Appendix F

GWSCREEN Model Results

OU 4-13 RI/FS

GWSCREEN
Model Output Results

Reviewed by: _____ Date: 4/30/98

SITES (RADIOLOGICAL, NON-RAD COCs):

```
TIME OF RUN 17:49:07.0
DATE OF RUN 04/22/98
FILE NAME: c:\mydocu~1\WAG4\new\out\04-nr.max
 ***************************************************
 *                                                 *
 *     This output was produced by the model:      *
 *                    GWMENU                       *
 *         Version 1.01: Beta Test Version         *
 * A menu-driven pre-processor for the groundwater *
 * pathway screening model GWSCREEN Version 2.5    *
 *             GWSCREEN Copyright (C) 1992,        *
 *   Lockheed Martin Idaho Technologies Company    *
 *      GWMENU (C) Copyright 1996, K-Spar Inc.     *
 *                    09-15-97                     *
 *                   K-Spar Inc.                   *
 *         493 N 4154 E Rigby Idaho 83442          *
 *         (208) 745-8068 email asr@srv.net        *
 ***************************************************
 ==================================================================
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 Numerical Recipes, Cambridge University Press.
 ==================================================================

TITLE: CFA-04 max, non-rad
------------------ MODEL OPTIONS -------------------
Type of Output:        Limiting Conc
Integration Method:    Gaussian Quad
Source Model Type:     Surface/Buried
Dose Criteria:         MCL for Non-radiological Contaminant
--------------- SOURCE PARAMETERS ------------------
X Coordinate (m):    0.000E+00  Y Coordinate (m):    0.000E+00
Source Length (m):   1.507E+02  Source Width (m):    4.561E+01
Thickness (m):       5.500E+00  Bulk Density (g/cc): 1.500E+00
Percolation (m/y):   1.000E-01  Moisture Content:    3.000E-01
------------ UNSATURATED ZONE PARAMETERS -----------
Unsat Thickness (m): 1.400E+01  Moisture Content:    3.000E-01
Total Porosity:      4.870E-01  Bulk Density:        1.500E+00
---------------- AQUIFER PARAMETERS ----------------
Solution Type:    2D Averaged
Pore Velocity (m/y):        5.700E+02 Aquifer Porosity:          1.000E-01
Longitudinal Disp (m):      9.000E+00 Transverse Disp (m):       4.000E+00
Vertical Disp (m):         n/a        Well Screen Thickness (m): 1.500E+01
Bulk Density (g/cc):        1.900E+00 Number of Receptors:      11
--------------- EXPOSURE PARAMETERS ----------------
Dose Impacts Base on: MCL (mg/L)
Body Weight (kg):           7.000E+01 Averaging Time (d):        2.556E+04
Water Ingestion Rate (L/d): 2.000E+00 Exposure Frequency (d/y):  3.500E+02
Exposure Duration (y):      3.000E+01
---------------------------------------------------- CONTAMINANT PARAMETERS ----------------------------------------------
Contaminant Name          Inventory    Dose      Molar    Half Life  Kd Source  Kd Unsat  Kd Aquifer Additional Solubility
                                      Factor    Weight                                                Loss Rate    Limit
                            (mg)    MCL (mg/L) (g/mole)    (years)    (mL/g)     (mL/g)     (mL/g)     (1/y)     (mg/L)
--------------------------------------------------------------------------------------------------------------------------
Arsenic                   7.487E+08  1.100E-02  7.500E+01  9.000E+09  3.000E+00  3.000E+00  3.000E+00  0.000E+00  1.000E+06
Mercury                   5.530E+09  2.000E-03  2.006E+02  9.000E+09  1.000E+02  1.000E+02  1.000E+02  0.000E+00  1.000E+06
---------------------------------------------- RESULTS ----------------------------------------------
* = Limiting pore water concentration exceeds solubility
Receptor Location X, Y, Z, (meters):  7.537E+01, 0.000E+00, 1.500E+01
```

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	4.399E-02	4.176E-02	0.000E+00	0.000E+00	3.478E+00	6.963E+02
Mercury	1.035E-02	1.035E-02	0.000E+00	0.000E+00	1.885E+01	2.183E+04

Receptor Location X, Y, Z, (meters): 7.550E+01,-2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	2.535E-07	2.454E-07	0.000E+00	0.000E+00	5.919E+05	7.250E+02
Mercury	5.957E-08	5.955E-08	0.000E+00	0.000E+00	3.275E+06	2.278E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 0.000E+00, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	4.397E-02	4.174E-02	0.000E+00	0.000E+00	3.480E+00	6.963E+02
Mercury	1.034E-02	1.034E-02	0.000E+00	0.000E+00	1.886E+01	2.183E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	4.207E-04	4.019E-04	0.000E+00	0.000E+00	3.614E+02	7.082E+02
Mercury	9.894E-05	9.892E-05	0.000E+00	0.000E+00	1.972E+03	2.223E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	2.535E-07	2.454E-07	0.000E+00	0.000E+00	5.919E+05	7.250E+02
Mercury	5.957E-08	5.955E-08	0.000E+00	0.000E+00	3.275E+06	2.278E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 3.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	8.240E-11	8.012E-11	0.000E+00	0.000E+00	1.813E+09*	7.415E+02
Mercury	1.936E-11	1.936E-11	0.000E+00	0.000E+00	1.008E+10*	2.331E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 4.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	2.224E-14	2.171E-14	0.000E+00	0.000E+00	6.690E+12*	7.585E+02
Mercury	5.223E-15	5.223E-15	0.000E+00	0.000E+00	3.734E+13*	2.387E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 6.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	7.987E-22	7.731E-22	0.000E+00	0.000E+00	1.878E+20*	7.640E+02
Mercury	1.881E-22	1.892E-22	0.000E+00	0.000E+00	1.031E+21*	2.406E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 8.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Mercury	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+03, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Mercury	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.200E+03, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Arsenic	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Mercury	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

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TIME OF RUN 17:49:30.2
DATE OF RUN 04/22/98
FILE NAME: c:\mydocu~1\WAG4\new\out\04-rad.max
  ***************************************************
  *                                                 *
  *     This output was produced by the model:      *
  *                    GWMENU                       *
  *         Version 1.01; Beta Test Version         *
  * A menu-driven pre-processor for the groundwater *
  * pathway screening model GWSCREEN Version 2.5    *
  *              GWSCREEN Copyright (C) 1992,       *
  *   Lockheed Martin Idaho Technologies Company   *
  *      GWMENU (C) Copyright 1996, K-Spar Inc.     *
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  *                   K-Spar Inc.                   *
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  *         (208) 745-8068 email asr@srv.net        *
  ***************************************************
 ==========================================================
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TITLE: CFA-04 max, rad
------------------ MODEL OPTIONS -------------------
Type of Output:        Limiting Conc
Integration Method:    Gaussian Quad
Source Model Type:     Surface/Buried
Dose Criteria:         MCL for Radionuclide
--------------- SOURCE PARAMETERS ------------------
X Coordinate (m):    0.000E+00  Y Coordinate (m):    0.000E+00
Source Length (m):   1.507E+02  Source Width (m):    4.561E+01
Thickness (m):       5.500E+00  Bulk Density (g/cc): 1.500E+00
Percolation (m/y):   1.000E-01  Moisture Content:    3.000E-01
------------ UNSATURATED ZONE PARAMETERS -----------
Unsat Thickness (m): 1.400E+01  Moisture Content:    3.000E-01
Total Porosity:      4.870E-01  Bulk Density:        1.500E+00
---------------- AQUIFER PARAMETERS ----------------
Solution Type:    2D Averaged
Pore Velocity (m/y):        5.700E+02 Aquifer Porosity:          1.000E-01
Longitudinal Disp (m):      9.000E+00 Transverse Disp (m):       4.000E+00
Vertical Disp (m):          n/a       Well Screen Thickness (m): 1.500E+01
Bulk Density (g/cc):        1.900E+00 Number of Receptors:       11
--------------- EXPOSURE PARAMETERS ----------------
Dose Impacts Base on: MCL (Ci/L)
Body Weight (kg):           7.000E+01 Averaging Time (d):        2.556E+04
Water Ingestion Rate (L/d): 2.000E+00 Exposure Frequency (d/y):  3.500E+02
Exposure Duration (y):      3.000E+01
---------------------------------------------- CONTAMINANT PARAMETERS ----------------------------------------------
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Contaminant Name	Inventory (Ci)	Dose Factor MCL (Ci/L)	Molar Weight (g/mole)	Half Life (years)	Kd Source (mL/g)	Kd Unsat (mL/g)	Kd Aquifer (mL/g)	Additional Loss Rate (1/y)	Solubility Limit (mg/L)
Cs-137	1.259E-02	1.510E-12	1.370E+02	3.020E+01	5.000E+02	5.000E+02	5.000E+02	0.000E+00	1.000E+06
U-234	1.174E-01	1.070E-12	2.340E+02	2.450E+05	6.000E+00	6.000E+00	6.000E+00	0.000E+00	1.000E+06
Th-230		5.300E+05		7.540E+03			1.000E+02		
Ra-226		1.100E+06		1.600E+03			1.000E+02		
Pb-210		6.700E+06		2.230E+01			1.000E+02		
U-235	8.451E-03	1.010E-12	2.350E+02	7.040E+08	6.000E+00	6.000E+00	6.000E+00	0.000E+00	1.000E+06
Pa-231		1.340E+00		3.500E+04			8.000E+00		
Ac-227		2.490E+05		2.160E+01			7.000E+01		
U-238	1.293E-01	7.680E-13	2.380E+02	4.470E+09	6.000E+00	6.000E+00	6.000E+00	0.000E+00	1.000E+06
U-234		2.600E+05		2.450E+05			6.000E+00		
Th-230		5.300E+05		7.540E+03			1.000E+02		
Ra-226		1.100E+06		1.600E+03			1.000E+02		
Pb-210		6.700E+06		2.230E+01			1.000E+02		

RESULTS

* = Limiting pore water concentration exceeds solubility

Receptor Location X, Y, Z, (meters): 7.537E+01, 0.000E+00, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		3.542E-12	3.506E-12	0.000E+00	0.000E+00	6.318E-10	1.350E+03
	Th-230	2.505E-14	2.481E-14	0.000E+00	0.000E+00		
	Ra-226	6.203E-15	6.142E-15	0.000E+00	0.000E+00		
	Pb-210	5.944E-15	5.886E-15	0.000E+00	0.000E+00		
U-235		2.559E-13	2.534E-13	0.000E+00	0.000E+00	5.941E-10	1.350E+03
	Pa-231	5.075E-15	5.025E-15	0.000E+00	0.000E+00		
	Ac-227	5.701E-16	5.644E-16	0.000E+00	0.000E+00		
U-238		3.915E-12	3.876E-12	0.000E+00	0.000E+00	4.517E-10	1.350E+03
	U-234	1.493E-14	1.478E-14	0.000E+00	0.000E+00		
	Th-230	5.383E-17	5.330E-17	0.000E+00	0.000E+00		
	Ra-226	9.211E-18	9.122E-18	0.000E+00	0.000E+00		
	Pb-210	8.616E-18	8.532E-18	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01,-2.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		2.039E-17	2.025E-17	0.000E+00	0.000E+00	1.094E-04	1.407E+03
	Th-230	1.500E-19	1.489E-19	0.000E+00	0.000E+00		
	Ra-226	3.844E-20	3.816E-20	0.000E+00	0.000E+00		
	Pb-210	3.691E-20	3.664E-20	0.000E+00	0.000E+00		
U-235		1.474E-18	1.463E-18	0.000E+00	0.000E+00	1.029E-04	1.407E+03
	Pa-231	3.044E-20	3.022E-20	0.000E+00	0.000E+00		
	Ac-227	3.423E-21	3.398E-21	0.000E+00	0.000E+00		
U-238		2.255E-17	2.239E-17	0.000E+00	0.000E+00	7.822E-05	1.407E+03
	U-234	8.959E-20	8.894E-20	0.000E+00	0.000E+00		
	Th-230	3.361E-22	3.337E-22	0.000E+00	0.000E+00		
	Ra-226	5.962E-23	5.920E-23	0.000E+00	0.000E+00		
	Pb-210	5.592E-23	5.553E-23	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 0.000E+00, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		3.540E-12	3.503E-12	0.000E+00	0.000E+00	6.325E-10	1.350E+03
	Th-230	2.503E-14	2.477E-14	0.000E+00	0.000E+00		
	Ra-226	6.196E-15	6.132E-15	0.000E+00	0.000E+00		
	Pb-210	5.938E-15	5.876E-15	0.000E+00	0.000E+00		
U-235		2.558E-13	2.531E-13	0.000E+00	0.000E+00	5.947E-10	1.350E+03
	Pa-231	5.071E-15	5.018E-15	0.000E+00	0.000E+00		

	Ac-227	5.696E-16	5.637E-16	0.000E+00	0.000E+00		
U-238		3.913E-12	3.872E-12	0.000E+00	0.000E+00	4.522E-10	1.350E+03
	U-234	1.491E-14	1.476E-14	0.000E+00	0.000E+00		
	Th-230	5.376E-17	5.321E-17	0.000E+00	0.000E+00		
	Ra-226	9.199E-18	9.105E-18	0.000E+00	0.000E+00		
	Pb-210	8.604E-18	8.516E-18	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		3.387E-14	3.356E-14	0.000E+00	0.000E+00	6.601E-08	1.374E+03
	Th-230	2.435E-16	2.413E-16	0.000E+00	0.000E+00		
	Ra-226	6.117E-17	6.062E-17	0.000E+00	0.000E+00		
	Pb-210	5.867E-17	5.814E-17	0.000E+00	0.000E+00		
U-235		2.447E-15	2.425E-15	0.000E+00	0.000E+00	6.206E-08	1.374E+03
	Pa-231	4.937E-17	4.893E-17	0.000E+00	0.000E+00		
	Ac-227	5.548E-18	5.498E-18	0.000E+00	0.000E+00		
U-238		3.744E-14	3.711E-14	0.000E+00	0.000E+00	4.719E-08	1.374E+03
	U-234	1.452E-16	1.439E-16	0.000E+00	0.000E+00		
	Th-230	5.325E-19	5.277E-19	0.000E+00	0.000E+00		
	Ra-226	9.251E-20	9.169E-20	0.000E+00	0.000E+00		
	Pb-210	8.663E-20	8.587E-20	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 2.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		2.039E-17	2.025E-17	0.000E+00	0.000E+00	1.094E-04	1.407E+03
	Th-230	1.500E-19	1.489E-19	0.000E+00	0.000E+00		
	Ra-226	3.844E-20	3.816E-20	0.000E+00	0.000E+00		
	Pb-210	3.691E-20	3.664E-20	0.000E+00	0.000E+00		
U-235		1.474E-18	1.463E-18	0.000E+00	0.000E+00	1.029E-04	1.407E+03
	Pa-231	3.044E-20	3.022E-20	0.000E+00	0.000E+00		
	Ac-227	3.423E-21	3.398E-21	0.000E+00	0.000E+00		
U-238		2.255E-17	2.239E-17	0.000E+00	0.000E+00	7.822E-05	1.407E+03
	U-234	8.959E-20	8.894E-20	0.000E+00	0.000E+00		
	Th-230	3.361E-22	3.337E-22	0.000E+00	0.000E+00		
	Ra-226	5.962E-23	5.920E-23	0.000E+00	0.000E+00		
	Pb-210	5.592E-23	5.553E-23	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 3.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		6.628E-21	6.586E-21	0.000E+00	0.000E+00	3.364E-01	1.439E+03
	Th-230	4.980E-23	4.948E-23	0.000E+00	0.000E+00		
	Ra-226	1.301E-23	1.292E-23	0.000E+00	0.000E+00		
	Pb-210	1.250E-23	1.242E-23	0.000E+00	0.000E+00		
U-235		4.791E-22	4.760E-22	0.000E+00	0.000E+00	3.162E-01*	1.440E+03
	Pa-231	1.012E-23	1.006E-23	0.000E+00	0.000E+00		
	Ac-227	1.139E-24	1.131E-24	0.000E+00	0.000E+00		
U-238		7.330E-21	7.283E-21	0.000E+00	0.000E+00	2.404E-01*	1.440E+03
	U-234	2.979E-23	2.960E-23	0.000E+00	0.000E+00		
	Th-230	1.142E-25	1.135E-25	0.000E+00	0.000E+00		
	Ra-226	2.067E-26	2.054E-26	0.000E+00	0.000E+00		
	Pb-210	1.942E-26	1.930E-26	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 4.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		1.788E-24	1.778E-24	0.000E+00	0.000E+00	1.246E+03*	1.473E+03

	Th-230	1.373E-26	1.366E-26	0.000E+00	0.000E+00		
	Ra-226	3.656E-27	3.636E-27	0.000E+00	0.000E+00		
	Pb-210	3.518E-27	3.498E-27	0.000E+00	0.000E+00		
U-235		1.293E-25	1.285E-25	0.000E+00	0.000E+00	1.171E+03*	1.473E+03
	Pa-231	2.794E-27	2.779E-27	0.000E+00	0.000E+00		
	Ac-227	3.145E-28	3.127E-28	0.000E+00	0.000E+00		
U-238		1.978E-24	1.967E-24	0.000E+00	0.000E+00	8.903E+02*	1.473E+03
	U-234	8.227E-27	8.181E-27	0.000E+00	0.000E+00		
	Th-230	3.225E-29	3.207E-29	0.000E+00	0.000E+00		
	Ra-226	5.955E-30	5.922E-30	0.000E+00	0.000E+00		
	Pb-210	5.602E-30	5.571E-30	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 6.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		6.431E-32	6.383E-32	0.000E+00	0.000E+00	3.470E+10*	1.484E+03
	Th-230	4.973E-34	4.942E-34	0.000E+00	0.000E+00		
	Ra-226	1.332E-34	1.326E-34	0.000E+00	0.000E+00		
	Pb-210	1.282E-34	1.276E-34	0.000E+00	0.000E+00		
U-235		4.649E-33	4.614E-33	0.000E+00	0.000E+00	3.262E+10*	1.484E+03
	Pa-231	1.012E-34	1.006E-34	0.000E+00	0.000E+00		
	Ac-227	1.140E-35	1.133E-35	0.000E+00	0.000E+00		
U-238		7.113E-32	7.060E-32	0.000E+00	0.000E+00	2.480E+10*	1.484E+03
	U-234	2.981E-34	2.963E-34	0.000E+00	0.000E+00		
	Th-230	1.177E-36	1.172E-36	0.000E+00	0.000E+00		
	Ra-226	2.187E-37	2.180E-37	0.000E+00	0.000E+00		
	Pb-210	2.059E-37	2.052E-37	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 8.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Th-230	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ra-226	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
U-235		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Pa-231	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ac-227	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
U-238		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	U-234	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Th-230	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ra-226	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+03, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Th-230	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ra-226	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
U-235		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Pa-231	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ac-227	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
U-238		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	U-234	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Th-230	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ra-226	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.200E+03, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
U-234		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Th-230	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ra-226	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
U-235		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Pa-231	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ac-227	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
U-238		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	U-234	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Th-230	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Ra-226	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		

```
TIME OF RUN 17:49:57.0
DATE OF RUN 04/22/98
FILE NAME: c:\mydocu~1\WAG4\new\out\05a-nr.max
 ***************************************************
 *                                                 *
 *     This output was produced by the model:      *
 *                    GWMENU                       *
 *         Version 1.01: Beta Test Version         *
 * A menu-driven pre-processor for the groundwater *
 * pathway screening model GWSCREEN Version 2.5    *
 *             GWSCREEN Copyright (C) 1992,        *
 *   Lockheed Martin Idaho Technologies Company   *
 *      GWMENU (C) Copyright 1996, K-Spar Inc.     *
 *                    09-15-97                     *
 *                   K-Spar Inc.                   *
 *         493 N 4154 E Rigby Idaho 83442          *
 *         (208) 745-8068 email asr@srv.net        *
 ***************************************************
 ===================================================================
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 ===================================================================

TITLE: CFA-05a max, non-rad
------------------ MODEL OPTIONS -------------------
Type of Output:        Limiting Conc
Integration Method:    Gaussian Quad
Source Model Type:     Surface/Buried
Dose Criteria:         MCL for Non-radiological Contaminant
--------------- SOURCE PARAMETERS -----------------
X Coordinate (m):   -5.143E+02  Y Coordinate (m):    9.249E+02
Source Length (m):   6.949E+01  Source Width (m):    6.949E+01
Thickness (m):       5.790E+00  Bulk Density (g/cc): 1.500E+00
Percolation (m/y):   1.000E-01  Moisture Content:    3.000E-01
------------ UNSATURATED ZONE PARAMETERS -----------
Unsat Thickness (m): 3.200E+01  Moisture Content:    3.000E-01
Total Porosity:      4.870E-01  Bulk Density:        1.500E+00
---------------- AQUIFER PARAMETERS ----------------
Solution Type:    2D Averaged
Pore Velocity (m/y):        5.700E+02 Aquifer Porosity:           1.000E-01
Longitudinal Disp (m):      9.000E+00 Transverse Disp (m):        4.000E+00
Vertical Disp (m):          n/a       Well Screen Thickness (m):  1.500E+01
Bulk Density (g/cc):        1.900E+00 Number of Receptors:        11
--------------- EXPOSURE PARAMETERS ----------------
```

Dose Impacts Base on: MCL (mg/L)
Body Weight (kg): 7.000E+01 Averaging Time (d): 2.556E+04
Water Ingestion Rate (L/d): 2.000E+00 Exposure Frequency (d/y): 3.500E+02
Exposure Duration (y): 3.000E+01

CONTAMINANT PARAMETERS

Contaminant Name	Inventory (mg)	Dose Factor MCL (mg/L)	Molar Weight (g/mole)	Half Life (years)	Kd Source (mL/g)	Kd Unsat (mL/g)	Kd Aquifer (mL/g)	Additional Loss Rate (1/y)	Solubility Limit (mg/L)
Lead	2.672E+09	0.000E+00	2.072E+02	9.000E+09	1.000E+02	1.000E+02	1.000E+02	0.000E+00	1.000E+06

RESULTS

* = Limiting pore water concentration exceeds solubility

Receptor Location X, Y, Z, (meters): -4.795E+02, 9.249E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	4.422E-03	4.422E-03	0.000E+00	0.000E+00	0.000E+00	4.866E+04

Receptor Location X, Y, Z, (meters): 7.550E+01,-2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 0.000E+00, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	2.395E-25	1.890E-25	0.000E+00	0.000E+00	0.000E+00	5.521E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	5.009E-22	4.921E-22	0.000E+00	0.000E+00	0.000E+00	5.428E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	8.687E-19	8.678E-19	0.000E+00	0.000E+00	0.000E+00	5.324E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 3.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.123E-15	1.123E-15	0.000E+00	0.000E+00	0.000E+00	5.276E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 4.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.029E-12	1.029E-12	0.000E+00	0.000E+00	0.000E+00	5.229E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 6.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.592E-07	1.592E-07	0.000E+00	0.000E+00	0.000E+00	5.149E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 8.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	3.921E-04	3.920E-04	0.000E+00	0.000E+00	0.000E+00	5.101E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+03, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.020E-03	1.020E-03	0.000E+00	0.000E+00	0.000E+00	5.095E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.200E+03, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.831E-06	1.831E-06	0.000E+00	0.000E+00	0.000E+00	5.136E+04

```
TIME OF RUN 17:50:05.7
DATE OF RUN 04/22/98
FILE NAME: c:\mydocu~1\WAG4\new\out\05a-rad.max
  ***************************************************
  *                                                 *
  *     This output was produced by the model:      *
  *                    GWMENU                       *
  *         Version 1.01; Beta Test Version         *
  * A menu-driven pre-processor for the groundwater *
  * pathway screening model GWSCREEN Version 2.5    *
  *              GWSCREEN Copyright (C) 1992,       *
  *   Lockheed Martin Idaho Technologies Company   *
  *      GWMENU (C) Copyright 1996, K-Spar Inc.     *
  *                    09-15-97                     *
  *                   K-Spar Inc.                   *
  *         493 N 4154 E Rigby Idaho 83442          *
  *         (208) 745-8068 email asr@srv.net        *
  ***************************************************
 ==================================================================
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 ==================================================================

TITLE: CFA-05a max, rad
----------------- MODEL OPTIONS -------------------
Type of Output:        Limiting Conc
Integration Method:    Gaussian Quad
Source Model Type:     Surface/Buried
Dose Criteria:         MCL for Radionuclide
--------------- SOURCE PARAMETERS ------------------
X Coordinate (m):   -5.143E+02  Y Coordinate (m):    9.249E+02
Source Length (m):   6.949E+01  Source Width (m):    6.949E+01
Thickness (m):       5.790E+00  Bulk Density (g/cc): 1.500E+00
Percolation (m/y):   1.000E-01  Moisture Content:    3.000E-01
------------ UNSATURATED ZONE PARAMETERS -----------
Unsat Thickness (m): 3.200E+01  Moisture Content:    3.000E-01
Total Porosity:      4.870E-01  Bulk Density:        1.500E+00
---------------- AQUIFER PARAMETERS ----------------
Solution Type:    2D Averaged
Pore Velocity (m/y):        5.700E+02 Aquifer Porosity:          1.000E-01
Longitudinal Disp (m):      9.000E+00 Transverse Disp (m):       4.000E+00
Vertical Disp (m):         n/a        Well Screen Thickness (m):  1.500E+01
Bulk Density (g/cc):        1.900E+00 Number of Receptors:       11
--------------- EXPOSURE PARAMETERS ----------------
Dose Impacts Base on: MCL (Ci/L)
Body Weight (kg):           7.000E+01 Averaging Time (d):        2.556E+04
Water Ingestion Rate (L/d): 2.000E+00 Exposure Frequency (d/y):  3.500E+02
Exposure Duration (y):      3.000E+01
---------------------------------------------- CONTAMINANT PARAMETERS ----------------------------------------------
```

Contaminant Name	Inventory (Ci)	Dose Factor MCL (Ci/L)	Molar Weight (g/mole)	Half Life (years)	Kd Source (mL/g)	Kd Unsat (mL/g)	Kd Aquifer (mL/g)	Additional Loss Rate (1/y)	Solubility Limit (mg/L)
Np-237	4.203E-06	1.500E-11	2.370E+02	2.100E+06	5.000E+00	5.000E+00	5.000E+00	0.000E+00	1.000E+06
U-233		2.700E+05		1.590E+05			6.000E+00		
Th-229		3.910E+06		7.340E+03			1.000E+02		
Cs-137	2.211E-02	1.510E-12	1.370E+02	3.020E+01	5.000E+02	5.000E+02	5.000E+02	0.000E+00	1.000E+06
Ra-226	8.390E-02	2.000E-11	2.260E+02	1.600E+03	1.000E+02	1.000E+02	1.000E+02	0.000E+00	1.000E+06
Pb-210		6.700E+06		2.230E+01			1.000E+02		
Th-228	1.860E-05	0.000E+00	2.280E+02	1.913E+00	1.000E+02	1.000E+02	1.000E+02	0.000E+00	1.000E+06
Pb-210	7.410E-08	6.700E+06	2.100E+02	2.230E+01	1.000E+02	1.000E+02	1.000E+02	0.000E+00	1.000E+06

RESULTS

* = Limiting pore water concentration exceeds solubility

Receptor Location X, Y, Z, (meters): -4.795E+02, 9.249E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.341E-16	1.313E-16	0.000E+00	0.000E+00	1.144E-08	2.525E+03
	U-233	1.226E-18	1.201E-18	0.000E+00	0.000E+00		
	Th-229	8.193E-21	8.026E-21	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		1.018E-22	1.018E-22	0.000E+00	0.000E+00	3.930E+02	4.849E+04
	Pb-210	1.033E-22	1.032E-22	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01,-2.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.724E+22*	2.888E+03
	U-233	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Th-229	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 0.000E+00, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		7.297E-39	5.276E-39	0.000E+00	0.000E+00	2.849E+14*	2.855E+03
	U-233	7.539E-41	5.451E-41	0.000E+00	0.000E+00		
	Th-229	5.647E-43	4.078E-43	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.524E-35	1.469E-35	0.000E+00	0.000E+00	1.023E+11*	2.808E+03
	U-233	1.549E-37	1.493E-37	0.000E+00	0.000E+00		
	Th-229	1.142E-39	1.100E-39	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		1.506E-42	1.481E-42	0.000E+00	0.000E+00	2.702E+22*	5.336E+04
	Pb-210	1.527E-42	1.502E-42	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 2.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		2.639E-32	2.623E-32	0.000E+00	0.000E+00	5.732E+07*	2.756E+03
	U-233	2.632E-34	2.616E-34	0.000E+00	0.000E+00		
	Th-229	1.907E-36	1.895E-36	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		3.054E-39	3.043E-39	0.000E+00	0.000E+00	1.315E+19*	5.264E+04
	Pb-210	3.098E-39	3.085E-39	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 3.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		3.412E-29	3.391E-29	0.000E+00	0.000E+00	4.433E+04*	2.732E+03
	U-233	3.373E-31	3.353E-31	0.000E+00	0.000E+00		
	Th-229	2.424E-33	2.410E-33	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		4.786E-36	4.786E-36	0.000E+00	0.000E+00	8.361E+15*	5.224E+04
	Pb-210	4.853E-36	4.853E-36	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 4.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		3.126E-26	3.103E-26	0.000E+00	0.000E+00	4.844E+01*	2.708E+03
	U-233	3.063E-28	3.041E-28	0.000E+00	0.000E+00		
	Th-229	2.184E-30	2.168E-30	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		5.281E-33	5.279E-33	0.000E+00	0.000E+00	7.580E+12*	5.182E+04
	Pb-210	5.356E-33	5.353E-33	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 6.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		4.834E-21	4.793E-21	0.000E+00	0.000E+00	3.136E-04	2.668E+03
	U-233	4.668E-23	4.628E-23	0.000E+00	0.000E+00		
	Th-229	3.282E-25	3.254E-25	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		1.132E-27	1.132E-27	0.000E+00	0.000E+00	3.535E+07*	5.110E+04
	Pb-210	1.148E-27	1.148E-27	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 8.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.190E-17	1.181E-17	0.000E+00	0.000E+00	1.272E-07	2.644E+03
	U-233	1.139E-19	1.131E-19	0.000E+00	0.000E+00		
	Th-229	7.945E-22	7.886E-22	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		3.450E-24	3.450E-24	0.000E+00	0.000E+00	1.160E+04	5.062E+04
	Pb-210	3.499E-24	3.499E-24	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+03, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		3.097E-17	3.073E-17	0.000E+00	0.000E+00	4.891E-08	2.641E+03
	U-233	2.961E-19	2.938E-19	0.000E+00	0.000E+00		
	Th-229	2.062E-21	2.046E-21	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		9.210E-24	9.210E-24	0.000E+00	0.000E+00	4.344E+03	5.056E+04
	Pb-210	9.340E-24	9.340E-24	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.200E+03, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		5.559E-20	5.520E-20	0.000E+00	0.000E+00	2.724E-05	2.662E+03
	U-233	5.356E-22	5.318E-22	0.000E+00	0.000E+00		
	Th-229	3.759E-24	3.733E-24	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		1.392E-26	1.392E-26	0.000E+00	0.000E+00	2.875E+06*	5.095E+04
	Pb-210	1.412E-26	1.412E-26	0.000E+00	0.000E+00		
Th-228		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Pb-210		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00

```
TIME OF RUN 17:50:25.8
 DATE OF RUN 04/22/98
 FILE NAME: c:\mydocu~1\WAG4\new\out\05b-nr.max
  ***************************************************
  *                                                 *
  *     This output was produced by the model:      *
  *                    GWMENU                       *
  *         Version 1.01: Beta Test Version         *
  * A menu-driven pre-processor for the groundwater *
  * pathway screening model GWSCREEN Version 2.5    *
  *             GWSCREEN Copyright (C) 1992,        *
  *   Lockheed Martin Idaho Technologies Company   *
  *      GWMENU (C) Copyright 1996, K-Spar Inc.     *
  *                    09-15-97                     *
  *                   K-Spar Inc.                   *
  *         493 N 4154 E Rigby Idaho 83442          *
  *         (208) 745-8068 email asr@srv.net        *
  ***************************************************
 ==================================================================
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 ==================================================================

 TITLE: CFA-05b max, non-rad
 ----------------- MODEL OPTIONS ------------------
 Type of Output:        Limiting Conc
 Integration Method:    Gaussian Quad
 Source Model Type:     Surface/Buried
 Dose Criteria:         MCL for Non-radiological Contaminant
 -------------- SOURCE PARAMETERS -----------------
 X Coordinate (m):   -5.301E+02  Y Coordinate (m):    8.555E+02
 Source Length (m):   6.949E+01  Source Width (m):    3.779E+01
 Thickness (m):       5.790E+00  Bulk Density (g/cc): 1.500E+00
 Percolation (m/y):   1.000E-01  Moisture Content:    3.000E-01
 ------------ UNSATURATED ZONE PARAMETERS -----------
 Unsat Thickness (m): 3.150E+01  Moisture Content:    3.000E-01
 Total Porosity:      4.870E-01  Bulk Density:        1.500E+00
```

---------- AQUIFER PARAMETERS ----------

Solution Type: 2D Averaged

Pore Velocity (m/y):	5.700E+02	Aquifer Porosity:	1.000E-01
Longitudinal Disp (m):	9.000E+00	Transverse Disp (m):	4.000E+00
Vertical Disp (m):	n/a	Well Screen Thickness (m):	1.500E+01
Bulk Density (g/cc):	1.900E+00	Number of Receptors:	11

---------- EXPOSURE PARAMETERS ----------

Dose Impacts Base on: MCL (mg/L)

Body Weight (kg):	7.000E+01	Averaging Time (d):	2.556E+04
Water Ingestion Rate (L/d):	2.000E+00	Exposure Frequency (d/y):	3.500E+02
Exposure Duration (y):	3.000E+01		

---------- CONTAMINANT PARAMETERS ----------

Contaminant Name	Inventory (mg)	Dose Factor MCL (mg/L)	Molar Weight (g/mole)	Half Life (years)	Kd Source (mL/g)	Kd Unsat (mL/g)	Kd Aquifer (mL/g)	Additional Loss Rate (1/y)	Solubility Limit (mg/L)
Lead	1.453E+09	0.000E+00	2.072E+02	9.000E+09	1.000E+02	1.000E+02	1.000E+02	0.000E+00	1.000E+06

---------- RESULTS ----------

* = Limiting pore water concentration exceeds solubility

Receptor Location X, Y, Z, (meters): -4.953E+02, 8.555E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	3.430E-03	3.429E-03	0.000E+00	0.000E+00	0.000E+00	4.787E+04

Receptor Location X, Y, Z, (meters): 7.550E+01,-2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.361E-30	9.284E-31	0.000E+00	0.000E+00	0.000E+00	5.483E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 0.000E+00, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	2.430E-23	2.404E-23	0.000E+00	0.000E+00	0.000E+00	5.407E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	4.267E-20	4.250E-20	0.000E+00	0.000E+00	0.000E+00	5.259E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	5.913E-17	5.911E-17	0.000E+00	0.000E+00	0.000E+00	5.225E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 3.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	6.048E-14	6.047E-14	0.000E+00	0.000E+00	0.000E+00	5.176E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 4.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	4.025E-11	4.023E-11	0.000E+00	0.000E+00	0.000E+00	5.137E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 6.000E+02, 1.500E+01

```
  Contaminant Name       Maximum        Average        Maximum        Average        Limiting       Peak Time
                       Concentration  Concentration     Impacts        Impacts     Concentration    (years)
                          (mg/L)         (mg/L)          (MCL)          (MCL)         (mg/kg)
-----------------------------------------------------------------------------------------------------------
Lead                    2.129E-06      2.129E-06      0.000E+00      0.000E+00      0.000E+00      5.063E+04
Receptor Location X, Y, Z, (meters):  7.550E+01, 8.000E+02, 1.500E+01
  Contaminant Name       Maximum        Average        Maximum        Average        Limiting       Peak Time
                       Concentration  Concentration     Impacts        Impacts     Concentration    (years)
                          (mg/L)         (mg/L)          (MCL)          (MCL)         (mg/kg)
-----------------------------------------------------------------------------------------------------------
Lead                    7.158E-04      7.157E-04      0.000E+00      0.000E+00      0.000E+00      5.024E+04
Receptor Location X, Y, Z, (meters):  7.550E+01, 1.000E+03, 1.500E+01
  Contaminant Name       Maximum        Average        Maximum        Average        Limiting       Peak Time
                       Concentration  Concentration     Impacts        Impacts     Concentration    (years)
                          (mg/L)         (mg/L)          (MCL)          (MCL)         (mg/kg)
-----------------------------------------------------------------------------------------------------------
Lead                    1.234E-04      1.233E-04      0.000E+00      0.000E+00      0.000E+00      5.035E+04
Receptor Location X, Y, Z, (meters):  7.550E+01, 1.200E+03, 1.500E+01
  Contaminant Name       Maximum        Average        Maximum        Average        Limiting       Peak Time
                       Concentration  Concentration     Impacts        Impacts     Concentration    (years)
                          (mg/L)         (mg/L)          (MCL)          (MCL)         (mg/kg)
-----------------------------------------------------------------------------------------------------------
Lead                    2.626E-08      2.626E-08      0.000E+00      0.000E+00      0.000E+00      5.095E+04

TIME OF RUN 17:50:43.0
DATE OF RUN 04/22/98
FILE NAME: c:\mydocu~1\WAG4\new\out\05b-rad.max
  ***************************************************
  *                                                 *
  *     This output was produced by the model:      *
  *                    GWMENU                       *
  *         Version 1.01; Beta Test Version         *
  * A menu-driven pre-processor for the groundwater *
  * pathway screening model GWSCREEN Version 2.5    *
  *              GWSCREEN Copyright (C) 1992,       *
  *   Lockheed Martin Idaho Technologies Company   *
  *      GWMENU (C) Copyright 1996, K-Spar Inc.     *
  *                    09-15-97                     *
  *                   K-Spar Inc.                   *
  *         493 N 4154 E Rigby Idaho 83442          *
  *         (208) 745-8068 email asr@srv.net        *
  ***************************************************
 ==================================================================
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 ==================================================================

TITLE: CFA-05b max, rad
----------------- MODEL OPTIONS -----------------
Type of Output:        Limiting Conc
Integration Method:    Gaussian Quad
Source Model Type:     Surface/Buried
Dose Criteria:         MCL for Radionuclide
--------------- SOURCE PARAMETERS -----------------
X Coordinate (m):   -5.301E+02  Y Coordinate (m):    8.555E+02
Source Length (m):   6.949E+01  Source Width (m):    3.779E+01
Thickness (m):       5.790E+00  Bulk Density (g/cc): 1.500E+00
Percolation (m/y):   1.000E-01  Moisture Content:    3.000E-01
------------ UNSATURATED ZONE PARAMETERS -----------
Unsat Thickness (m): 3.150E+01  Moisture Content:    3.000E-01
Total Porosity:      4.870E-01  Bulk Density:        1.500E+00
---------------- AQUIFER PARAMETERS ----------------
Solution Type:    2D Averaged
```

Pore Velocity (m/y): 5.700E+02 Aquifer Porosity: 1.000E-01
Longitudinal Disp (m): 9.000E+00 Transverse Disp (m): 4.000E+00
Vertical Disp (m): n/a Well Screen Thickness (m): 1.500E+01
Bulk Density (g/cc): 1.900E+00 Number of Receptors: 11

---------- EXPOSURE PARAMETERS ----------

Dose Impacts Base on: MCL (Ci/L)
Body Weight (kg): 7.000E+01 Averaging Time (d): 2.556E+04
Water Ingestion Rate (L/d): 2.000E+00 Exposure Frequency (d/y): 3.500E+02
Exposure Duration (y): 3.000E+01

---------- CONTAMINANT PARAMETERS ----------

Contaminant Name	Inventory (Ci)	Dose Factor MCL (Ci/L)	Molar Weight (g/mole)	Half Life (years)	Kd Source (mL/g)	Kd Unsat (mL/g)	Kd Aquifer (mL/g)	Additional Loss Rate (1/y)	Solubility Limit (mg/L)
Np-237	2.286E-06	1.500E-11	2.370E+02	2.100E+06	5.000E+00	5.000E+00	5.000E+00	0.000E+00	1.000E+06
U-233		2.700E+05		1.590E+05			6.000E+00		
Th-229		3.910E+06		7.340E+03			1.000E+02		
Cs-137	1.202E-02	1.510E-12	1.370E+02	3.020E+01	5.000E+02	5.000E+02	5.000E+02	0.000E+00	1.000E+06
Ra-226	4.563E-02	2.000E-11	2.260E+02	1.600E+03	1.000E+02	1.000E+02	1.000E+02	0.000E+00	1.000E+06
Pb-210		6.700E+06		2.230E+01			1.000E+02		

---------- RESULTS ----------

* = Limiting pore water concentration exceeds solubility

Receptor Location X, Y, Z, (meters): -4.953E+02, 8.555E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.040E-16	1.018E-16	0.000E+00	0.000E+00	1.477E-08	2.484E+03
	U-233	9.357E-19	9.157E-19	0.000E+00	0.000E+00		
	Th-229	6.161E-21	6.030E-21	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		1.106E-22	1.106E-22	0.000E+00	0.000E+00	3.619E+02	4.771E+04
	Pb-210	1.121E-22	1.121E-22	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01,-2.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		4.064E-44	2.242E-44	0.000E+00	0.000E+00	6.656E+19*	2.835E+03
	U-233	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
	Th-229	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 0.000E+00, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		7.405E-37	6.162E-37	0.000E+00	0.000E+00	2.440E+12*	2.797E+03
	U-233	7.494E-39	6.236E-39	0.000E+00	0.000E+00		
	Th-229	5.504E-41	4.580E-41	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
	Pb-210	0.000E+00	0.000E+00	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.296E-33	1.269E-33	0.000E+00	0.000E+00	1.185E+09*	2.722E+03
	U-233	1.277E-35	1.250E-35	0.000E+00	0.000E+00		
	Th-229	9.149E-38	8.955E-38	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		1.890E-40	1.881E-40	0.000E+00	0.000E+00	2.127E+20*	5.221E+04
	Pb-210	1.917E-40	1.908E-40	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 2.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.797E-30	1.786E-30	0.000E+00	0.000E+00	8.419E+05*	2.705E+03
	U-233	1.759E-32	1.748E-32	0.000E+00	0.000E+00		
	Th-229	1.253E-34	1.245E-34	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		3.165E-37	3.164E-37	0.000E+00	0.000E+00	1.265E+17*	5.172E+04
	Pb-210	3.210E-37	3.209E-37	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 3.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.838E-27	1.825E-27	0.000E+00	0.000E+00	8.237E+02*	2.680E+03
	U-233	1.783E-29	1.771E-29	0.000E+00	0.000E+00		
	Th-229	1.259E-31	1.251E-31	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		3.912E-34	3.912E-34	0.000E+00	0.000E+00	1.023E+14*	5.129E+04
	Pb-210	3.967E-34	3.967E-34	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 4.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		1.223E-24	1.214E-24	0.000E+00	0.000E+00	1.238E+00	2.660E+03
	U-233	1.177E-26	1.169E-26	0.000E+00	0.000E+00		
	Th-229	8.257E-29	8.200E-29	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		3.108E-31	3.108E-31	0.000E+00	0.000E+00	1.287E+11*	5.089E+04
	Pb-210	3.152E-31	3.152E-31	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 6.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		6.468E-20	6.424E-20	0.000E+00	0.000E+00	2.340E-05	2.625E+03
	U-233	6.146E-22	6.104E-22	0.000E+00	0.000E+00		
	Th-229	4.258E-24	4.229E-24	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		2.224E-26	2.223E-26	0.000E+00	0.000E+00	1.800E+06*	5.021E+04
	Pb-210	2.255E-26	2.255E-26	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 8.000E+02, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		2.174E-17	2.157E-17	0.000E+00	0.000E+00	6.972E-08	2.603E+03
	U-233	2.049E-19	2.032E-19	0.000E+00	0.000E+00		
	Th-229	1.408E-21	1.397E-21	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		8.791E-24	8.790E-24	0.000E+00	0.000E+00	4.552E+03	4.985E+04
	Pb-210	8.915E-24	8.914E-24	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+03, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		3.746E-18	3.717E-18	0.000E+00	0.000E+00	4.045E-07	2.609E+03
	U-233	3.538E-20	3.511E-20	0.000E+00	0.000E+00		
	Th-229	2.438E-22	2.419E-22	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		1.442E-24	1.442E-24	0.000E+00	0.000E+00	2.775E+04	4.996E+04
	Pb-210	1.462E-24	1.462E-24	0.000E+00	0.000E+00		

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.200E+03, 1.500E+01

Contaminant Name		Maximum Concentration (Ci/L)	Average Concentration (Ci/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (Ci/kg)	Peak Time (years)
Np-237		7.978E-22	7.925E-22	0.000E+00	0.000E+00	1.897E-03	2.640E+03
	U-233	7.623E-24	7.573E-24	0.000E+00	0.000E+00		
	Th-229	5.309E-26	5.274E-26	0.000E+00	0.000E+00		
Cs-137		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00*	0.000E+00
Ra-226		2.426E-28	2.426E-28	0.000E+00	0.000E+00	1.650E+08*	5.049E+04
	Pb-210	2.460E-28	2.460E-28	0.000E+00	0.000E+00		

TIME OF RUN 17:50:57.6
DATE OF RUN 04/22/98
FILE NAME: c:\mydocu~1\WAG4\new\out\07a-nr.max

```
 ***************************************************
 *                                                 *
 *     This output was produced by the model:      *
 *                    GWMENU                       *
 *         Version 1.01: Beta Test Version         *
 * A menu-driven pre-processor for the groundwater *
 * pathway screening model GWSCREEN Version 2.5    *
 *              GWSCREEN Copyright (C) 1992,       *
 *   Lockheed Martin Idaho Technologies Company   *
 *      GWMENU (C) Copyright 1996, K-Spar Inc.     *
 *                    09-15-97                     *
 *                   K-Spar Inc.                   *
 *         493 N 4154 E Rigby Idaho 83442          *
 *         (208) 745-8068 email asr@srv.net        *
 ***************************************************
```


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```
TITLE: CFA-07a max, non-rad
----------------- MODEL OPTIONS ------------------
Type of Output:        Limiting Conc
Integration Method:    Gaussian Quad
Source Model Type:     Surface/Buried
Dose Criteria:         MCL for Non-radiological Contaminant
-------------- SOURCE PARAMETERS -----------------
X Coordinate (m):   -1.449E+03  Y Coordinate (m):    8.121E+02
Source Length (m):   2.700E+00  Source Width (m):    2.700E+00
Thickness (m):       3.500E+00  Bulk Density (g/cc): 1.500E+00
Percolation (m/y):   1.000E-01  Moisture Content:    3.000E-01
----------- UNSATURATED ZONE PARAMETERS -----------
Unsat Thickness (m): 4.630E+01  Moisture Content:    3.000E-01
Total Porosity:      4.870E-01  Bulk Density:        1.500E+00
--------------- AQUIFER PARAMETERS ---------------
Solution Type:    2D Averaged
Pore Velocity (m/y):        5.700E+02 Aquifer Porosity:          1.000E-01
Longitudinal Disp (m):      9.000E+00 Transverse Disp (m):       4.000E+00
Vertical Disp (m):         n/a        Well Screen Thickness (m):  1.500E+01
Bulk Density (g/cc):        1.900E+00 Number of Receptors:       11
-------------- EXPOSURE PARAMETERS ----------------
Dose Impacts Base on: MCL (mg/L)
Body Weight (kg):           7.000E+01 Averaging Time (d):        2.556E+04
Water Ingestion Rate (L/d): 2.000E+00 Exposure Frequency (d/y):  3.500E+02
Exposure Duration (y):      3.000E+01
---------------------------------------------------- CONTAMINANT PARAMETERS ----------------------------------------------------
```

Contaminant Name	Inventory (mg)	Dose Factor MCL (mg/L)	Molar Weight (g/mole)	Half Life (years)	Kd Source (mL/g)	Kd Unsat (mL/g)	Kd Aquifer (mL/g)	Additional Loss Rate (1/y)	Solubility Limit (mg/L)
Lead	1.753E+08	0.000E+00	2.072E+02	9.000E+09	1.000E+02	1.000E+02	1.000E+02	0.000E+00	1.000E+06

RESULTS

* = Limiting pore water concentration exceeds solubility

Receptor Location X, Y, Z, (meters): -1.448E+03, 8.121E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	2.426E-03	2.419E-03	0.000E+00	0.000E+00	0.000E+00	6.964E+04

Receptor Location X, Y, Z, (meters): 7.550E+01,-2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	8.534E-20	8.229E-20	0.000E+00	0.000E+00	0.000E+00	7.895E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 0.000E+00, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	4.896E-15	4.846E-15	0.000E+00	0.000E+00	0.000E+00	7.726E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	7.456E-13	7.353E-13	0.000E+00	0.000E+00	0.000E+00	7.680E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 2.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	7.164E-11	7.073E-11	0.000E+00	0.000E+00	0.000E+00	7.672E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 3.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	4.121E-09	4.086E-09	0.000E+00	0.000E+00	0.000E+00	7.635E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 4.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.324E-07	1.309E-07	0.000E+00	0.000E+00	0.000E+00	7.617E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 6.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.771E-05	1.763E-05	0.000E+00	0.000E+00	0.000E+00	7.580E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 8.000E+02, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	1.098E-04	1.096E-04	0.000E+00	0.000E+00	0.000E+00	7.569E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.000E+03, 1.500E+01

Contaminant Name	Maximum Concentration (mg/L)	Average Concentration (mg/L)	Maximum Impacts (MCL)	Average Impacts (MCL)	Limiting Concentration (mg/kg)	Peak Time (years)
Lead	2.631E-05	2.621E-05	0.000E+00	0.000E+00	0.000E+00	7.580E+04

Receptor Location X, Y, Z, (meters): 7.550E+01, 1.200E+03, 1.500E+01