
0.02544	-3.671432541	128	0.31267	-0.4883	-0.012422	0.2384	1.792772104
0.02544	-3.671432541	129	0.31512	-0.4814	-0.012247	0.2317	1.767427967
0.02544	-3.671432541	130	0.31757	-0.4745	-0.012072	0.2252	1.742163135
0.02544	-3.671432541	131	0.32001	-0.4677	-0.011897	0.2187	1.716981782
0.02544	-3.671432541	132	0.32246	-0.4608	-0.011723	0.2124	1.691879733
0.02562	-3.664381983	133	0.32491	-0.4540	-0.011632	0.2061	1.663660151
0.02562	-3.664381983	134	0.32736	-0.4472	-0.011458	0.2	1.638764613
0.026	-3.649658741	135	0.32981	-0.4404	-0.011451	0.194	1.607459343
0.026	-3.649658741	136	0.33226	-0.4337	-0.011276	0.1881	1.582809055
0.026	-3.649658741	137	0.33471	-0.4270	-0.011101	0.1823	1.558233452
0.0265	-3.630610546	138	0.33716	-0.4202	-0.011136	0.1766	1.525723594
0.026925	-3.614700056	139	0.33960	-0.4135	-0.011135	0.171	1.494832797
0.027	-3.611918413	140	0.34205	-0.4069	-0.010985	0.1655	1.469570417
0.027	-3.611918413	141	0.34450	-0.4002	-0.010806	0.1602	1.445515854
0.02712	-3.607483816	142	0.34695	-0.3936	-0.010674	0.1549	1.419781685
0.02713	-3.607115152	143	0.34940	-0.3869	-0.010498	0.1497	1.395745243
0.027136	-3.606894019	144	0.35185	-0.3803	-0.010321	0.1447	1.371827201
0.027136	-3.606894019	145	0.35430	-0.3737	-0.010142	0.1397	1.348060333
0.0274	-3.597212266	146	0.35675	-0.3672	-0.01006	0.1348	1.320791914
0.0275	-3.593569274	147	0.35919	-0.3606	-0.009917	0.13	1.295885553
0.027516	-3.592987625	148	0.36164	-0.3541	-0.009743	0.1254	1.272168043
0.028	-3.575550769	149	0.36409	-0.3475	-0.009731	0.1208	1.242653349
0.028	-3.575550769	150	0.36654	-0.3410	-0.009549	0.1163	1.219365362
0.028	-3.575550769	151	0.36899	-0.3345	-0.009367	0.1119	1.196130219
0.02812	-3.571274212	152	0.37144	-0.3280	-0.009225	0.1076	1.171540949
0.0285	-3.557851192	153	0.37389	-0.3216	-0.009165	0.1034	1.144114535
0.0285	-3.557851192	154	0.37634	-0.3151	-0.008981	0.0993	1.121140023
0.0286	-3.554348561	155	0.37878	-0.3087	-0.008828	0.0953	1.097132879
0.02862	-3.553649505	156	0.38123	-0.3022	-0.00865	0.0914	1.07406264
0.029	-3.540459449	157	0.38368	-0.2958	-0.008579	0.0875	1.047350694
0.029	-3.540459449	158	0.38613	-0.2894	-0.008393	0.0838	1.024669614
0.029	-3.540459449	159	0.38858	-0.2830	-0.008208	0.0801	1.002028784
0.0297	-3.516608233	160	0.39103	-0.2766	-0.008216	0.0765	0.972830034
0.03	-3.506557897	161	0.39348	-0.2703	-0.008108	0.073	0.947705419

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.03	-3.506557897	162	0.39593	-0.2639	-0.007917	0.0696	0.925400981
0.03	-3.506557897	163	0.39838	-0.2576	-0.007727	0.0663	0.903132421
0.03096	-3.47505923	164	0.40082	-0.2512	-0.007778	0.0631	0.872986804
0.031	-3.473768074	165	0.40327	-0.2449	-0.007591	0.06	0.850673205
0.031	-3.473768074	166	0.40572	-0.2386	-0.007396	0.0569	0.828719508
0.03112	-3.46990458	167	0.40817	-0.2323	-0.007228	0.0539	0.805900091
0.03112	-3.46990458	168	0.41062	-0.2260	-0.007032	0.0511	0.784033927
0.03115	-3.468941034	169	0.41307	-0.2197	-0.006842	0.0483	0.761987669
0.0315	-3.457767733	170	0.41552	-0.2134	-0.006721	0.0455	0.737806556
0.0316	-3.454598158	171	0.41797	-0.2071	-0.006544	0.0429	0.715450866
0.03173	-3.450492673	172	0.42041	-0.2008	-0.006372	0.0403	0.692974462
0.032	-3.442019376	173	0.42286	-0.1946	-0.006226	0.0379	0.669730998
0.032	-3.442019376	174	0.42531	-0.1883	-0.006026	0.0355	0.648208822
0.03212	-3.43827639	175	0.42776	-0.1821	-0.005848	0.0332	0.626036433
0.03227	-3.433617273	176	0.43021	-0.1758	-0.005674	0.0309	0.603769214
0.03248	-3.427130764	177	0.43266	-0.1696	-0.005509	0.0288	0.581277465
0.0327	-3.420380201	178	0.43511	-0.1634	-0.005343	0.0267	0.55884284
0.03272	-3.419768767	179	0.43756	-0.1572	-0.005143	0.0247	0.537480415
0.033	-3.411247718	180	0.44000	-0.1510	-0.004982	0.0228	0.514954896
0.033	-3.411247718	181	0.44245	-0.1448	-0.004777	0.021	0.493784132
0.0335	-3.39620984	182	0.44490	-0.1386	-0.004641	0.0192	0.470549241
0.03362	-3.392634151	183	0.44735	-0.1324	-0.00445	0.0175	0.449037149
0.03392	-3.383750468	184	0.44980	-0.1262	-0.00428	0.0159	0.426918927
0.03392	-3.383750468	185	0.45225	-0.1200	-0.00407	0.0144	0.405991906
0.03392	-3.383750468	186	0.45470	-0.1138	-0.00386	0.013	0.385076425
0.03392	-3.383750468	187	0.45715	-0.1076	-0.003651	0.0116	0.364180179
0.03392	-3.383750468	188	0.45959	-0.1015	-0.003441	0.0103	0.343295473
0.03392	-3.383750468	189	0.46204	-0.0953	-0.003232	0.0091	0.322422308
0.03392	-3.383750468	190	0.46449	-0.0891	-0.003023	0.0079	0.301564531
0.03392	-3.383750468	191	0.46694	-0.0830	-0.002814	0.0069	0.280718294
0.03392	-3.383750468	192	0.46939	-0.0768	-0.002605	0.0059	0.259879751
0.03392	-3.383750468	193	0.47184	-0.0706	-0.002396	0.005	0.239052749
0.03392	-3.383750468	194	0.47429	-0.0645	-0.002188	0.0042	0.218237287
0.03392	-3.383750468	195	0.47674	-0.0583	-0.001979	0.0034	0.197429519
0.03392	-3.383750468	196	0.47919	-0.0522	-0.001771	0.0027	0.176625598
0.03392	-3.383750468	197	0.48163	-0.0461	-0.001562	0.0021	0.155829371
0.03392	-3.383750468	198	0.48408	-0.0399	-0.001354	0.0016	0.135040837
0.03392	-3.383750468	199	0.48653	-0.0338	-0.001145	0.0011	0.11425615
0.0344	-3.369698715	200	0.48898	-0.0276	-0.00095	0.0008	0.093090965
0.035	-3.352407217	201	0.49143	-0.0215	-0.000752	0.0005	0.072024922
0.035	-3.352407217	202	0.49388	-0.0153	-0.000537	0.0002	0.051444195
0.036	-3.324236341	203	0.49633	-0.0092	-0.000331	8E-05	0.030607896
0.036464	-3.311429806	204	0.49878	-0.0031	-0.000112	9E-06	0.010164582
0.03672	-3.304433713	205	0.50122	0.0031	0.0001127	9E-06	-0.010143107
0.037312	-3.288440288	206	0.50367	0.0092	0.0003436	8E-05	-0.030278304
0.037312	-3.288440288	207	0.50612	0.0153	0.0005726	0.0002	-0.050462594
0.03744	-3.285015627	208	0.50857	0.0215	0.0008044	0.0005	-0.070577045
0.03772	-3.277564821	209	0.51102	0.0276	0.001042	0.0008	-0.090545683
0.03772	-3.277564821	210	0.51347	0.0338	0.0012737	0.0011	-0.110670672
0.03777	-3.276240142	211	0.51592	0.0399	0.0015073	0.0016	-0.130750247
0.038	-3.270169119	212	0.51837	0.0461	0.00175	0.0021	-0.150598692
0.038	-3.270169119	213	0.52081	0.0522	0.0019835	0.0027	-0.170696859
0.03816	-3.265967432	214	0.52326	0.0583	0.0022265	0.0034	-0.190557308
0.03816	-3.265967432	215	0.52571	0.0645	0.0024612	0.0042	-0.21064079
0.0383	-3.262305383	216	0.52816	0.0706	0.0027058	0.005	-0.230472985
0.0393	-3.23653076	217	0.53061	0.0768	0.0030183	0.0059	-0.248572942

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.04	-3.218875825	218	0.53306	0.0830	0.0033184	0.0069	-0.267040179
0.04046	-3.207441447	219	0.53551	0.0891	0.0036059	0.0079	-0.285851627
0.0407	-3.201527187	220	0.53796	0.0953	0.0038781	0.0091	-0.305059074
0.0407	-3.201527187	221	0.54041	0.1015	0.0041292	0.0103	-0.324808168
0.0409	-3.196625216	222	0.54285	0.1076	0.0044019	0.0116	-0.344040601
0.041	-3.194183212	223	0.54530	0.1138	0.0046659	0.013	-0.363503356
0.041	-3.194183212	224	0.54775	0.1200	0.0049193	0.0144	-0.383247093
0.04115	-3.190531352	225	0.55020	0.1262	0.0051918	0.0159	-0.402540978
0.0413	-3.186892779	226	0.55265	0.1324	0.0054663	0.0175	-0.421805943
0.0416	-3.179655112	227	0.55510	0.1386	0.0057637	0.0192	-0.440545305
0.0417	-3.17725415	228	0.55755	0.1448	0.0060361	0.021	-0.45991315
0.04196	-3.171038495	229	0.56000	0.1510	0.0063342	0.0228	-0.478693409
0.04222	-3.164861237	230	0.56244	0.1572	0.0066357	0.0247	-0.497416944
0.0424	-3.160606917	231	0.56489	0.1634	0.0069276	0.0267	-0.516399477
0.0424	-3.160606917	232	0.56734	0.1696	0.0071915	0.0288	-0.536072214
0.0424	-3.160606917	233	0.56979	0.1758	0.0074556	0.0309	-0.555762918
0.0424	-3.160606917	234	0.57224	0.1821	0.0077201	0.0332	-0.575478774
0.0424	-3.160606917	235	0.57469	0.1883	0.0079849	0.0355	-0.595212595
0.0424	-3.160606917	236	0.57714	0.1946	0.00825	0.0379	-0.614975163
0.0424	-3.160606917	237	0.57959	0.2008	0.0085153	0.0403	-0.634755696
0.0424	-3.160606917	238	0.58203	0.2071	0.0087811	0.0429	-0.654564975
0.0424	-3.160606917	239	0.58448	0.2134	0.0090472	0.0455	-0.674399406
0.0424	-3.160606917	240	0.58693	0.2197	0.0093136	0.0483	-0.69425899
0.0424	-3.160606917	241	0.58938	0.2260	0.0095804	0.0511	-0.714147319
0.0424	-3.160606917	242	0.59183	0.2323	0.0098476	0.0539	-0.734064393
0.0424	-3.160606917	243	0.59428	0.2386	0.0101152	0.0569	-0.754010214
0.0424	-3.160606917	244	0.59673	0.2449	0.0103831	0.06	-0.773984779
0.0424	-3.160606917	245	0.59918	0.2512	0.0106515	0.0631	-0.793991684
0.04256	-3.156840434	246	0.60162	0.2576	0.0109616	0.0663	-0.81306085
0.04296	-3.147485829	247	0.60407	0.2639	0.0113374	0.0696	-0.830639778
0.043	-3.146555163	248	0.60652	0.2703	0.0116215	0.073	-0.85040871
0.043	-3.146555163	249	0.60897	0.2766	0.0118955	0.0765	-0.870459023
0.04318	-3.142377854	250	0.61142	0.2830	0.0122209	0.0801	-0.889362837
0.0432	-3.141914784	251	0.61387	0.2894	0.0125028	0.0838	-0.90932396
0.04392	-3.125385482	252	0.61632	0.2958	0.0129926	0.0875	-0.924562108
0.044	-3.123565645	253	0.61877	0.3022	0.0132987	0.0914	-0.944073173
0.04452	-3.111816753	254	0.62122	0.3087	0.0137421	0.0953	-0.960535078
0.045	-3.101092789	255	0.62366	0.3151	0.0141803	0.0993	-0.977207605
0.046	-3.079113882	256	0.62611	0.3216	0.0147924	0.1034	-0.990164782
0.046	-3.079113882	257	0.62856	0.3280	0.0150901	0.1076	-1.010089896
0.046	-3.079113882	258	0.63101	0.3345	0.0153884	0.1119	-1.030057018
0.047488	-3.047278231	259	0.63346	0.3410	0.0161948	0.1163	-1.039209275
0.0475	-3.047025568	260	0.63591	0.3475	0.0165082	0.1208	-1.05896875
0.049	-3.015934981	261	0.63836	0.3541	0.0173494	0.1254	-1.067851188
0.0494	-3.007804855	262	0.64081	0.3606	0.0178143	0.13	-1.084651654
0.04995	-2.996732774	263	0.64325	0.3672	0.0183402	0.1348	-1.100313277
0.05	-2.995732274	264	0.64570	0.3737	0.0186873	0.1397	-1.119641394
0.05088	-2.97828536	265	0.64815	0.3803	0.0193514	0.1447	-1.132745472
0.05088	-2.97828536	266	0.65060	0.3869	0.0196876	0.1497	-1.15242443
0.05088	-2.97828536	267	0.65305	0.3936	0.0200246	0.1549	-1.172150791
0.05088	-2.97828536	268	0.65550	0.4002	0.0203625	0.1602	-1.191931326
0.05088	-2.97828536	269	0.65795	0.4069	0.0207014	0.1655	-1.211766036
0.05088	-2.97828536	270	0.66040	0.4135	0.0210411	0.171	-1.23164815
0.051	-2.975929646	271	0.66284	0.4202	0.0214322	0.1766	-1.250601247
0.051	-2.975929646	272	0.66529	0.4270	0.0217746	0.1823	-1.270582664
0.0511	-2.973970782	273	0.66774	0.4337	0.0221614	0.1881	-1.289772063

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.0512	-2.972015747	274	0.67019	0.4404	0.0225506	0.194	-1.308997585
0.052	-2.95651156	275	0.67264	0.4472	0.0232552	0.2	-1.322194724
0.052	-2.95651156	276	0.67509	0.4540	0.0236084	0.2061	-1.342281043
0.05238	-2.94923044	277	0.67754	0.4608	0.0241379	0.2124	-1.359072557
0.0529	-2.93935194	278	0.67999	0.4677	0.0247392	0.2187	-1.37461704
0.053	-2.937463365	279	0.68243	0.4745	0.0251495	0.2252	-1.393881088
0.0538	-2.922481812	280	0.68488	0.4814	0.0258993	0.2317	-1.406883016
0.054	-2.918771232	281	0.68733	0.4883	0.0263684	0.2384	-1.42524521
0.054272	-2.913746839	282	0.68978	0.4952	0.0268771	0.2453	-1.442975129
0.05544	-2.892453924	283	0.69223	0.5022	0.027841	0.2522	-1.452538433
0.056	-2.882403588	284	0.69468	0.5092	0.0285128	0.2592	-1.467595199
0.056	-2.882403588	285	0.69713	0.5162	0.0289048	0.2664	-1.487771155
0.05616	-2.879550519	286	0.69958	0.5232	0.0293819	0.2737	-1.506529805
0.05768	-2.852844786	287	0.70203	0.5302	0.0305838	0.2811	-1.512672841
0.059	-2.830217835	288	0.70447	0.5373	0.0317014	0.2887	-1.520707967
0.05936	-2.82413468	289	0.70692	0.5444	0.0323166	0.2964	-1.537506103
0.05936	-2.82413468	290	0.70937	0.5515	0.03274	0.3042	-1.557649843
0.05936	-2.82413468	291	0.71182	0.5587	0.033165	0.3122	-1.577870639
0.05936	-2.82413468	292	0.71427	0.5659	0.0335918	0.3202	-1.598174913
0.05936	-2.82413468	293	0.71672	0.5731	0.0340203	0.3285	-1.618562663
0.05936	-2.82413468	294	0.71917	0.5804	0.0344506	0.3368	-1.639033892
0.05936	-2.82413468	295	0.72162	0.5876	0.0348827	0.3453	-1.659595018
0.05968	-2.818758323	296	0.72406	0.5950	0.0355071	0.354	-1.67704092
0.06	-2.813410717	297	0.72651	0.6023	0.0361381	0.3628	-1.694521488
0.061	-2.796881415	298	0.72896	0.6097	0.0371902	0.3717	-1.705189308
0.0636	-2.755141809	299	0.73141	0.6171	0.0392466	0.3808	-1.700157603
0.06392	-2.750122978	300	0.73386	0.6245	0.0399198	0.39	-1.717526807
0.06392	-2.750122978	301	0.73631	0.6320	0.0403978	0.3994	-1.738093107
0.064	-2.748872196	302	0.73876	0.6395	0.0409292	0.409	-1.757953306
0.06412	-2.746998951	303	0.74121	0.6471	0.0414899	0.4187	-1.777491895
0.06416	-2.746375315	304	0.74365	0.6547	0.0420025	0.4286	-1.79792325
0.0652	-2.73029581	305	0.74610	0.6623	0.0431805	0.4386	-1.808215192
0.06544	-2.726621587	306	0.74855	0.6699	0.0438409	0.4488	-1.826674552
0.066	-2.718100537	307	0.75100	0.6776	0.0447244	0.4592	-1.841901535
0.0664533	-2.711255332	308	0.75345	0.6854	0.0455462	0.4698	-1.858256752
0.06784	-2.690603287	309	0.75590	0.6932	0.0470246	0.4805	-1.865043095
0.06784	-2.690603287	310	0.75835	0.7010	0.0475555	0.4914	-1.886100299
0.06784	-2.690603287	311	0.76080	0.7089	0.0480894	0.5025	-1.907273741
0.06784	-2.690603287	312	0.76324	0.7168	0.0486263	0.5138	-1.928569537
0.06784	-2.690603287	313	0.76569	0.7247	0.0491662	0.5252	-1.949981569
0.06784	-2.690603287	314	0.76814	0.7327	0.0497093	0.5369	-1.971522074
0.06784	-2.690603287	315	0.77059	0.7408	0.0502555	0.5488	-1.993184933
0.06892	-2.674808867	316	0.77304	0.7489	0.0516139	0.5608	-2.003154002
0.0723	-2.62693115	317	0.77549	0.7570	0.0547344	0.5731	-1.988705617
0.073	-2.617295838	318	0.77794	0.7652	0.055863	0.5856	-2.002876658
0.07414	-2.601800081	319	0.78039	0.7735	0.0573471	0.5983	-2.012487053
0.07632	-2.572820252	320	0.78284	0.7818	0.0596673	0.6112	-2.011440957
0.07632	-2.572820252	321	0.78528	0.7902	0.0603054	0.6244	-2.032951098
0.07632	-2.572820252	322	0.78773	0.7986	0.0609476	0.6377	-2.054601637
0.07632	-2.572820252	323	0.79018	0.8071	0.0615942	0.6513	-2.076398424
0.07632	-2.572820252	324	0.79263	0.8156	0.0622453	0.6652	-2.098347308
0.080136	-2.524030088	325	0.79508	0.8242	0.0660459	0.6793	-2.080236768
0.0814	-2.508380006	326	0.79753	0.8328	0.0677919	0.6936	-2.089039819
0.0848	-2.467459736	327	0.79998	0.8415	0.0713624	0.7082	-2.0764593
0.0848	-2.467459736	328	0.80243	0.8503	0.0721068	0.723	-2.098120876
0.0848	-2.467459736	329	0.80487	0.8592	0.0728569	0.7382	-2.119945153

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.0848	-2.467459736	330	0.80732	0.8681	0.0736127	0.7536	-2.14193774
0.0848	-2.467459736	331	0.80977	0.8771	0.0743743	0.7692	-2.164098638
0.0848	-2.467459736	332	0.81222	0.8861	0.0751421	0.7852	-2.186439067
0.0848	-2.467459736	333	0.81467	0.8952	0.075916	0.8014	-2.208959028
0.093	-2.375155786	334	0.81712	0.9044	0.0841127	0.818	-2.148180938
0.09328	-2.372149556	335	0.81957	0.9137	0.0852315	0.8349	-2.16747345
0.09328	-2.372149556	336	0.82202	0.9231	0.0861043	0.8521	-2.189668293
0.09328	-2.372149556	337	0.82446	0.9325	0.0869849	0.8696	-2.212062701
0.09328	-2.372149556	338	0.82691	0.9420	0.0878734	0.8874	-2.234656675
0.09328	-2.372149556	339	0.82936	0.9516	0.0887697	0.9056	-2.257450213
0.09328	-2.372149556	340	0.83181	0.9613	0.0896745	0.9242	-2.280459496
0.09328	-2.372149556	341	0.83426	0.9711	0.0905875	0.9431	-2.303679132
0.09936	-2.309005661	342	0.83671	0.9810	0.0974741	0.9624	-2.265179899
0.10176	-2.285138179	343	0.83916	0.9910	0.1008443	0.9821	-2.264575005
0.10176	-2.285138179	344	0.84161	1.0011	0.10187	1.0022	-2.287607998
0.10176	-2.285138179	345	0.84405	1.0113	0.1029063	1.0227	-2.310879999
0.10176	-2.285138179	346	0.84650	1.0216	0.1039533	1.0436	-2.334391006
0.10176	-2.285138179	347	0.84895	1.0320	0.1050114	1.0649	-2.358151411
0.10176	-2.285138179	348	0.85140	1.0425	0.106081	1.0867	-2.382171607
0.10176	-2.285138179	349	0.85385	1.0531	0.1071625	1.109	-2.406456789
0.11024	-2.205095472	350	0.85630	1.0638	0.1172775	1.1318	-2.345864856
0.11024	-2.205095472	351	0.85875	1.0747	0.1184759	1.155	-2.369835865
0.11024	-2.205095472	352	0.86120	1.0857	0.1196888	1.1788	-2.394097675
0.11024	-2.205095472	353	0.86365	1.0968	0.1209161	1.2031	-2.418645273
0.11024	-2.205095472	354	0.86609	1.1081	0.1221586	1.2279	-2.443498712
0.11024	-2.205095472	355	0.86854	1.1195	0.1234169	1.2533	-2.468668021
0.11024	-2.205095472	356	0.87099	1.1311	0.1246915	1.2794	-2.494163228
0.111936	-2.189828	357	0.87344	1.1428	0.1279213	1.306	-2.502551594
0.11194	-2.189792266	358	0.87589	1.1547	0.129255	1.3333	-2.528511153
0.11872	-2.1309875	359	0.87834	1.1667	0.1385128	1.3612	-2.486261459
0.11872	-2.1309875	360	0.88079	1.1789	0.1399623	1.3899	-2.512280745
0.11872	-2.1309875	361	0.88324	1.1913	0.1414332	1.4192	-2.53868281
0.11872	-2.1309875	362	0.88568	1.2039	0.1429262	1.4494	-2.56548219
0.11872	-2.1309875	363	0.88813	1.2167	0.1444419	1.4803	-2.592688575
0.123	-2.095570924	364	0.89058	1.2296	0.1512442	1.512	-2.576772143
0.125504	-2.075417648	365	0.89303	1.2428	0.1559774	1.5446	-2.579346889
0.1272	-2.061994628	366	0.89548	1.2562	0.1597896	1.5781	-2.59029358
0.1272	-2.061994628	367	0.89793	1.2698	0.1615232	1.6125	-2.618396047
0.132	-2.024953356	368	0.90038	1.2837	0.1694489	1.6479	-2.59944077
0.13568	-1.997456107	369	0.90283	1.2978	0.1760884	1.6843	-2.59234179
0.13568	-1.997456107	370	0.90527	1.3122	0.17804	1.7219	-2.621072517
0.13568	-1.997456107	371	0.90772	1.3269	0.1800292	1.7606	-2.65035733
0.13568	-1.997456107	372	0.91017	1.3418	0.1820579	1.8005	-2.680223479
0.14016	-1.964970652	373	0.91262	1.3571	0.1902077	1.8417	-2.666613008
0.141	-1.958995389	374	0.91507	1.3727	0.1935443	1.8842	-2.689024577
0.14416	-1.936831485	375	0.91752	1.3886	0.2001767	1.9281	-2.689432506
0.14416	-1.936831485	376	0.91997	1.4049	0.2025233	1.9736	-2.720959631
0.14416	-1.936831485	377	0.92242	1.4215	0.2049253	2.0207	-2.753231007
0.14416	-1.936831485	378	0.92487	1.4386	0.2073856	2.0695	-2.786286267
0.14416	-1.936831485	379	0.92731	1.4561	0.2099076	2.1202	-2.82016945
0.146	-1.924148657	380	0.92976	1.4740	0.215208	2.1728	-2.836247377
0.147	-1.917322692	381	0.93221	1.4925	0.2193927	2.2275	-2.861541159
0.147	-1.917322692	382	0.93466	1.5114	0.2221796	2.2844	-2.897890563
0.148	-1.910543005	383	0.93711	1.5309	0.2265803	2.3438	-2.924941771
0.15264	-1.879673071	384	0.93956	1.5511	0.2367554	2.4058	-2.915505365
0.1536	-1.873403458	385	0.94201	1.5718	0.2414351	2.4707	-2.944696699

Table 122. Uranium Combined Upgradient Background Data Set, Filliben's Statistic Analysis (continued)

Uranium	Ln(Uranium)	Count	m(i)	M(i)	X(i)*Mi	Mi^2	X(i)*Mi (log)
0.155	-1.864330162	386	0.94446	1.5933	0.2469641	2.5387	-2.970467977
0.16112	-1.82560585	387	0.94690	1.6155	0.2602973	2.61	-2.949355854
0.16114	-1.825481727	388	0.94935	1.6386	0.2640455	2.685	-2.99125137
0.162	-1.820158944	389	0.95180	1.6626	0.2693378	2.7642	-3.026158132
0.163	-1.814005078	390	0.95425	1.6875	0.275069	2.8478	-3.061206373
0.164	-1.807888851	391	0.95670	1.7136	0.2810314	2.9364	-3.098009639
0.164	-1.807888851	392	0.95915	1.7409	0.2855046	3.0307	-3.147321156
0.166	-1.795767491	393	0.96160	1.7695	0.2937406	3.1312	-3.177650058
0.1696	-1.774312556	394	0.96405	1.7997	0.3052282	3.2389	-3.193220501
0.1696	-1.774312556	395	0.96649	1.8316	0.3106385	3.3547	-3.249822006
0.175	-1.742969305	396	0.96894	1.8655	0.3264595	3.48	-3.251479212
0.17544	-1.740458175	397	0.97139	1.9017	0.3336261	3.6163	-3.309748166
0.17808	-1.725522391	398	0.97384	1.9405	0.3455655	3.7656	-3.348388263
0.182	-1.703748592	399	0.97629	1.9825	0.360818	3.9304	-3.377709782
0.182	-1.703748592	400	0.97874	2.0284	0.3691623	4.1143	-3.455822614
0.184	-1.692819521	401	0.98119	2.0789	0.3825185	4.3218	-3.519210628
0.185	-1.687399454	402	0.98364	2.1354	0.3950495	4.5599	-3.603277198
0.1861	-1.681471115	403	0.98608	2.1997	0.4093581	4.8385	-3.698677375
0.188	-1.671313316	404	0.98853	2.2746	0.4276164	5.1736	-3.801494561
0.192	-1.650259907	405	0.99098	2.3649	0.4540582	5.5927	-3.902677068
0.20352	-1.591990999	406	0.99343	2.4800	0.5047317	6.1505	-3.94815384
0.31376	-1.159126917	407	0.99588	2.6420	0.8289683	6.9804	-3.062466319
0.7208	-0.327393573	408	0.99830	2.9295	2.1115972	8.5821	-0.959105631

Figure 18. Uranium Combined Background Data Set, Histogram (normal)

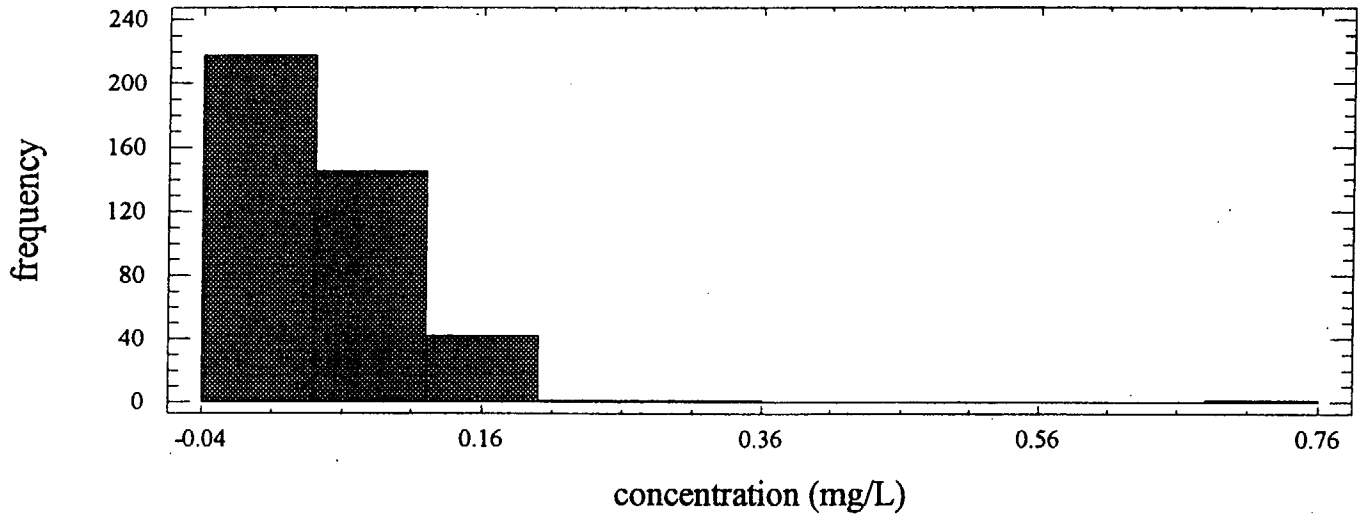


Figure 19. Uranium Combined Background Data Set, Histogram (lognormal)

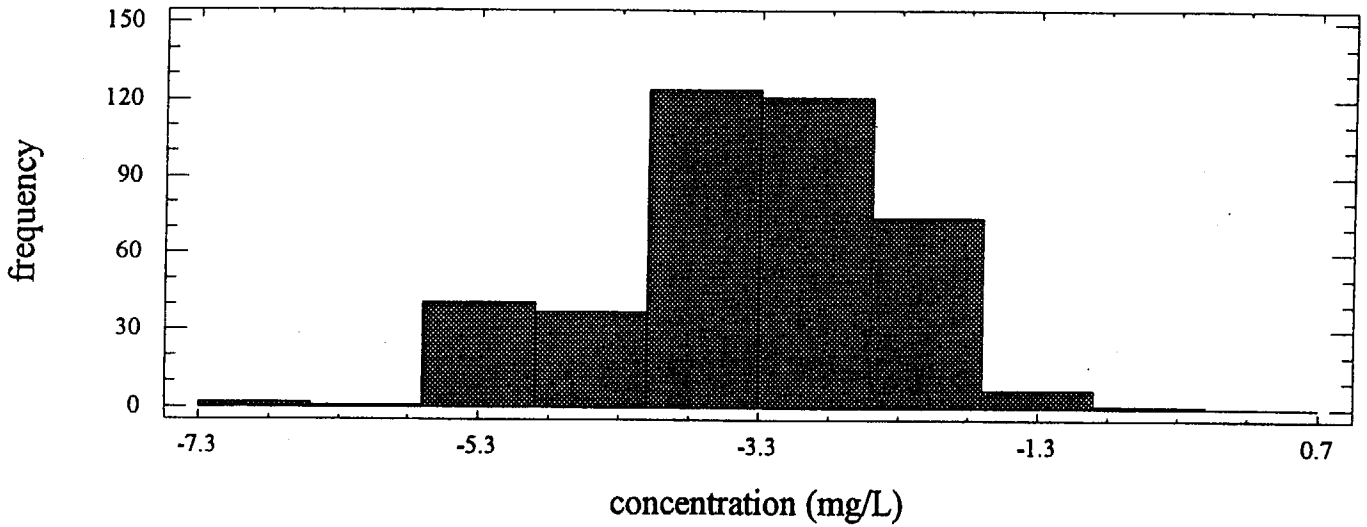


Figure 20. Uranium Combined Background Data Set, Probability Plot (normal)

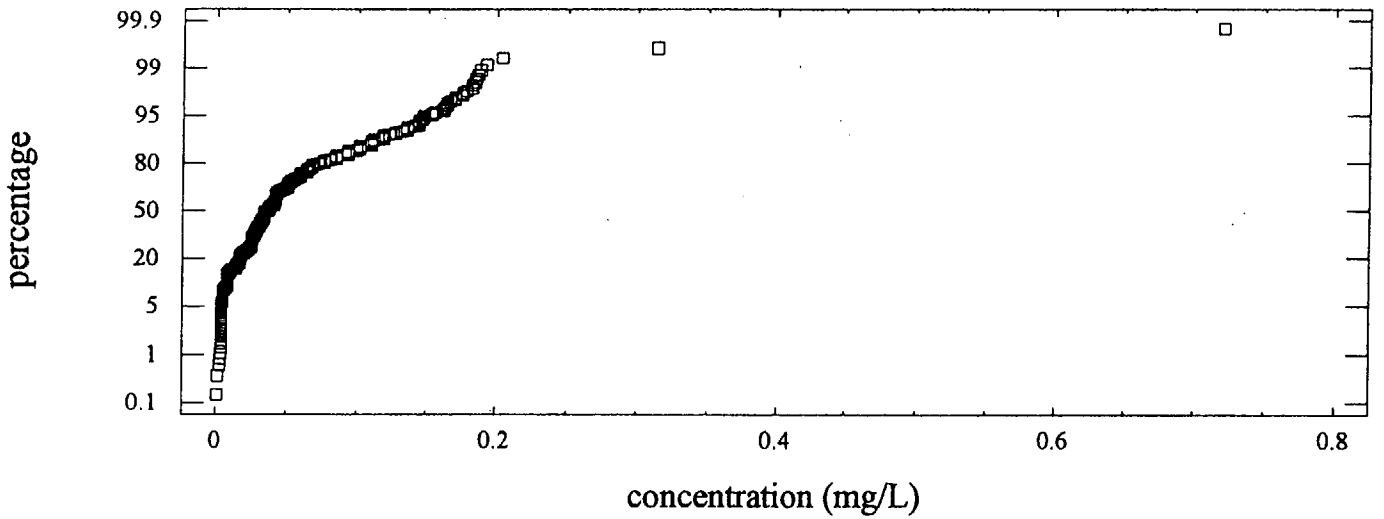


Figure 21. Uranium Combined Background Data Set, Probability Plot (lognormal)

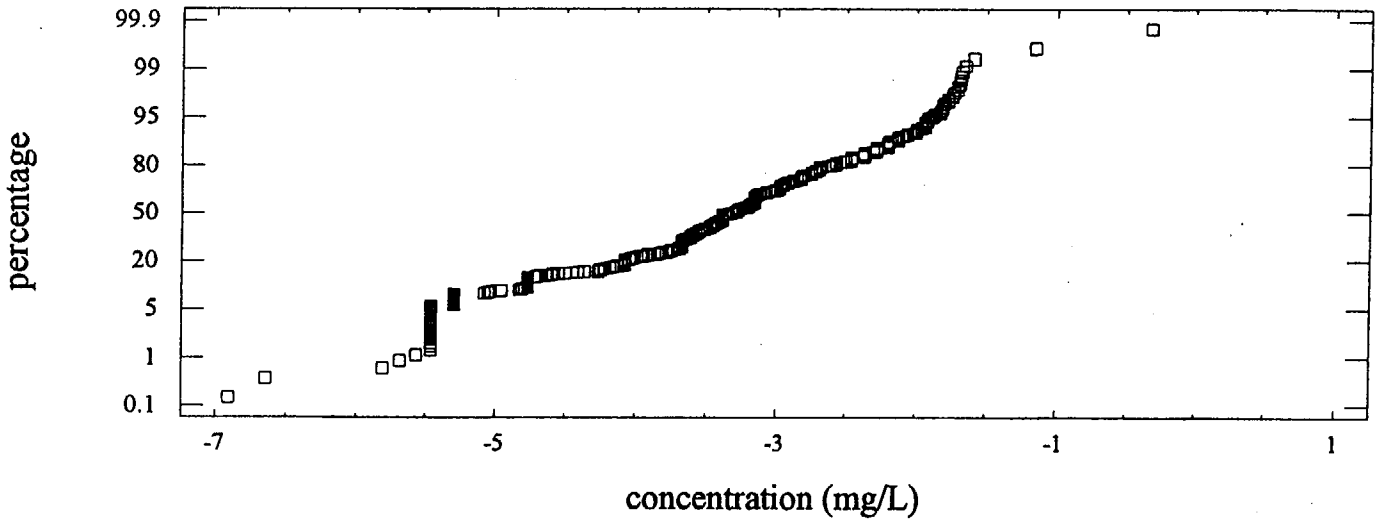


Table 123. Uranium Combined Upgradient Background Data Set, Distribution Summary

Parameter	Distribution Type (tested)	Coefficient of Variation	Studentized Range Test	Geary's Test	Coefficient of Skewness (-1 to 1)	Shapiro-Francia Test	Filliben's Statistic	Histogram	Probability Plot	Number of Samples	Distribution Type (determined)
Uranium	Normal	Fail	Fail	Fail	Fail	Fail	Fail	Nonparametric	Nonparametric	408	Nonparametric
Uranium	Lognormal	Pass	NA	Fail	Pass	Fail	Fail	Lognormal	Nonparametric	408	

NA - not applicable

Table 124. Uranium Combined Upgradient Background Data Set, T_n Statisitic Analysis

Parameter	Distribution	Maximum Observation	Mean	Standard Deviation	T_n Statistic	N	Upper 5% Critical Value	Pass or Fail T_n Statistic
Uranium	Lognormal	-0.327393573	-3.398132022	1.04705448	2.933	408	3.34+	Pass

ND - concentration was non-detect
N - number of samples

Table 125. Uranium Combined Upgradient Background Data Set, 95th Percentile Calculation

Parameter	Distribution	95th Percentile (mg/L)	Sample #
Uranium	Nonparametric	0.16	408

SD = standard deviation

Table 126. Uranium Combined Upgradient Background Data Set, Summary Table

Parameter	Distribution	95th Percentile (mg/L)	Range (normal)	Sample #
Uranium	Nonparametric	0.16	0.001 to 0.7208	408

SD = standard deviation
ND = non-detect, concentration reported as the minimum detecatable activity (MDA)

Table 127. Summary Table for Upgradient Wells, Statistical Analysis

Parameter	Data Set	Distribution	95th Percentile	Range	Arithmetic Mean	Sample #
Molybdenum	Near Upgradient	Nonparametric	0.054	<0.001 to 0.2	0.019	366
	Far Upgradient	Nonparametric	0.04	<0.01 to 0.07	0.018	42
	Combined	Nonparametric	0.05	<0.001 to 0.2	0.019	408
Selenium	Near Upgradient	Nonparametric	0.27	0.009 to 0.755	0.13	365
	Far Upgradient	Nonparametric	0.72	<0.005 to 0.79	0.3	42
Uranium	Near Upgradient	Nonparametric	0.147	0.003392 to 0.7208	0.05	366
	Far Upgradient	Nonparametric	0.18	0.001 to 0.192	0.07	42
	Combined	Nonparametric	0.16	0.001 to 0.7208	0.05	408

Corporate Occupational Health and Safety Policy

It is the policy of Homestake Mining Co. to provide each employee with a safe and healthful work place, to prevent accidents, work interruptions, damage to equipment and materials, and to establish safety and health excellence as a primary objective for all Company operations and activities.

Principles and Practices

To carry out this policy, we:

- Establish health and safety improvement objectives for every operation and assign responsibility and accountability to managers and supervisors for safety and health performance leading to an accident-free workplace;
- Establish health and safety policies, procedures, and management systems to accomplish corporate policies; integrate them fully into design, operating, and contracting activities as an essential element of management; and commit adequate resources for their effective implementation;
- Establish responsibility and accountability for each employee to apply safe work methods and practices and require all employees to exert positive proactive safety awareness and commitment to safety achievement by personal example in their work activities and the direction of the work of others;
- Evaluate each employee's health and safety performance and reward excellence and provide direction for improvement when appropriate;
- Assure that all employees are appropriately trained to accomplish their job tasks in a safe manner;
- Comply with all health and safety laws and regulations and, where laws and regulations do not exist, adopt appropriate standards and provide additional levels of health and safety protection where technically and economically feasible;
- Conduct constructive communications

with all employees and encourage them to participate fully in the prevention of accidents and to communicate both internally and externally regarding this policy and company health and safety practices and issues;

- Take appropriate measures to make positive contributions to the health and safety of the communities in which we operate;

- Conduct appropriate research, studies, and evaluations to develop more effective methods for protecting the health and safety of employees and surrounding communities and encourage and support the use of sound scientific principles in the decisions related to health and safety issues;

- Develop, implement and test accident and emergency contingency plans; and

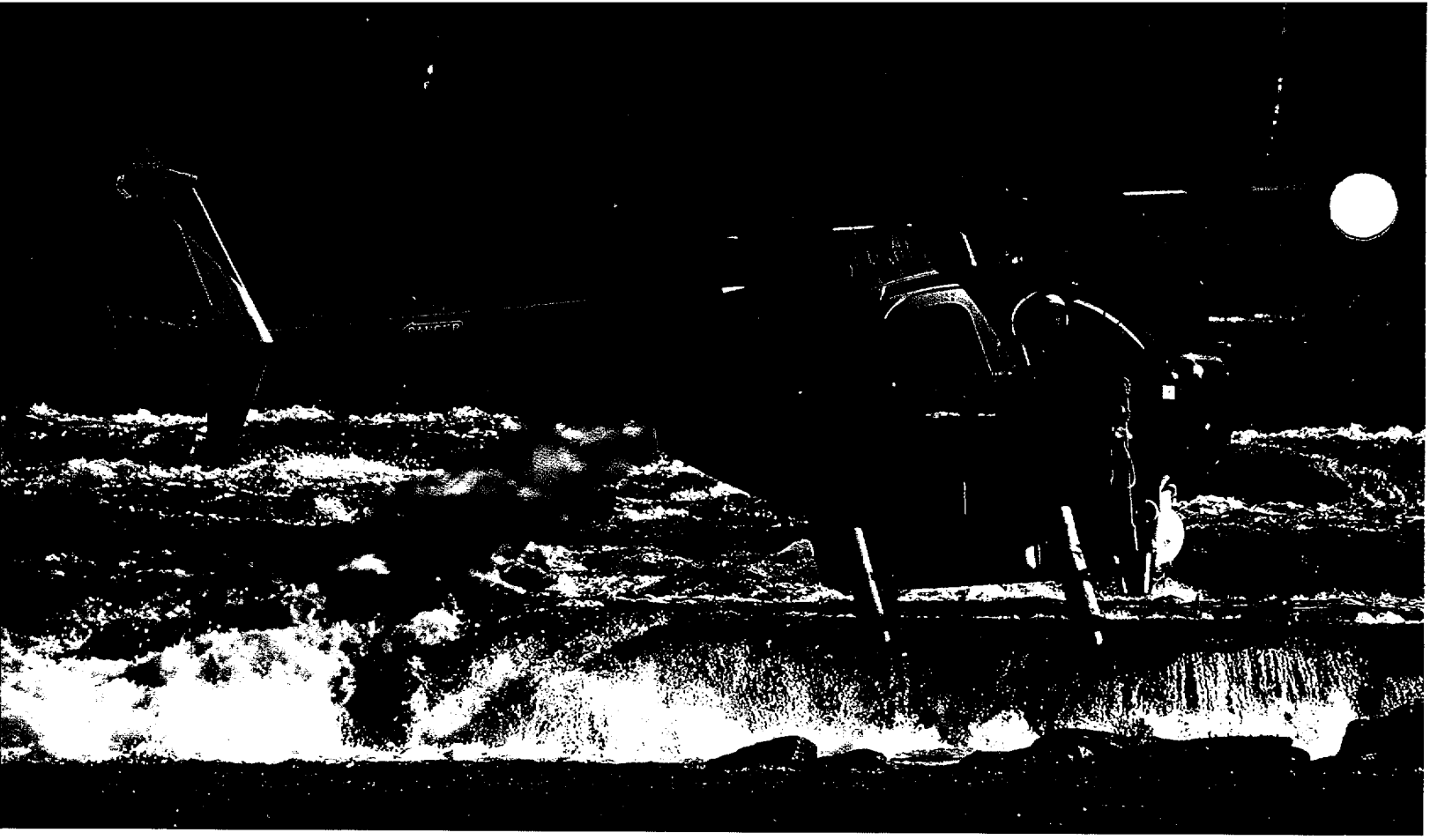
- Conduct periodic reviews and health and safety audits of all operations and activities of the Company to assure implementation of this policy, effective health and safety management practices and the identification of potential improvements, and report the findings and take timely corrective actions where appropriate.

Please contact enviro@homestake.com for more information on Environmental and other Health, Safety and Governmental Affairs publications.

USA CANADA AUSTRALIA ARGENTINA CHILE

HOMESTAKE MINING COMPANY

1999 Environment, Health & Safety Report



Highlights

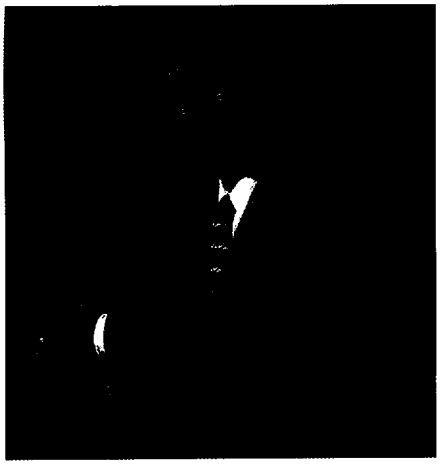
- Achieved best safety performance in the Company's history.
- Recorded no employee or contractor work-related fatal injuries.
- Reclaimed over 2,447 acres of disturbed mining land worldwide.
- Received final completion approval for 1,100 previously reclaimed acres.
- Performed six comprehensive environmental, health and safety and 15 reclamation and closure audits at operations and implemented corrective action.
- Received six environmental and five health and safety awards during the year.

Contents

About the Cover

The Eskay Creek Mine, located in northern British Columbia, is designed and operated to have minimal environmental effect while making significant social and economic contributions. Eskay Creek exemplifies Homestake's commitment to sustainable development worldwide.

top left
Water sampling at Hemlo. During winter or periods of high water, routine water monitoring is performed via helicopter.



Our Commitment

Homestake's long-standing commitment to environmental, health, and safety excellence brings real value to our many stakeholders.

equires effort, focus, and perseverance by all Homestake personnel. etrospect, while the Company has much to be proud of, it can and should do better. For this reason, environmental, health, and safety improvement continues each year to be a personal performance objective for me and each member of Homestake's staff.

The improvement of environmental, health and safety performance is achieved by establishing policies and goals, and focusing resources on their achievement. This report, Homestake's seventh, describes the Company's efforts to improve environmental, health and safety in 1999, addresses issues confronting the mining industry entering the 21st century, and presents Homestake's goals for the year 2000.

Homestake has long understood the critical importance of public support for its activities. Public support is earned through demonstrated commitment to responsible development, honest communication, and a priority on performance. Wherever in the world Homestake operates, it does so only with the consent of society.

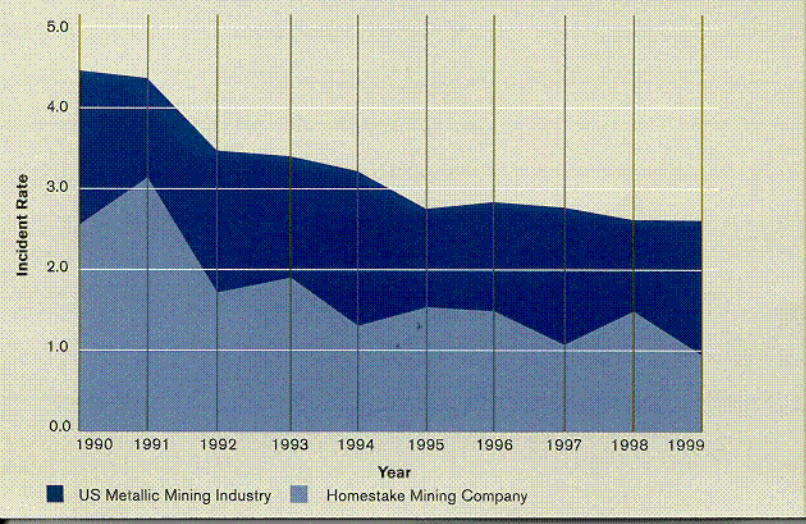
This Environment, Health and Safety Report is one element in Homestake's sustainable development strategy - striving to meet the needs of today without compromising the ability of future generations to meet their own needs. To achieve this objective, Homestake must maintain a responsive dialogue with its stakeholders - employees and their families, shareholders, members of the communities in which the Company operates, regulators, and environmental groups.

Rightfully, our stakeholders expect the best - and that is what we intend to deliver. Your comments on Homestake's performance, improvement strategies, and this report are important to us. Please take a moment to complete and return the enclosed reader response card.

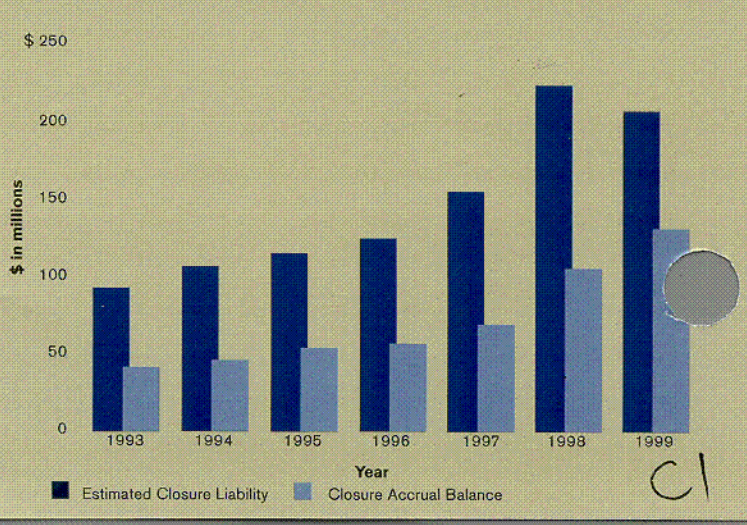
Jack E. Thompson

Chairman and Chief Executive Officer

Lost-Time Injury Incident Rates



Post-Closure Reclamation Liability and Accrual Status



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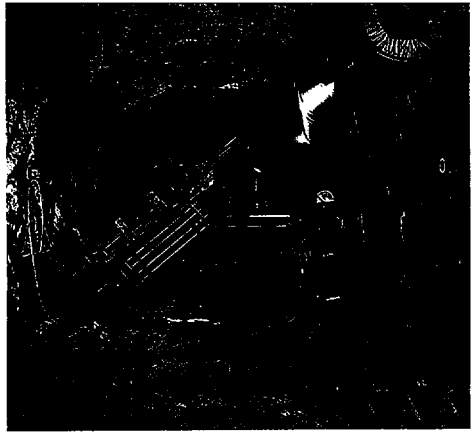
Top Left
Whitewood Creek, South Dakota



Right
Underground Production Blasthole Drilling at Hemlo

Our Performance

Homestake is proud to report that its 1999 safety performance, including contractors and joint venture operations, was the best in its history. This rformance reflects the commitment that Homestake and its contractors ve made to create an injury-free workplace. This commitment builds on the strength of programs, procedures, and efforts of previous years. Last year's performance continues a long trend of improvement (See Figure entitled Lost-Time Injury Incident Rates).

The Company continues to focus on improving its management of mine wastes, such as tailings and process solutions. All Homestake operations have made significant efforts to identify possible failure modes and to develop safeguards to prevent accidental releases of these materials.

Unfortunately, during 1999 these efforts were insufficient to prevent a release of tailings at Kalgoorlie Consolidated Gold Mines (KCGM) in Western Australia. Approximately 58,000 gallons escaped the site boundary. The tailings were promptly removed and the area was re-seeded. Flow monitoring and containment structures were immediately upgraded to prevent this from happening again. The incident has not resulted in regulatory action or fine, and long-term damage did not occur.

Mining's most visible environmental effect is the disturbance of land. Homestake has established strong programs and procedures to assess the environmental consequences of land disturbance, to concurrently reclaim areas affected by mining, and to fully provide for the ultimate reclamation and closure of all properties. Detailed reclamation/closure audits are regularly performed at all producing and nonproducing operations.[1] These audits ensure that reclamation and closure planning progress as the operation matures. They also identify more efficient operating procedures designed to accelerate reclamation and reduce closure costs.

Homestake accrues for reclamation and closure on the basis of units of production. Consequently, producing operations expense current reclamation while they accrue for post-closure costs. As shown in the figure (Post-Closure Reclamation Liability and Accrual Status), at the end of 1999 Homestake had accrued 65 percent of its estimated post-closure reclamation liabilities. Through careful planning, realistic estimation, and prudent financial measures, Homestake provides stakeholders assurance that reclamation liabilities are being appropriately addressed, and mined land will be reclaimed to other productive uses.

During 1999, Homestake settled the final issues related to natural resource damages associated with its discharge of tailings to Whitewood Creek in South Dakota beginning in the late 1800s and ending in 1977. Homestake's settlement of natural resource damage claims provides funds for environmental monitoring, restoration work, and public access to additional lands and water rights. The Company is pleased to have this issue resolved and finds the settlement fair. The total value of the settlement is approximately $6 million.

The sustainable development of the mining industry is vital and Homestake is determined to bring value to its stakeholders through continual environmental, health and safety improvement. This year, Homestake will continue to lead the industry by its performance.

Harold F. Barnes

Harold F. Barnes

Director - Environmental, Health, Safety and Government Affairs

1 See Homestake's Web page to review "Estimating Site Closure Costs - A Critical Tool For Reclamation Planning." This paper, which describes Homestake's reclamation/closure audit program, was presented recently at the Australian Minerals Council Environmental Workshop and at the Annual Meeting of the Society for Mining, Metallurgy, and Exploration.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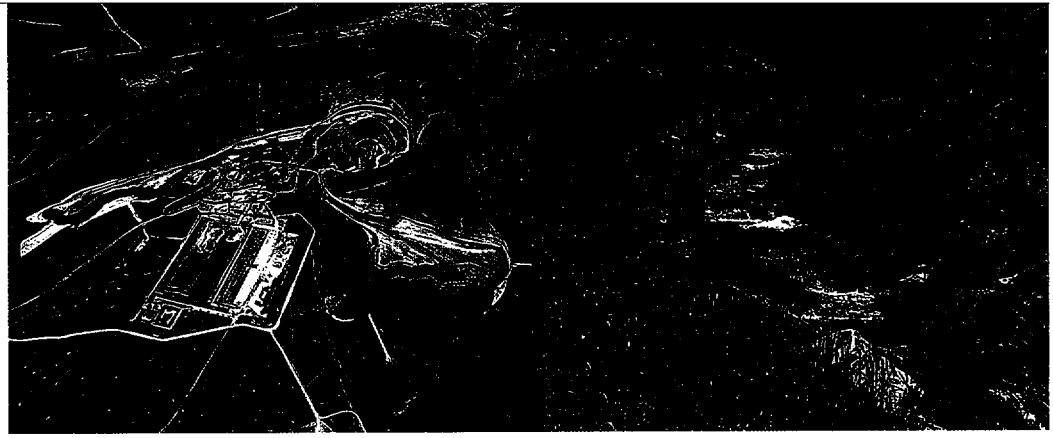
Training and employment at Homestake operations provide opportunities for local workers.

top right
The Ruby Hill Mine was recognized in 1999 by the State of Nevada and the US Bureau of Land Management for its innovative agglomeration process that eliminated the need for a tailings disposal facility.

far right
Homestake removed 270,000 cubic yards of tailings from the orphaned Wasp and Bismarck mines in S. Dakota that threatened adjacent streams and wetlands.



Homestake's Commitment to Sustainable Development

Homestake has long understood that its success is determined by numerous factors in addition to financial profit. As early as the late 1800s Homestake built hospitals and libraries for employees and their families. More recently, Homestake created a wildlife preserve and field station for environmental studies at the McLaughlin mine. Today these efforts fall under the umbrella of sustainable development, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs!" These efforts include the preservation of valuable wildlife habitat and improving the quality of life in the communities where the Company operates. Homestake's business is guided by six principles of sustainable development:

Resource Conservation: As a producer of the most recycled material on earth, Homestake strives to demonstrate a consistent conservation ethic with respect to the resources and materials used in the production of gold. Conservation, recycling, and material substitution programs are in place at all Homestake operations. These programs have resulted in significant savings associated with fuel and power costs and reductions in waste disposal requirements and costs. Conservation efforts are regularly reviewed and updated.

Resource Stewardship: Homestake's operations are designed and operated to avoid significant environmental effects or minimize and mitigate unavoidable effects. This focus has led to technical innovations and cost savings over the years. Recently, the Ruby Hill mine in Nevada implemented a process whereby tailings are mixed with low-grade ore and cement to form ore pellets (agglomerates). This agglomerated ore is then heap leached, thereby eliminating the need for a tailings disposal facility and significantly reducing the total land area affected by this mining operation.

Reclamation: Mining is a temporary land use that should not result in long-term environmental or land productivity losses. Homestake has a long history of returning mined lands to other productive uses. Where effects are unavoidable, measures such as wildlife habitat improvement mitigate for those losses. During the past ten years, Homestake has expanded its efforts to include the reclamation of areas disturbed by others. An example is the Wasp and Bismarck mines in South Dakota, mined by other companies, were reclaimed following the excavation of over 270,000 cubic yards of tailings. The tailings were placed in a permitted disposal facility. Reclamation included the creation of new wetlands and riparian habitat along the creek, preserving the historic record of the mines - including old equipment, for historical interest - and the creation of a stable and productive landscape.

Management Excellence: The public's willingness to support mining depends upon the industry's ability to demonstrate its commitment to protect employee and public safety, the environment, and to make a positive contribution to society. This commitment must be open to objective scrutiny. As an example, the Ruby Hill mine has delivered on its promises. In addition to being recognized by the State of Nevada for its innovative reclamation efforts, Ruby Hill achieved the best safety record in the Company, with no reportable injuries among employees or contractors during 1999.

Social Contribution: Homestake's activities are designed to contribute positively to the quality of life today and in the future. Operations provide careers for many local people, of course, but others in the community benefit as well from the services, infrastructure and improvements that Homestake operations generate. For example, The Eskay Creek mine, located on lands claimed by the Tahltan Nation to be within their traditional territory, encourages members of the Tahltan Nation to apply for employment. The Mine provides training and job opportunities to build meaningful careers that promise rich rewards for the Tahltan Nation for years to come. The mine also donated over $336,000 for the development of the Telegraph Creek Recreational Center in 1999.

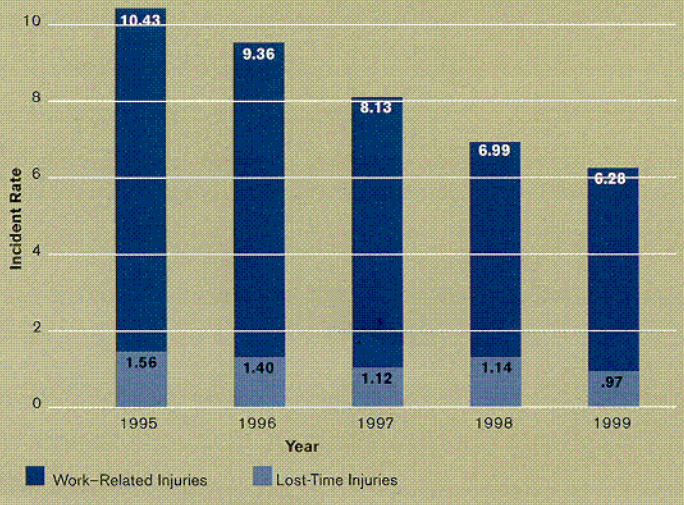
Another example is Homestake's KCGM joint venture operation in Kalgoorlie, Western Australia, where labor and financial support is provided for an aboriginal mining training program, schools, medical equipment, scholarships, and preservation of items of historical interest.

Communication: Sustainable development relies on open, candid, constructive, and responsive dialogue between the Company and its stakeholders. Homestake is committed to maintaining two-way communications with all its stakeholders. This Environment, Health and Safety Report is one vehicle for communications. Individual operations also hold regular community meetings to inform the public of their activities and hear their comments and recommendations. Homestake held over 21 meetings worldwide during 1999 to discuss environmental issues.

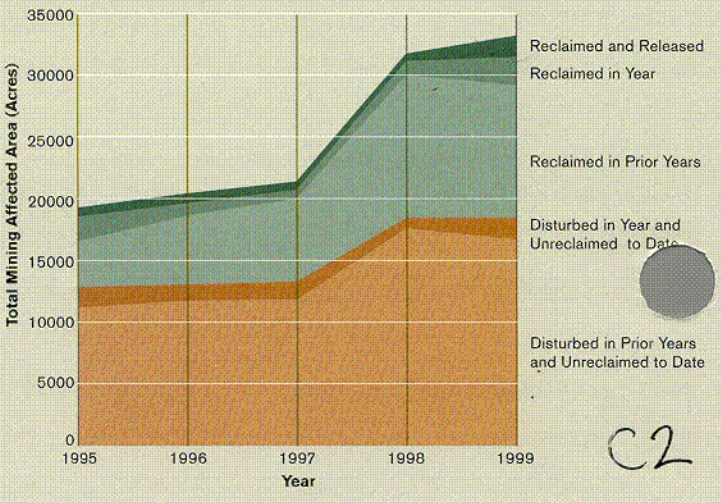
Homestake's mines are designed to be an important foundation for sustainable development. By focusing on positively contributing to a "triple bottom line" (economic production, environmental protection, and social development), Homestake will continue to contribute to the quality of life wherever it operates.

1 World Commission on Environment and Development (the Brundtland Commission), Our Common Future, Oxford University Press, 1987.

Work-Related and Lost-Time Injury Performance



Reclamation Performance



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Publicly stated goals and performance reporting are a key part of management's efforts to create and maintain a culture supportive of continuous environmental, health and safety improvement in all business activities.

top left
Biological monitoring of fishery health at Hemlo documents no detrimental effect by mining operations.

Goals and Results

Compliance

Homestake received 152 regulatory actions for health and safety issues during the year. Fines totaled $3,662 for health and safety violations in 1999, a 35 percent reduction compared with 1998. Regulatory actions and fines were received primarily for minor issues such as record maintenance and housekeeping.

The Company also received eight regulatory actions for environmental issues in 1999. Six were received at the Eskay Creek mine for minor exceedances of water discharge limits and plastic waste in their landfill. The Williams mine and the closed Snip mine each received one for minor exceedance of water discharge limits. No fines were assessed or are expected as a result of these actions. Measures have been implemented at all facilities to prevent recurrence of these incidents.

In addition to the exceedances of discharge limits discussed above, Homestake's closed Nickel Plate mine in British Columbia exceeded its discharge limits five times as a result of unusual climactic conditions. All exceedances related to elevated sulfate levels in the receiving waters and were promptly corrected with no detrimental effect. Homestake operations discharged over 4.5 billion gallons of treated water from 30 permitted locations worldwide during the year.

Air emission limits were not exceeded at any of the 434 permitted emission points at Homestake operations during 1999.

Homestake identified during an audit that environmental monitoring and reporting were deficient at the Homestake mine. Information was provided to regulatory agencies and correction implemented to prevent recurrence.

Homestake has reestablished for 2000 its goal for compliance: Achieve full compliance with all regulatory obligations and commitments evidenced by no environmental, safety or health regulatory actions, no exceedance of regulatory discharge or emission limits and no compliance audit findings.

1 Includes the Pinson and Peakhill mines which ceased production prior to the end of 1999.

Improved Safety and Health Performance

During 1999 there were no fatal injuries to Homestake, contractor, or joint-venture employees. Homestake's 1999 lost-time injury rate for employees and contractors was 31 percent lower than in 1998 and was the lowest rate in Homestake's history. The Company's goal of no lost-time injuries was achieved at six producing operations during the year.[1]

Homestake's 1999 work-related injury rate for employees and contractors was reduced 10 percent compared to 1998. The Company's goal to reduce the rate of all injuries at least 15 percent was achieved at nine operating units during the year. Two producing operations had no work-related injuries in 1999.

The severity rate of work-related injuries during 1999 was 58, compared to 114 in 1998, nearly a fifty percent improvement. Homestake's goal to reduce the severity rate of work-related injuries at least 12 percent was achieved at nine operating units during the year.

Homestake's safety and health goals for 2000 are: No work-related fatal injuries, no lost-time injuries, 10% reduction in work-related injuries, and 10% reduction in the severity rate for work-related injuries.

Improved Environmental Performance

One spill of tailings escaped site containment and the property boundary during 1999. The spill occurred at Homestake's KCGM joint venture when a tailings line ruptured and spilled over the containment berm. In addition to removing all spill materials, KCGM upgraded flow monitoring and containment structures to prevent recurrence.

A focused assessment of the adequacy of tailings and process solution management systems was performed at two operations during 1999, and corrective measures were implemented to reduce the potential for uncontrolled releases.

Homestake's environmental performance goals for 2000 are: No chemical spills outside site containment systems, reductions in discharges and emissions per production unit, and regular evaluation and improvement of process solution management systems.

top right
A large bear population resides in harmony with the Eskay Creek mine in northwestern British Columbia. Reclaimed areas are favorite forage areas for the bears in the spring.

Reduced Environmental Effects

In 1999, Homestake reclaimed 2,360 acres at producing and non-producing operations, plus an additional 87 acres of orphaned mines, greatly exceeding its goal of 1,500 acres. Additionally, 1,100 previously reclaimed acres received final completion approval from the appropriate authority, exceeding Homestake's goal of 1,000 acres.

Wildlife mitigation and habitat enhancement strategies have been put in place at all operations. During 1999, there were 21 chemical-related wildlife mortalities, a 99 percent reduction compared to 1998. The largest number of mortalities occurred at the Peak Hill joint venture[1] in Western Australia.

Homestake's goals in 2000 for minimizing environmental effects are: To reclaim 2,000 acres of mining-disturbed land, to obtain final completion approval for 1,000 previously reclaimed acres, the expansion and enhancement of wildlife mitigation and habitat enhancement strategies at each operating mine, and no chemical-related wildlife mortalities.

Improved Sustainable Development

Conservation and recycling programs were in place at all operations during 1999. Progress towards reducing the use of resources per unit of production will be reported in next year's report.

While documentation of each operation's environmental, social, and financial contributions was improved during 1999, this area requires further development to achieve Homestake's reporting objectives. Action plans to document the Company's environmental, social, and financial contributions are being implemented to achieve this objective over the next two years.

Homestake's year 2000 goals for improved sustainable development are: Improved conservation and recycling per production unit, improved documentation and reporting of the Company's environmental, social and financial contribution, and formalization of policies concerning community relations and indigenous peoples.

Oversight

Homestake conducted six planned environmental, health and safety audits during 1999. In addition, 15 reclamation and closure audits were performed, exceeding the Company's goal of six. Arthur D. Little performed a third-party evaluation and review of the corporate environmental, health and safety audit program. The result of that review is summarized on page 24.

Homestake's goal to maintain an independent environmental, health and safety oversight system that assures the effectiveness of management systems at each operating unit will be evidenced in 2000 by: Performance of six environmental, health and safety audits, four reclamation/closure audits, timely and effective response to audit findings, follow-up verification of audit response, and independent review of the audit program.

Improved Stakeholder Communications

An audit was conducted during 1999 to assess the quality of information collected for inclusion in the Environment, Health and Safety Report. While measures were taken to improve the quality and relevance of reporting information, full implementation of improvements will require significant effort over the next two years.

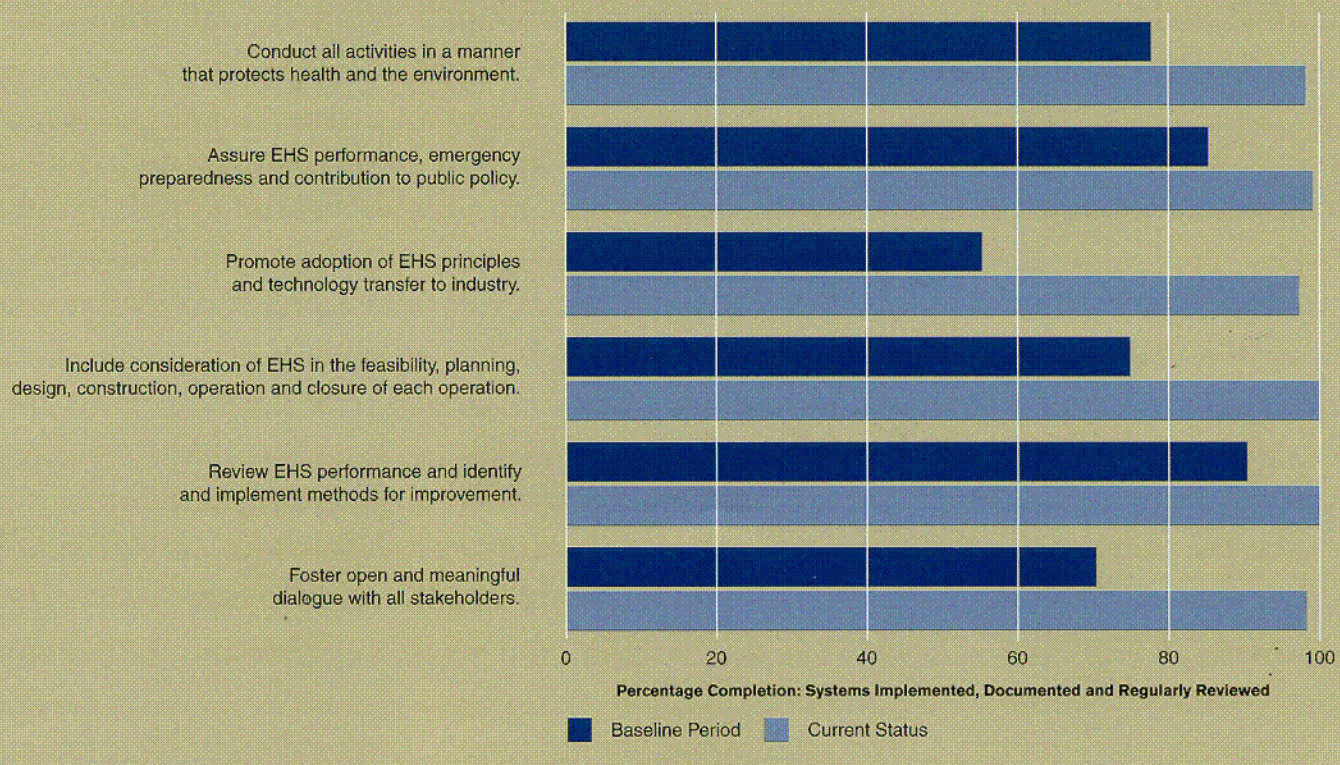
Homestake's communications goals for 2000 are: Independent evaluation of the quality and candor of stakeholder environmental, health and safety communications, and implementation of communications improvements.

Benchmarking

Homestake updated its self-assessment of its environmental, health and safety management systems as compared with international standards. That assessment, presented in the adjacent figure, concludes that Homestake's EHS management systems are in line with international standards. **Homestake's 2000 benchmarking goal is: Conduct an independent evaluation of the Company's EHS management systems compared with other industry leaders and the criteria of international standards organizations.**

1 Peak Hill is operated by North Limited.

Environmental, Health and Safety Management System Status



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Canada National Pollutant Inventory Program (NPRI)
1998 Reported Releases (pounds)

Operation:	David Bell			Eskay Creek			Nickel Plate			Snip			Williams		
Substance:	1997	1998	% change	1997	1998	% change	1997	1998	% change	1997	1998	% change	1997	1998	% change
Ammonia[2]	32,322	15,357	-52.5	None[1]	None[1]		None[1]	132		None[1]	None[1]		42,196	22,999	-45.5
Cobalt & its compounds	None[1]	None[1]		None	None		None	1,181		None	None		None[1]	None[1]	
Copper & its compounds	None	None		None	None		None	7		None	None		None	None	
Cyanides (ionic)[3]	17	14	-17.9	None	None		None	53		None	None		25	9	-64.6
Nitrate [ionic at pH≥6][4]	379,375	158,364	-58.3	None	None		None	683		None	None		363,426	271,330	-25.3

1) All table references to 'None' mean that the "manufacture, process, or use" reporting threshold of 22,040 pounds (10,000 kgs) was not met for NPRI reporting.
2) Ammonia releases at the David Bell and Williams operations are permitted by discharge permit at 20 ppm; no exceedances were reported in 1997 or 1998.
3) Cyanide releases at the David Bell and Williams operations are permitted by discharge permit at 2 ppm; no exceedances were reported in 1997 or 1998.
4) Discharge limit has not been set for nitrate at David Bell or Williams.

US Toxic Release Inventory Program (TRI)
1998 Reported Releases (pounds)

Operation Releases to:	Homestake				McLaughlin				Pinson				Ruby Hill			
Substance:	Air	Water[1]	Land[2]	Managed on-site[3]	Air	Water	Land[2]	Managed on-site[3]	Air	Water	Land[2]	Managed on-site[3]	Air	Water	Land[2]	Managed on-site[3]
Ammonia	25,096	20			45,086											
Antimony					1		128,592									
Arsenic	4,094	307	9,888,218	542,954	9		942,603									
Chromium							28,226									
Copper	64	225	359,171		1		65,561									
Cyanide Compounds		717	2[3]	3,064,554			100,925	5,682,698			154	49,163				63,296
Hydrogen Cyanide	38,079															
Lead							439,575									
Manganese Compounds	1,271	235	6,168,331		2		26,970									
Nickel Compounds					6		698,936									
Nitrate Compounds		205,571	773				870,957				1,954				1,000[4]	
Nitric Acid								671,075					1,041			185,068
Propylene									653							
Silver					1		53,699									
Zinc Compounds					5		533,792									
TOTALS	68,604	207,075	16,416,495	3,607,508	48,111		3,889,836	6,353,773	653		2,108	49,163	1,041		1,000	248,364

1) Reported releases to water at the Homestake Mine are permitted under an approved water discharge permit.
2) All releases to "land" or "managed on-site" are located within permitted tailings disposal facilities or rock disposal sites, or are otherwise managed & contained within the ore processing systems.
3) Reported release was associated with a spill to land involving 2 pounds of cyanide compound at the Homestake Mine; the spill area was cleaned up.
4) Reported release is associated with use of nitrate fertilizer for concurrent revegetation of permitted rock disposal site.

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The tailings disposal facility at the McLaughlin mine is designed to have no discharge to surface or ground water.

Environmental Release Reporting

Homestake is committed to open and responsive dialogue concerning its environmental, health and safety management. This commitment includes periodic open meetings in the communities near Homestake operations, as well as the publication of environmental discharge and emission information in this annual report (pages 20-21). In addition, the Company is also required by regulation in the US, Canada, and Australia to report information about its releases[1] to the environment. This section supplements those required reports in an effort to make that information more useful and available to Homestake's stakeholders.

Common Misconceptions

While release reporting is required by legislation such as the Community ght to Know Act in the US and the Canadian Environmental Protection Act, these reports do not provide information on the potential risks or environmental effects associated with a release. Risk evaluation requires information on both concentration and potential exposure pathways, neither of which are included in these reports. Environmental release concentrations and exposure pathways are the focus of the permitting process and result in specified facility design and operating requirements such as the design of containment structures, specific discharge limits, and material handling requirements to prevent exposure risks and environmental effects.

Canada

In Canada, Homestake has reported under regulations of the National Pollutant Release Inventory (NPRI) program since its inception in 1993. NPRI reporting is triggered by the manufacture, processing, or use of an NPRI listed substance in amounts greater than 22,040 pounds (10,000 kilograms). Once the useage trigger is exceeded, each facility is required to report the amount of that substance released from permitted discharge points. For the 1998 reporting year, Homestake's Canadian operations reported releases of ammonia, cobalt, copper, cyanides, and nitrate. The Company had no incidents of these releases exceeding permitted discharge limits. In a number of cases, even though the reporting trigger was exceeded, there was no release of the substance. The Company remains committed to reducing all discharges and has made significant strides as shown in the table comparing the 1997 and 1998 reporting years. Reporting for 1999 is due in June 2000 and will be included in 'omestake's 2000 Environment, Health, and Safety Report.

US

In the US, the Environmental Protection Agency's (EPA) Toxic Release Inventory (TRI) reporting program was expanded in 1998 to include the mining industry. Homestake filed its first reports under this program for the 1998 reporting year on July 1, 1999. While there are similarities between the NPRI and TRI reporting programs, the TRI program reports significantly higher release totals because a release is defined by EPA to include listed substances that are placed into permitted tailings ponds, rock disposal sites, and managed sites such as heap leach pads. It is estimated that 80 to 95 percent of the reported releases from a typical mine are naturally occurring substances that are not discharged, but are simply relocated during mining and processing. Because TRI reporting includes large quantities of materials placed in rock disposal sites, tailings ponds, and other permitted disposal facilities, the mining industry will not be capable of significantly reducing the quantities "released" except when mining operations are reduced.

It is important to note that, contrary to its name, the Toxic Release Inventory reports more than "toxics." Included are substances such as "nitrate compounds." Consequently, some of the components of ordinary fertilizer used in the revegetation of disturbed lands are required to be included within the TRI report as a release .

Australia

The Australian National Pollutant Inventory (NPI) reporting program is similar to the Canadian NPRI program. Because the program is just being phased in, complete NPI annual reporting data for 1998 is not available for Homestake's Australian operations and therefore not included here. A full listing of 1999 releases for all Homestake's Australian operations will be presented in next year's EHS Annual Report.

Conclusion

Open and responsive communication with Homestake's stakeholders is a fundamental business practice of the Company. In addition to taking whatever steps are required to ensure the protection of the public, employees, and the environment, Homestake will continue to discuss the nature and risks associated with its environmental releases. Key to Homestake's risk reduction strategy is a continued focus on conservation and management excellence - components of the Company's principles of sustainable development.

To review additional information concerning the NPRI, TRI and NPI regulatory reporting programs and Homestake's environmental release information, please visit the Environmental, Health and Safety section of the Company's web site, http://www.homestake.com

1 The term "release" is used herein as defined by the relevant regulatory jurisdiction.

Operations Overview

Homestake Mining Company has mining operations and exploration programs in Australia, Canada, Chile, and the United States. In addition to these locations, the Company has active exploration programs in Argentina. Homestake operations and joint ventures produced a total of 3,534,450 gold equivalent ounces during 1999. Homestake's share of gold production was 2,389,960 gold equivalent ounces. Total Homestake assets at the end of 1999 were US$1,634,469,00 and revenues for the year were $748,125,000. Over 5,200 people were directly employed at Homestake mines, offices, and exploration sites worldwide during 1999. Based upon research that shows that

Operations	Manager and Address	Description of Operations
Agua de la Falda 51% owned; operated by Homestake	Felipe Nunez Minera Homestake Chile, S.A. Nueva Tajamar #481 Torre Sur, Oficina 2101 Las Condes Santiago, Chile	Located 600 miles north of Santiago, Chile, at an elevation of 12,500 feet. Underground mine operations began in 1997 following completion of surface mining at the adjacent El Hueso mine. Ore is processed by heap leaching and milling at the El Hueso facilities.
Darlot 100% owned and operated by Homestake	Barry Mitchell P.O. Box 127 Leonora, WA 6438 Australia	Located 70 miles north of Leonora, Western Australia. Underground mine operations began in 1996 following completion of surface mining. Ore processing capacity by milling and CIP leaching is about 700,000 tons per year. Approximately 30% of recovered gold reports to a gravity circuit.
Eskay Creek 100% owned and operated by Homestake	Garry Biles Homestake Canada Inc., No. 1 Airport Way Smithers, British Columbia V0J 2 N0 Canada	Located 51 air miles north of Stewart, British Columbia. Underground mine operations began in 1995. The mine produces both direct ship ore and concentrates that are sold to third-party smelters and refineries.
Hemlo 50% owned; operated by Teck-Corona and Williams Operating Corporations	Peter Rowlandson Williams Operating Corp. P.O. Bag 500 Marathon, Ontario P0T 2E0 Canada	Located 217 miles east of Thunder Bay, Ontario. Hemlo includes the Williams and David Bell mines, primarily underground operations that began in 1985. Surface mining at Williams also produces ore and backfill for underground operations. Ore is processed at the Williams mill, which is rated for 8,000 tons per day but has demonstrated efficient production above this level. Cyanidation and CIP leaching are the major processes used at Williams.
Homestake 100% owned and operated by Homestake	Bruce Bried 630 East Summit Lead, South Dakota 57754-1700 U.S.A.	Located in Lead, South Dakota. Mining operations began in 1876. Surface mining was completed in 1998; underground mining continues. Ore processing capacity is 7,400 tons per day through a combination of gravity, CIP, and vat leaching.
KCGM 50% owned; operated by Kalgoorlie Consolidated Gold Mines	John Shipp KCGM Private Mail Bag 27 Kalgoorlie, WA 6430 Australia	Located adjacent to Kalgoorlie-Boulder, Western Australia, approximately 300 miles northeast of Perth. Mining began in the area in 1893 and Homestake acquired its original joint venture interest in 1975. Ore is mined using surface and underground methods. Ore processing capacity is 12.7 million tons per year through milling, CIP and refractory sulfide flotation. Sulfide concentrates are processed by the Gidji roaster complex, 12 miles north, which has an annual capacity of 420,000 tons.
Lawlers 100% owned and operated by Homestake	Andrew Stocks PMB 47 Leinster, WA 6437 Australia	Located 75 miles northwest of Leanora, Western Australia. Mining began in the area in the mid 1890s. The current mining operation began in 1986. In 1998, surface mining concluded and underground mining commenced. Ore processing capacity is 660,000 tons per year through gravity and CIP leaching.
Marigold 33% owned; operated by Glamis Gold Ltd.	Bob Bryson P.O. Box 9 Valmy, Nevada 89438 U.S.A.	Located 40 miles southeast of Winnemucca, Nevada. Surface mining began in 1989. Ore is processed by heap leaching.
McLaughlin 100% owned and operated by Homestake	Pat Purtell 26775 Morgan Valley Road Lower Lake, California 95457 U.S.A.	Located 15 miles east of Clear Lake, California. Surface mining began in 1985. Since decomissioning of the autoclave and flotation circuits in 1996, ore is processed by direct cyanide and CIP leaching.
Plutonic 100% owned and operated by Homestake	Michael Hulmes PMB 46 Meekatharra, WA 6642 Australia	Located 110 miles northeast of Meekatharra, Western Australia. Mining operations began in 1990. Ore is mined with both surface and undergound methods. Ore processing capacity is 3.0 million tons per year by milling and leaching.
Round Mountain 25% owned; operated by Echo Bay Mines Ltd.	Steve Mueller P.O. Box 480 Round Mountain, Nevada 89045 U.S.A.	Located 60 miles north of Tonopah, Nevada. Surface mining operations began in 1977. While most of the ore is heap leached, higher-grade sulfide ore is processed through an 8,000 ton per day mill containing gravity and cyanide leaching circuits.
Ruby Hill 100% owned and operated by Homestake	Tim Janke P.O. Box 676 Eureka, Nevada 89316 U.S.A.	Located one mile northwest of Eureka, Nevada. Surface mining operations began in 1997. Higher-grad ore is ground in a ball mill, leached and filtered before it is agglomerated with crushed low-grade ore, and heap leached.

*Production of gold or equivalent

**Number of personnel is the average for the year

†Production is reported on a 100% basis

each mining job indirectly supports at least 1.25 other jobs, approximately 6,500 additional jobs are supported by Homestake's business activities. Homestake paid $25,212,000 in taxes during 1999.

More detailed descriptions of each operation, along with financial information, can be found in Homestake's Annual Report, 10-K and other documents available either on Homestake's web page **http://www.homestake.com**, or from one of these Homestake offices.

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1998 Production[1]	Personnel**	Community Affairs
318,000 tons of ore processed 47,800 ounces produced*	Approximately 58 employees and 250 contractors including two health and safety specialists and one environmental specialist	Located in a remote area of northern Chile, mine employees are accommodated at a Homestake camp. In addition to supporting the local economy through the purchase of goods and services, the mine supports education programs at two technical schools.
760,000 tons of ore processed 113,100 ounces produced*	Approximately 92 employees and 210 contractors including two health and safety specialists and one environmental specialist	Located in a remote area of Western Australia, the mine is a fly-in fly-out operation with all personnel accommodated at a Homestake camp. Homestake owns and manages pastoral leases covering 600,000 acres on which the mine is located. The mine supports the local communities through the purchase of goods and services and contributions to support the Royal Flying Doctor Service and Princess Margaret Hospital for Children.
193,000 tons of ore processed 558,400 ounces produced*	Approximately 117 employees and 120 contractors including one health and safety specialist and one environmental specialist	Located in a remote area of northwestern British Columbia, the mine is a fly-in fly-out operation with all personnel accommodated at a Homestake camp. The mine is located on First Nations' land claims. Approximately 35 percent of mine employees are members of the Tahltan Nation and several service contracts have been entered into with the Tahltan Nation Development Corporation. The mine supports economic and education programs for the Tahltan Nation through employment, apprenticeship programs, and contributions to local community improvement projects.
3,170,000 tons of ore processed 588,000 ounces produced*	Approximately 830 employees and 133 contractors including nine health and safety specialists and one environmental specialist	Employees live in adjacent communities such as the town of Marathon. The mines provide direct and indirect support to the regional economy through the purchase of a variety of goods, services, and contributions to local community activities.
1,249,000 tons of ore processed 212,700 ounces produced*	Approximately 359 employees and 127 contractors including three health and safety specialists and three environmental specialists	Employees live in adjacent communities. The mine has a long history of supporting local community programs and activities. Surrounded by the communities of Lead and Deadwood, the mine maintains an interactive center that attracts thousands of visitors a year and provides tours of the mining facilities. The mine works with local groups to preserve and document the rich mining history of the area. During 1999 the mine made significant donations of land and equipment to assist local schools, churches, senior rehabilitation, and civic activities.
11,700,000 tons of ore processed 720,000 ounces produced*	Approximately 389 employees and 671 contractors including eight community, safety, and environmental specialists	Employees live in adjacent communities. The mine supports many programs and activities within the Kalgoorlie-Boulder community including educational facilities and programs, civic activities, and sporting facilities. During 1999 this included the donation of the Hannans North Tourist Mine to the local community. To reduce the safety hazards associated with historic mining, the operation, for the past ten years, has had a program of closing orphaned mine openings and removing associated wastes. During 1999, this included the reclamation of 50 acres and expenditure of over $807,000.
669,000 tons of ore processed 104,300 ounces produced*	Approximately 73 employees and 161 contractors including two health and safety specialists and one environmental specialist	Located in a remote area of Western Australia, the mine is a fly-in fly-out operation with all personnel accommodated at a Homestake camp. The mine supports the local communities through the purchase of goods and services, as well as contributions to the Royal Flying Doctor. The mine, through a partnership with a Perth high school, supports the education and awareness of students and faculty about the mining industry.
3,549,000 tons of ore processed 74,100 ounces produced*	Approximately 98 employees including one environmental, health and safety specialist	Employees live in nearby communities such as the town of Winnemucca. The mine supports the local community through the purchase of goods and services, as well as contributions and support for sporting activities and emergency response.
2,834,000 tons of ore processed 121,500 ounces produced*	Approximatley 95 employees and 9 contractors including two health and safety specialists and three environmental specialists	Employees live in nearby communities such as the town of Lower Lake. The mine supports many community programs and activities, with primary focus towards educational and emergency support services. The mine will ultimately become part of a larger ecological field station and reserve managed by the University of California.
3,344,000 tons of ore processed 236,400 ounces produced*	Approximately 130 employees and 326 contractors including two health and safety specialists and one environmental specialist	Located in a remote area of Western Australia, the mine is a fly-in fly-out operation with all personnel accommodated at a Homestake camp. Homestake owns and manages the Three Rivers pastoral station comprising 1,200,000 acres on which the mine is located. The mine supports the local communities through the purchase of goods and services, as well as providing emergency assistance in the event of accidents on the Great Northern Highway.
52,908,000 tons of ore processed 542,000 ounces produced*	Approximately 599 employees and 78 contractors including six health and safety specialists and five environmental specialists	Most employees live in the nearby mine-built subdivision of Hadley in the town of Round Mountain. The mine supports the adjacent communities to become economically sustainable. The mine donated community services and infrastructure, including land and remodeling supplies, for a new medical clinic in 1999.
22,000 tons of ore processed 123,800 ounces produced*	Approximately 90 employees and 10 contractors including two health and safety specialists and one environmental specialist	Most employees live in nearby communities such as the town of Eureka. The mine supports community development through the purchase of goods and services, as well as contributions and support for local schools, housing, and medical services. During 1999, this included the donation of a portable defibrilator to emergency medical services.

Health and Safety Management

Operations	Year	Safety Management: Health & Safety Management Expenditures (US$)	Safety Management: Health & Safety Capital Expenditures (US$)	Safety Management: Number of Regulatory Actions	Safety Management: Fines Paid (US$)
Agua de la Falda	1999	37,000	1,200	0	0
	1998	25,000	0	0	0
Darlot	1999	170,000	60,000	0	0
	1998	150,000	28,000	0	0
Eskay Creek	1999	277,200	265,500	45	0
	1998	289,400	0	43	0
Hemlo	1999	1,630,200	0	16	0
	1998	699,000	0	20	0
Homestake	1999	1,391,800	0	34	1,049
	1998	800,000	0	42	2,988
KCGM	1999	99,000	0	7	0
	1998	180,000	-	0	0
Lawlers	1999	14,900	105,500	0	0
	1998	269,900	0	0	0
Marigold	1999	82,500	2,500	6	407
	1998	75,300	-	5	440
McLaughlin	1999	175,800	0	26	827
	1998	183,400	0	2	205
Plutonic	1999	113,300	12,000	0	0
	1998	249,700	41,300	0	0
Round Mountain	1999	817,400	0	8	1,214
	1998	690,800	0	19	689
Ruby Hill	1999	111,700	9,800	8	165
	1998	244,200	64,400	7	411
Nonproducing Operations[1]	1999	176,300	0	2	0
	1998	502,000	102,300	1	55
TOTAL COMPANY	1999	5,097,100	456,500	152	3,662
	1998	4,358,700	236,000	139	4,788

1 Includes mining operations closed prior to the end of 1999.

Safe work environments are critical for the protection of employees and for efficient and productive operations. Employee participation in safety and health programs at each operation is a critical component of management efforts and is actively encouraged.

Health and safety performance data is regularly reviewed by the management of each operation as well as by senior management.

Each month the performance of all operations is reported and reviewed at the senior management level and neccessary corrective actions implemented. Responsible senior managers review safety performance during their on-site visits to each operation. During 1999, Homestake's safety performance continued to improve and was the best performance in the Company's history.

Training				Safety Statistics			
Employee Health and Safety Training Hours	Contractor Health and Safety Training Hours	Emergency Response Training Hours	Number of Fatalities	Lost-Time Incident Rate	All-Injury Incident Rate	Injury Severity Rate	External Awards and Recognition
1,000	4,000	60	0	0.97	0.97	28	
480	6,096	1,500	0	1.76	1.76	67	Inter-American Council on Safety
654	803	7,128	0	0.99	5.63	33	
-	-	1,491	0	1.04	6.26	33	IFAP Award
1,254	798	240	0	0.83	8.51	71	John T. Ryan Award
600	720	576	0	2.48	12.00	77	John T. Ryan Award
18,651	1,856	5,573	0	1.85	4.11	103	
11,207	2,395	5,793	0	2.48	12.00	77	Levitt Award
3,280	1,263	8,328	0	1.85	4.11	103	
3,200	800	1,457	0	1.42	4.26	501	
5,780	7,140	544	0	0.74	12.50	103	
14,855	16,980	9,682	0	0.98	9.20	87	
2,310	933	1,450	0	0	5.12	0	
-	-	432	0	0.83	6.20	104	
1,265	8	174	0	0	2.03	0	Nevada Mining Association Award
1,044	2	174	0	0	4.25	5	
2,320	137	200	0	2.74	6.40	24	
2,324	446	143	0	0.83	1.65	17	California Mining Association Award
3,269	7,052	5,616	0	0	1.20	0	
5,200	8,000	11,520	1	1.47	1.77	248	
32,200	1,056	1,920	0	1.33	3.99	56	Nevada Mining Association Award
31,720	1,848	3,384	0	0.58	2.92	21	
2,500	288	932	0	0	0	0	
2,461	263	838	0	0.79	4.76	64	Sentinels of Safety Award
332	730	2,365	0	1.76	6.35	36	Holmes Award - Pinson Mine New Mexico Mining Assoc. Award - Grants Mill
9,430	4,018	6,558	0	4.68	12.99	16	New Mexico Mining Assoc. Award - Grants Mill
74,815	26,064	34,530	0	0.97	6.28	58	
82,521	41,568	43,548	1	1.41	6.98	114	

Environmental Management

Operations	Year	Environmental Management Expenditures (US$)	Environmental Capital Expenditures (US$)	Number of Regulatory Actions	Fines Paid (US$)	Number of Chemical-Related Wildlife Mortalities
		Environmental Management				
Agua de la Falda	1999	6,400	0	0	0	0
	1998	80,000	0	0	0	0
Darlot	1999	113,000	5,000	0	0	0
	1998	139,000	0	0	0	0
Eskay Creek	1999	478,100	86,300	6	0	0
	1998	427,700	363,700	4	0	0
Hemlo	1999	1,323,900	3,388,200	1	0	0
	1998	3,472,700	2,190,000	0	0	0
Homestake	1999	1,100,000	650,000	0	0	0
	1998	1,000,000	27,300	1	200,000	2,000[2]
KCGM	1999	1,800,000	6,600	0	0	0
	1998	1,440,000	-	0	0	3
Lawlers	1999	79,400	39,700	0	0	2
	1998	239,200	0	0	0	2
Marigold	1999	78,600	2,900	0	0	0
	1998	75,000	-	0	0	0
McLaughlin	1999	840,300	1,327,600	0	0	0
	1998	700,000	984,800	1	2,000	1
Plutonic	1999	124,300	132,500	0	0	0
	1998	181,800	30,600	0	0	0
Round Mountain	1999	769,400	0	0	0	2
	1998	742,100	40,000	0	0	1
Ruby Hill	1999	194,900	0	0	0	2
	1998	221,800	16,000	1	0	2
Nonproducing Operations[1]	1999	1,350,800	0	1	0	15
	1998	1,011,000	0	0	0	29
TOTAL COMPANY	1999	8,259,100	5,638,800	8	0	21
	1998	9,730,300	3,652,400	7	202,000	2,038

1 Includes mining operations closed prior to the end of 1999.

2 Estimated number of fish killed following spill of process solution.

Stewardship of the environment begins with careful planning prior to mine development, followed by continuous improvement throughout mining operations and reclamation after mining is completed. Recognizing the importance of developing long-term relationships ınded on trust and respect, the Company takes steps early to establish communications with stakeholders so that their concerns can be addressed. Those communications, initiated prior to mine development, continue during mine operations and reclamation. During 1999, the Company held 21 open public meetings to discuss environmental issues.

Training		Spill Management				
Employee Training Hours	Contractor Training Hours	Volume Escaping First Level Spill Containment (gallons)	Volume Escaping Second Level Spill Containment (gallons)	Volume Escaping Site Boundary (gallons)	Cleanup Cost (US$)	Spill Prevention Plan Last Updated
78	0	15,850	0	0	49,500	12/99
1,200	0	4,000	0	0	5,000	
54	59	11,000	0	0	1,000	12/98
0	0	0	0	0	0	
56	2	0	0	0	0	2/99
2	20	0	0	0	0	
612	160	715	0	0	-	12/99
653	429	60	0	0	-	
1,690	125	600	0	0	45,000	2/99
586	20	10,000	10,000	10,000	56,507	
36	0	58,000	58,000	58,000	93,000	10/99
1,495	2,557	0	0	0	0	
140	8	0	0	0	0	1998
11	0	0	0	0	0	
52	6	0	0	0	0	1996
2	1	0	0	0	0	
0	0	20,000	0	0	0	10/92
0	0	-	200	0	7,512	
31	289	0	0	0	0	10/98
73	76	21,000	0	0	0	
1,120	176	7,283	0	0	-	12/99
719	1,020	69,819	69,819	0	150,000	
136	12	0	0	0	1,400	12/99
136	12	50	50	0	300	
258	147	4,459	0	0	0	Most in 98 or 99
860	59	127,603	12,400	8,000	58,277	
4,263	984	117,907	58,000	58,000	189,900	
5,737	4,194	232,532	92,469	18,000	277,596	

Resource Conservation

Operations	Year	Resource Use: Electricity (KWH)[3]	Natural Gas (MCF)[4]	Diesel Oil (gallons)	Gasoline (gallons)
Agua de la Falda	1999	7,152,800	0	230,000	15,200
	1998	7,632,000	0	275,800	12,700
Darlot	1999	0[2]	0	3,197,800	800
	1998	0	0	3,170,100	600
Eskay Creek	1999	0[2]	0	1,700,300	22,600
	1998	0	0	1,859,200	23,600
Hemlo	1999	261,344,700	0	1,349,700	63,500
	1998	260,344,900	0	1,780,700	46,400
Homestake	1999	127,549,600	179,109	233,900	21,500
	1998	156,632,300	195,552	203,600	22,400
KCGM	1999	312,000,000	0	10,500,000	33,000
	1998	335,000,000	0	10,900,000	50,000
Lawlers	1999	0[2]	0	2,936,100	500
	1998	0	0	3,760,000	2,800
Marigold	1999	9,986,700	0	1,146,300	57,400
	1998	18,169,200	0	1,031,100	67,300
McLaughlin	1999	89,697,500	0	362,600	27,400
	1998	86,891,500	0	383,900	32,700
Plutonic	1999	0[2]	857	3,189,800	300
	1998	0	889	2,206,800	400
Round Mountain	1999	104,088,000	0	11,271,000	159,600
	1998	104,904,000	0	10,519,600	186,400
Ruby Hill	1999	21,900,000	0	775,500	29,400
	1998	16,100,000	0	941,700	29,000
Nonproducing Operations[1]	1999	17,809,000	0	1,777,200	50,300
	1998	40,627,000	0	5,415,500	65,600
TOTAL COMPANY	1999	951,528,300	179,966	38,670,200	481,500
	1998	1,026,360,799	196,441	42,447,000	539,900

1 Includes mining operations closed prior to the end of 1999.
2 Electricity produced on site using gas or diesel powered generators.
3 Kilowatt Hours
4 Million Cubic Feet

Industrial production requires the use of many resources. The success of Homestake's sustainable development efforts will be partially determined by each operation's ability to minimize the use and maximize recycling of resources. While the economic cost of resources has been a powerful incentive for conservation, there is a growing awareness that the full environmental cost of resource consumption is not fully recognized within current economic costs. Progress towards reducing the use of resources per unit of production will be reported in next year's report.

		Recycling During Year		
Water (gallons)	**Cyanide (pounds)**	**Waste Oil**	**Scrap Metal**	**Batteries**
43,352,200	241,400	No	Yes	No
44,385,600	360,600	Yes	Yes	Yes
55,550,100	887,400	Yes	No	Yes
65,745,800	789,100	Yes	No	No
45,884,900	0	Yes	Yes	Yes
44,938,800	0	Yes	Yes	Yes
268,023,500	1,505,500	Yes	Yes	Yes
310,395,000	1,406,900	Yes	Yes	Yes
763,623,900	2,811,000	Yes	Yes	Yes
1,658,403,000	2,356,100	Yes	Yes	Yes
1,328,000,000	10,890,800	Yes	Yes	Yes
2,082,000,000	13,174,800	Yes	Yes	No
183,203,400	515,900	Yes	Yes	No
307,000,000	412,300	Yes	No	No
224,131,300	1,160,500	Yes	Yes	Yes
208,000,000	915,500	Yes	Yes	Yes
272,833,800	6,777,000	Yes	Yes	Yes
261,079,000	6,666,000	Yes	Yes	Yes
788,646,800	3,699,700	Yes	No	Yes
879,780,400	3,257,600	Yes	Yes	Yes
1,079,913,800	11,688,600	Yes	Yes	Yes
1,035,617,000	11,469,400	Yes	Yes	Yes
72,200,000	302,200	Yes	Yes	Yes
61,835,500	348,800	Yes	Yes	Yes
232,899,600	727,000	Yes	Yes	Yes
451,356,900	1,281,400	Yes	Yes	Yes
5,358,263,300	41,207,000	Yes	Yes	Yes
7,410,537,000	42,438,500	Yes	Yes	Yes

Environmental Discharges and Emissions

Operations	Number of Permitted Discharge Points	Total Gallons Discharged	Aluminum (Pounds)	Antimony (Pounds)	Arsenic (Pounds)	Copper (Pounds)	Lead (Pounds)	Wate
Agua de la Falda	0	0						
Darlot	0	0						
Eskay Creek	3	415,918,700	1,214.0	2,173.8	61.3	40.8	280.3	
Hemlo	4	611,490,600		982	9.9[1]	108	47	
Homestake	6	1,208,380,400	234		358.7	334.6	2.5	
KCGM	0	0						
Lawlers	2	9,184,400			442			
Marigold	0	0						
McLaughlin	3	0						
Plutonic	0	0						
Round Mountain	1	53,100						
Ruby Hill	0	0						
Nonproducing Operations[2]	11	2,285,846,200	57.8		136.2	23.8	22.1	
TOTAL COMPANY	30	4,530,873,400	1,505.8	3,155.8	1,008.1	507.2	351.9	

1 Amount estimated based upon one-half detection limit

2 Includes mining operations closed prior to the end of 1999.

The Company's operations are designed to minimize environmental effects. As a result, many of Homestake's operations have no water discharges. Ongoing monitoring of water and air discharges provides critical feedback concerning the effectiveness of designs, operations, controls and oversight management.

Except for Homestake's KCGM joint venture, air emissions are minor for Homestake operations and do not require regular quantitative monitoring. During 1999, KCGM's Gidji roaster emitted 106,400,000 pounds of sulphur dioxide under stringent emission monitoring controls and restrictions.

While discharge limits are established well below environmental effect thresholds, a primary objective of the Company is to have no exceedances. During 1999, minor exceedances of discharge limits occured at Eskay Creek, Williams, Snip, and the closed Nickel Plate mine, all in Canada. While no environmental effect or fines resulted, each operation has implemented measures to prevent similar occurrences in the future.

Discharges						Air Emissions	
Nickel (Pounds)	Silver (Pounds)	Zinc (Pounds)	Weak-acid Dissociable Cyanide (Pounds)	Total Cyanide (Pounds)	Number of Discharge Exceedances	Number of Permitted Emission Points	Number of Emission Exceedances
					0	0	0
					0	0	0
99.7	34.5	180.2	0	0	5	2	0
604.1	0	65.4	25	87.1	1	127	0
23.5	0	60	435	3,533	0	19	0
					0	1	0
			0		0	0	0
					0	22	0
					0	81	0
					0	2	0
					0	96	0
					0	71	0
20.4		73.5	35.5	370.2	6	13	0
747.7	34.5	379.1	495.5	3,990.3	12	434	0

Reclamation and Mitigation

Operations	Year	Area Disturbed and Unreclaimed (acres)	Total Area Reclaimed (acres)	Area Reclaimed During Year (acres)	Yearly Cost of Reclamation (US$)	Reclamation of Areas Disturbed by Others (acres)	Cost to Reclaim Areas Disturbed by Others (US$)
						Reclamation	
Agua de la Falda	1999	908	543	153	58,000	0	0
	1998	577	410	20	36,000	2	16,000
Darlot	1999	693	348	28	88,700	23	17,000
	1998	665	320	8	50,000	0	0
Eskay Creek	1999	38	17	0	2,100	0	0
	1998	37	17	1	205,900	0	0
Hemlo	1999	739	159	42	4,300	0	0
	1998	707	118	1	0	0	0
Homestake	1999	758	493	37	195,000	0	0
	1998	795	458	38	96,000	12	1,150,000
KCGM	1999	2,373	1,793	160	745,000	50	807,0(
	1998	2,571	1,632	222	790,000	-	43,000
Lawlers	1999	955	515	135	110,800	0	0
	1998	948	612	75	239,200	0	0
Marigold	1999	1,221	225	0	0	0	0
	1998	933	225	5	900	0	0
McLaughlin	1999	428	450	0	0	0	0
	1998	428	450	0	800,000	0	0
Plutonic	1999	1,747	947	412	347,200	0	0
	1998	1,800	619	173	242,700	0	0
Round Mountain	1999	4,997	381	52	339,600	0	0
	1998	4,984	329	162	507,800	0	0
Ruby Hill	1999	378	222	76	101,100	0	0
	1998	380	146	20	62,200	0	0
Nonproducing Operations[1]	1999	3,448	7,515	1,265	9,660,800	14	22,500
	1998	1,572	5,878	252	9,551,800	2	56,643
TOTAL COMPANY	1999	18,683	13,608	2,360	11,852,600	87	846,500
	1998	16,397	11,214	977	12,582,500	16	1,265,643

1 Includes mining operations closed prior to the end of 1999.

An important component of Homestake's sustainable development effort is the Company's policy to minimize ecosystem disturbance, mitigate unavoidable effects, and contemporaneously reclaim ining-disturbed lands to other productive and diverse land uses.

To ensure that this policy is implemented fully, the company regularly audits reclamation and closure plans and efforts at each operation. During 1999, Homestake performed 15 reclamation and closure audits and made appropriate adjustments to plans and schedules.

			Mitigation		
Number of Exploration Drill Holes in Year	**Number of Exploration Drill Holes Capped and Reclaimed in Year**	**Habitat Stewardship**	**Cost of Habitat Stewardship (US$)**	**Environmental Research Expenditures (US$)**	**External Awards and Recognition**
110	0	None	0	0	
93	30	Chinchilla habitat	200	36,000	
720	109	Protection of priority-listed species	0	0	
200	200	None	0	5,000	
63	63	None	0	74,500	
81	81	None	0	120,900	
35	0	Fish habitat	17,700	0	
0	0	None	0	0	
0	0	None	0	20,000	
12	12	Fishery and general habitat	5,000	0	South Dakota Chamber of Commerce & Industry Award
270	2,000	Native Vegetation Monitoring	6,500	17,000	Kalgoorlie Boulder Garden Beautiful Award
804	715	Mammal habitat	1,300	111,200	Kalgoorlie Boulder Garden Beautiful Award
190	95	None	0	800	
2,000	2,300	None	0	5,000	
126	126	None	0	12,200	State of Nevada, US BLM, USFS - Wildlife Habitat Enhancement Award
205	205	None	0	8,000	
0	0	Monitoring of sensitive plant communities	4,200	0	Wildlife Habitat Council (WHC) Certification
0	0	Bat habitat and bird nesting	0	0	
64	59	None	0	9,000	
21	20	Installation of habitat features	1,000	0	
95	95	Spotted Frog Conservation	6,000	0	
66	66	Repair of Groves Lake Habitat	3,000	0	
9	9	Ferruginous Hawk and bat monitoring	5,500	7,500	State of Nevada, USBLM, USFS - Reclamation Innovation Award
3	3	Ferruginous Hawk and bat monitoring	3,500	0	
138	158	Numerous	3,000	99,200	British Columbia Ministry of Mines - Reclamation Innovation Award - Nickel Plate Mine State of Nevada, US BLM, USFS - Reclamation Award - Santa Fe Mine
1,432	2,510	Numerous	16,000	59,700	
1,820	2,714	Numerous	42,900	240,200	
4,917	6,142	Numerous	30,000	345,800	

Independent Evaluation of Homestake Mining Company's Environment, Health and Safety Audit Program

Arthur D. Little, Inc., has reviewed the Environmental, Health, and Safety (EHS) Audit Program at Homestake Mining Company (Homestake) for the period of January 1, 1999 through December 31, 1999. Our evaluation is based on a review of Homestake's EHS Audit Program this year (including interviews, document reviews, and observation of an audit), our knowledge of the audit program from reviews in previous years, and our knowledge of internationally recognized EHS auditing standards. We conducted our evaluation relying upon our extensive consulting experience in this area, as well as our familiarity with similar programs established by many other corporations, including those that aim to have a leadership position.

Homestake's audit program is a key part of its company-wide EHS management system. Other key aspects of that system include corporate EHS policies and procedures, line management responsibility for performance, routine internal reporting on EHS performance, regular briefings of the Board of Directors, and annual public EHS reports.

In our opinion, Homestake's EHS Audit Program is designed and implemented in a manner that is generally consistent with, and in some instances exceeds, prevailing EHS auditing standards. It provides a high level of assurance that all operations, including joint-venture operations and inactive sites, have implemented and are continuing to improve EHS management systems, consistent with the state-of-the-art in multinational industrial companies. These management systems are designed to assure compliance; reduce risks; prevent pollution, injuries and illnesses, and damages to property, plant and equipment; and help maintain good relations with local stakeholders.

The EHS audit program is mature and well-accepted within the organization. Homestake has conducted several audits at all operating locations over the years, except for the Plutonic operations acquired in 1998, which have been audited once. One particularly important aspect of the audit program is Homestake's use of internal staff from other operations to serve as auditors. This has been highly effective in building an internal EHS network, sharing best practices and lessons learned, and building a common approach to EHS management across the company. It has also been key to the acceptance of the audit program by site general managers.

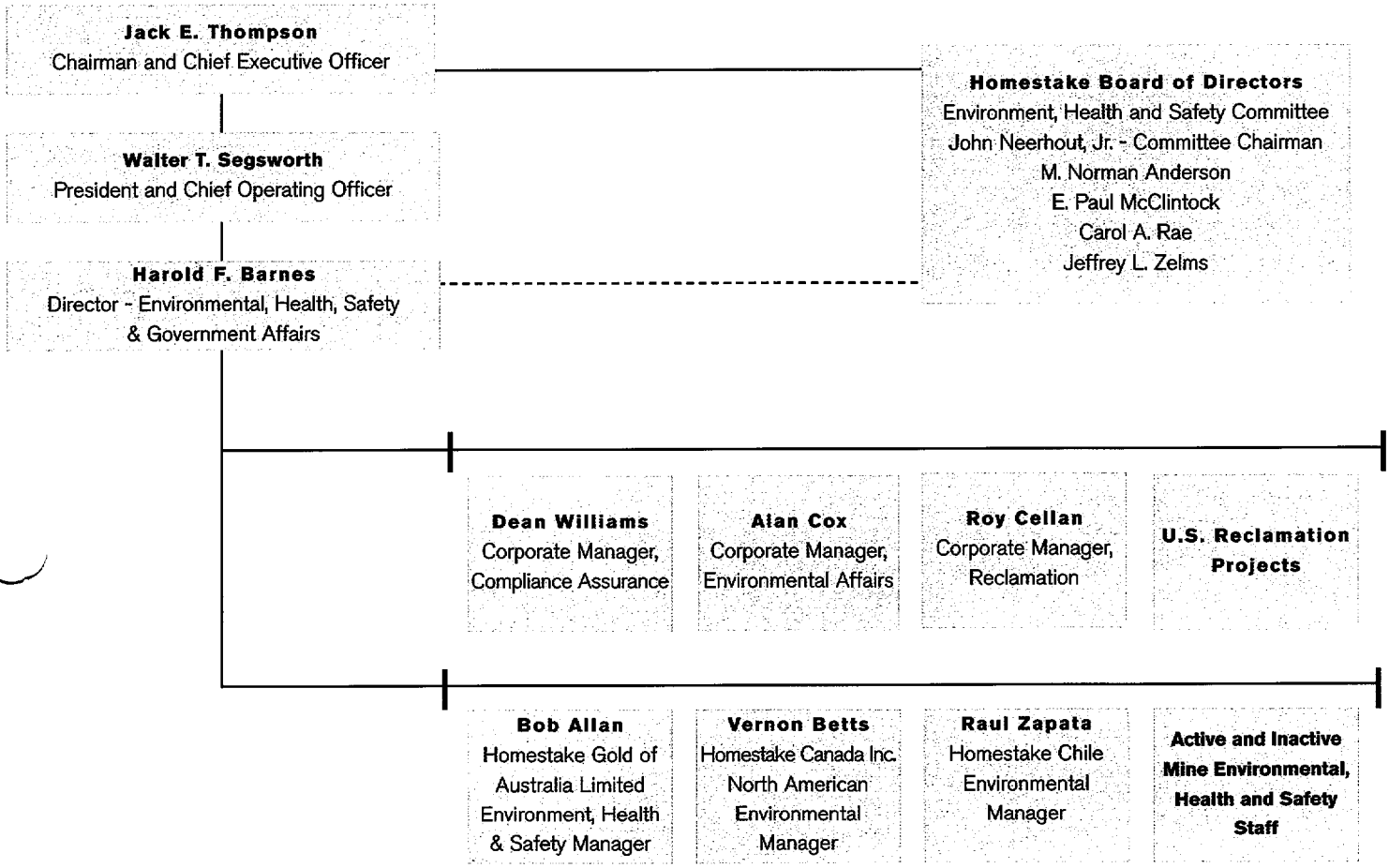
As part of our review, we have identified some opportunities to further strengthen the audit program, the key area being improvement in the development and implementation of corrective/preventive action plans developed by the sites in response to the audit findings.

We have provided Homestake with a report that provides more detail on our conclusions and recommendations and have discussed them with Homestake management. We are confident that Homestake will implement actions to further strengthen its EHS Audit Program.

James Margolis
Associate Director

Arthur D. Little, Inc.
February 2000

Environmental, Health and Safety Organization and Information



Information:
The following information is available from Homestake at the addresses below.
Much of this information is also available on Homestake's web page: http://www.homestake.com

Environmental, Health, Safety and Government Affairs Management
Homestake Mining Company 1999 Annual Report
Form 10-K Report on Homestake Mining Company

mestake Mining Company
California Street
an Francisco, CA 94108

As of June 15, 2000:
1600 Riviera Dr. 2nd Floor
Walnut Creek, CA 94596-3569

Homestake Canada Inc.
1055 West Georgia Street, Suite 1100
Vancouver, BC V6E 3P3

Homestake Gold of Australia Limited
Locked Bag 12
Cloisters Square
Perth, Western Australia 6850

Minera Homestake Chile, S.A.
Nueva Tajamar #481
Torre Sur, Oficina 2101
Las Condes
Santiago, Chile

Homestake Mining Company

Homestake Mining Company

Environmental, Health, Safety &
Government Affairs Department
650 California Street
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Selected Glossary

Selected Glossary

All-Injuries - All work-related and lost-time injuries, including fatalities, but excluding first aid incidents.

Containment Structure - Curbing, collection areas, and berming designed to collect and contain solution spills. Homestake operations are typically designed with redundant spill containment to ensure that spillage does not escape the site.

Gold Equivalent - Silver expressed in equivalent ounces of gold using a conversion ratio dependent on prevailing gold and silver prices.

Heap Leach - A method of recovering gold from a heap of ore placed on an impervious pad, whereby a leaching solution is allowed to percolate through the heap to dissolve the gold, which is subsequently collected and processed.

Injury Severity - The number of days lost as a result of a lost-time injury. Severity rate is calculated as the number of days lost for every 200,000 hours worked.

Lost-Time Injury - Any injury that results in days away from work. Incident rate is calculated as the number of incidents for every 200,000 hours worked.

Orphaned Mine - A closed mining operation that was mined by a company other than Homestake and left in an unreclaimed condition.

Reclamation - The process of converting mining-disturbed lands to other productive land uses. This process typically involves reshaping areas to an erosionally stable configuration, establishment of drainage systems, placement of topsoil or plant growth media, and planting.

Reclamation Accrual - An accounting reserve to recognize future reclamation obligations.

Regulatory Action - Written directions from a regulatory agency specifying that certain existing conditions must be corrected.

Reportable Injury - All injuries excluding first aid.

Stakeholders - People or groups of people that have an interest in the activities of the Company. This includes Homestake's shareholders, employees and their families, contractors, the communities near Homestake operations, legislative representatives, regulatory personnel, environmental activists, and interested non-governmental organizations.

Sustainable Development - Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

Work-Related Injury - Any injury that results in restricted duty (light duty), or medical treatment being required more than once, excluding lost-time injuries and fatalities.

Unit Conversion Table

Imperial measures are used in this report. To convert to the metric system, the following factors apply:

1 troy ounce = 31.103 grams
1 (short) ton = 0.907 (metric) tonnes
1 foot = 0.305 meters
1 mile = 1.609 kilometers
1 acre = 0.405 hectares
1 pound = 0.454 kilograms
1 (US) gallon = 3.785 liters

All dollars ($) reported are US.

HMC GROUNDWATER MONITORING

EQUIPMENT

Sample containers
Data sheets and pens
Electrical generator with gasoline
Winch
PCV pipe, 1 inch x 10 foot threaded sections sufficient for well depth
Submersible water pump and electrical cable
2 pair channel locks
Duct tape
90° elbow and discharge valve
Watch
3 gallon bucket
Conductivity meter
Shovel
Bailer for low-flow wells
#24 (course) glass fiber 102 mm filter (Schleichers and Schuell) or the equivalent
0.45 micron cellulose nitrate 102 mm f ilter (Geofilter) or the equivalent
Analytical chemicals and glassware needed for analyses specified in Appendix A, Table 1.

REGULATORY BASIS

Materials License SUA-1471, condition 35A states:

> Implement the monitoring program shown in Table 2 as revi sed by the licensee's August 25, 1997 submittal and Table 3 of the licensee's January 9, 1995 submittal. (Applicable Amendment: 28)

Materials License SUA-1471, condition 35B states:

> Comply with the following ground-water protection standards at brine evaporation pond point-of-compliance Wells D1 and BP, at the inactive tailings impoundment point-of compliance Wells Y and X, and at the active tailings impoundment point-of-compliance Wells S4, S3, M5, and DQ with background being recognized in Well P:

Molybdenum = 0.03 mg/L, selenium = 0.10 mg/L, vanadium = 0.02 mg/L, uranium = 0.04 mg/L, radium-226 and 228 = 5.0 pCi/L, thorium-230 = 0.30 pCi/L.

10 CFR 40, Appendix A, Criterion 7A states:

> The licensee shall establish a detection monitoring progra m needed for the Commission to set the site-specific groundwater protection standards...

PROCEDURE

A. GROUNDWATER MONITORING PROGRAM, SCHEDULE, AND PREPARATION

1. Table 2 of the August 25, 1997 submittal presents the well numbers, parameters, and the frequency of the groundwater monitoring program. Sample size and preservatives may vary according to contract laboratory needs but follow the guidelines outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater. Well locations are specified in the latest semiannual report. A schedule prepared by HMC's Radiation and Water Management Utility Operators designates which wells and the parameters are to be monitored each month. Each day the groundwater is to be sampled a standard form prepared by the Water Management Utility Operator is used to record the well identification number, the collection date, and the pumping rate recorded when the well was last sampled.

2. Obtain the correct size, new plastic sample containers and label with a permanent magic marker the following code:

   Well ID # / month-day-year / military time
   SS-0331/01-07-93/930

3. Each day the conductivity meter is used check the batteries in the meter, set the needle to the "red line", check that the meter was calibrated within the last 6 months using the conductivity standards specified in the latest edition of Standard Methods for the Examination of Water and Wastewater. Obtain a fresh sample of de-ionized water and check that the conductivity of de-ionized water reads the same as was recorded during the calibration.

B. SAMPLE COLLECTION

1. In each monitoring well measure the water level from the top of the well casing to the top of the water using a water level probe.

2. When collecting samples with the AMS SK3500 Well Management System, use the manufacture's instructions as a guide to lower the submersible pump into the well.

3. Pump the well with the valve wide open until the pump starts sucking air. Close the discharge valve until only water is being pumped. If air is pumped along with water the conductivity measurements will not be accurate. Measure the time in seconds required to fill a 3-gallon bucket. Divide the measured seconds into 60 seconds and multiply by 3 gallons to obtain the flow rate in gallons per minute. Record the pumping rate in gallons per minute on the analytical sheet for the well being sampled.

4. Standardize the temperature/conductivitymeter according to the manufacturer's instructions.

5. Take continuous temperature and conductivity measurements of the pumped water. Pump the well until the temperature and conductivity stabilize. Removal of at least two well casing volumes of water from the well is usually required to stabilize the conductivity measurements.

6. Rinse out the sample container at least twice with approximately one third the volume of the container. Fill and cap the sample container.

7. Shut off the pump and pull the pump from the well using the manufacture's instructions as a guide.

8. For monitoring wells that have a pump installed in the well follow steps 3-7 above.

C. BAILING LOW-FLOW WELLS

1. Wells that produce only a few (1-2) gallons per hour need to be bailed because well pumps can not remove the last few gallons of water in the well. For a low-flow well those few gallons remaining in the well would, if not removed, be a significant percentage, e.g. 10%, of the water sampled from the well.

2. Remove the well cap and verify that the number on the well matches the number on the analytical sheet. Measure the distance from the top of the well casing to the water and record on the analytical data sheet. Position the bailing boom over the well and lower the bailer to the bottom of the well. Pull the bailer out of the well and measure the water volume in a 3-gallon bucket. The bailer typically removes 1.5 gallons of water at a time from a 5-inch ID well and 0.1 gallons at time from a 2 inch well. Continue to bail the well until dry and record the total volume of water removed on the analytical data sheet.

3. Return to the well approximately 24 hours later, measure the distance from the top of the well casing to the water, and record on the analytical data sheet. Bail out 3 additional gallons of water from the 5 inch ID well and 1 gallons from a 2-inch well. Rinse out the sample container at least twice with approximately one third the volume of the container. Collect the sample and cap the container.

D. SAMPLE PREPARATION AND ANALYSIS

1. At the end of each day of well sampling bring the water samples to the HMC Laboratory for filtering. If a water sample contains algae, prefilter the sample through a #24 (course) glass fiber 102 mm filter (Schleichers and Schuell) or the equivalent. After algae have been removed or if not present filter the water samples through a 0.45 micron cellulose nitrate 102 mm filter (Geofilter or the equivalent). Rinse the filter container with deionized water initially and filter using argon gas to pressurize the system.

2. Add the preservative specified in the latest edition of Standard Methods and cap the container. If the sample foams, allow the gas to bleed off before tightening the cap on the container. Place the sample in a shipping container to be shipped to the contract laboratory for.

3. The contract laboratory uses the standard EPA methods for analysis.

E. INJECTION WELL CLEANING PROCEDURE

1. The injection well cleaning procedure is used on injection wells when injection flow has decreased and the hydrologist deems that they need cleaning.

2. A contract driller is hired to clean the wells using his standard well air development procedures to clean the well screens.

3. Record in the well maintenance records the final flow rate, the initial flow rate, the date the well was cleaned, parts replaced, and any observations. The final flow rate should be at least 10 gallons per minute greater than the initial flow rate. If not, check for a possible broken well casing and report the flow rates to the Radiation Protection Administrator.

F. CLEANING AND REPLACING MAIN INJECTION WELL FILTERS

1. Once a month open the valve(s) at the bottom of the filters for approximately 15 seconds to remove the rusty, dirty water from the filter.

2. Replace the main injection filters when needed. Open the bypass valve shut the feed and discharge valves on the filter. Open the drain valve(s) on the bottom of the filter and the bleeder valve on the top of the filter. Remove lid and old filters (27 - 48 filters), wash out filter housing, inspect, and reassemble with new filters.

G. ANALYSIS AND REPORTING OF GROUNDWATER DATA

1. Documentation for inputting analytical data and generating various reports is available in a 3-ring binder labeled ***Groundwater Control – System Documentation***.

   a) **MANAGEMENTS**

   Managements are entered on a weekly, with a *Ground Water Status Report* written using the generated reports.

   B) **ANALYTICAL**

   Internal data as well as outside lab analytical data is entered as time allows. Data sheets are then filed in individual well files.

2. Prepare for review and submission by the Radiation Protection Administrator and or Environmental/Project Supervisor the following reports specified in the Nuclear Regulatory Commission License SUA-1471 and State of New Mexico Discharge Permits DP-725 and DP-200:

   1) Quarterly DP-725 to the State of New Mexico, Ground Water Pollution Prevention Section, Environmental Department, as per permit requirement.

2) Semi-annual DP-200 to the Nuclear Regulatory Commission and the State of New Mexico, Environment Department, Ground Water Section, as per permit requirement.
3) Annual DP-200 to the Nuclear Regulatory Commission and the State of New Mexico, Environment Department, Ground Water Section, as per permit requirement. Water quality data is transferred to the Contract Hydrologist for inclusion in this report.
4) Water usage report to the New Mexico State Engineer, due the 10 th of each month.

QUALITY CONTROL

The Water Management Utility Operator is to verify that the groundwater is sampled, the injection wells are cleaned, and the main injection well filters are cleaned according to this procedure. The Utility Operator recording the groundwater data is to verify the accuracy of the data in the groundwater reports. The Environmental Project Supervisor is to verify the analysis of trends in groundwater concentrations and to implement changes in the program as needed.

REFERENCES

1. Standard Methods for the Examination of Water and Wastewater - American Public Health Association, Washington DC, 19th Edition, 1995.

REVISIONS

Original	02-22-93
Revision 1	05-18-98

DISTRIBUTION

Corporate Manager, Reclamation/Radiation Protection Administrator
Utility Operator/Radiation Management
Utility Operator/Water Management
Environmental Project Supervisor

APPROVAL

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