## Results of Gamma Spec Analysis for Depleted Uranium in APG Soils

	pCi/g	T / 10 :		0''	T / 10 ·		
Sample ID:	U-238 (Th-234)	Total Curies U-238	grams U-238 per Sample	pCi/g U-235	Total Curies U-235	grams U-235 per sample	U-235/U-238 Ratio
oumpio ibi	(	0 200	por compre	0 200	0 200		6.4227E-02 This Sample
	0.60	5.9600E-13	1.7898E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-1-1	0.00	0.00002 10	0002 00	0.2.0	21.10002 10		785.53 % Diff from Natual
00 1 1							1.0346E-01 This Sample
	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
CLL4.0	0.57	3.7000L-13	1.111112-00	0.240	2.4000L-13	1.1433L-01	1326.43 % Diff from Natual
SU-1-2							
	0.02	9.3200E-13	2 7000 00	0.022	2.27005.44	1 F200F 00	5.4596E-03 This Sample
CLL4.0	0.93	9.3200E-13	2.7988E-06	0.033	3.2700E-14	1.5280E-08	7.2529E-03 Natural
SU-1-3							5.3729E-03 This Sample
	2.65	2.6500E-12	7.9580E-06	0.002	9.1500E-14	4.2757E-08	7.2529E-03 Natural
CILAA	2.00	2.0300E-12	7.9300E-00	0.092	9.1500E-14	4.2/3/E-00	-25.92 % Diff from Natual
SU-1-4							
	0.00	9.0200E-13	2.7087E-06	0.038	3.8200E-14	1.7850E-08	6.5900E-03 This Sample 7.2529E-03 Natural
CLL4.5	0.90	9.0200E-13	2.7007 E-00	0.036	3.0200E-14	1.7650E-06	-9.14 % Diff from Natual
SU-1-5							
	0.07	2.70005.42	4 4444 5 00	0.040	0.40005.40	4 4 4 0 5 5 0 7	1.0346E-01 This Sample
0114.0	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-1-6							1326.43 % Diff from Natual
	0.00	0.04005.40	0.40545.00	0.040	0.40005.40	4.44055.07	4.7790E-02 This Sample
O	0.80	8.0100E-13	2.4054E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-1-7							558.90 % Diff from Natual
	4.70	4 70005 40	5 40545 00	0.070	7.00005.44	0.50075.00	6.9749E-03 This Sample
011.4.0	1.70	1.7000E-12	5.1051E-06	0.076	7.6200E-14	3.5607E-08	7.2529E-03 Natural
SU-1-8							-3.83 % Diff from Natual
							2.6988E-03 This Sample
	12.80	1.2800E-11	3.8438E-05	0.222	2.2200E-13	1.0374E-07	7.2529E-03 Natural
SU-1-9							-62.79 % Diff from Natual
			. =====================================				3.2168E-03 This Sample
	5.95	5.9500E-12	1.7868E-05	0.123	1.2300E-13	5.7477E-08	7.2529E-03 Natural
SU-1-10							-55.65 % Diff from Natual
	0.50	0.50005.40	7 50705 00	0.007	0.07005.44	4 74505 00	2.2662E-03 This Sample
011.4.4.4	2.52	2.5200E-12	7.5676E-06	0.037	3.6700E-14	1.7150E-08	7.2529E-03 Natural
SU-1-11							-68.75 % Diff from Natual
	4.00	4 00005 40	5 7050E 00	0.040	0.00005.44	4.05055.00	3.1928E-03 This Sample
011.4.40	1.93	1.9300E-12	5.7958E-06	0.040	3.9600E-14	1.8505E-08	7.2529E-03 Natural
SU-1-12							-55.98 % Diff from Natual
	0.00	0.00005.40	0.07075.00	0.000	0.00005.44	4 00005 00	3.8379E-03 This Sample
011.4.40	0.89	8.9200E-13	2.6787E-06	0.022	2.2000E-14	1.0280E-08	7.2529E-03 Natural
SU-1-13							-47.09 % Diff from Natual
	0.75	2.75005.40	0.05005.00	0.044	4.44005.44	4 00005 00	2.3256E-03 This Sample
011444	2.75	2.7500E-12	8.2583E-06	0.041	4.1100E-14	1.9206E-08	7.2529E-03 Natural
SU-1-14							-67.94 % Diff from Natual
	0.07	2 70005 40	4 4444 5 00	0.040	0.46005.40	1 11055 07	1.0346E-01 This Sample
011.0.4	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-1							1326.43 % Diff from Natual
	0.00	0.0000= 11	0.0000= 00	0.000	0.04005.41	4.0000= 00	2.8087E-01 This Sample
011.0.5	0.02	2.0000E-14	6.0060E-08	0.036	3.6100E-14	1.6869E-08	7.2529E-03 Natural
SU-2-2							3772.52 % Diff from Natual
	2.55	5 7 400 F 10	4 70075 65	0.045	0.40005.40	4 4 4055 55	6.6689E-02 This Sample
011.5.5	0.57	5.7400E-13	1.7237E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-3							819.47 % Diff from Natual
		0.7000= :-	4.44.5	0.0.1-	0.40007 (5	4 445==	1.0346E-01 This Sample
011 - 1	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-4							1326.43 % Diff from Natual
							1.0346E-01 This Sample
	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-5							1326.43 % Diff from Natual

## Results of Gamma Spec Analysis for Depleted Uranium in APG Soils

	pCi/g U-238		grams U-238	pCi/g	Total Curies	grams U-235	
Sample ID:	(Th-234)	U-238	per Sample	U-235	U-235	per sample	U-235/U-238 Ratio
_							8.6801E-02 This Sample
	0.44	4.4100E-13	1.3243E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-6							1096.77 % Diff from Natual
_	0.57	5.05005.40	4 00075 00	0.040	0.40005.40	4 4 4055 07	6.7751E-02 This Sample
	0.57	5.6500E-13	1.6967E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-7							834.12 % Diff from Natual
	10.00				0.0000000000000000000000000000000000000		2.6308E-03 This Sample
011.0.0	13.90	1.3900E-11	4.1742E-05	0.235	2.3500E-13	1.0981E-07	7.2529E-03 Natural
SU-2-8							-63.73 % Diff from Natual
-	0.00	0.00005.40	4 47705 05	0.074	7.07005.44	0.00075.00	2.8065E-03 This Sample
011.0.0	3.92	3.9200E-12	1.1772E-05	0.071	7.0700E-14	3.3037E-08	7.2529E-03 Natural
SU-2-9							-61.31 % Diff from Natual
-	0.70	7 0000E 40	0.00045.00	0.040	0.40005.40	4 4 4 0 5 5 0 7	4.8578E-02 This Sample
011.0.40	0.79	7.8800E-13	2.3664E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-10							569.77 % Diff from Natual
	0.07	0.0000E 40	0.00005.00	0.004	0.05005.44	4.00045.00	4.2080E-03 This Sample
011.0.44	0.87	8.6900E-13	2.6096E-06	0.024	2.3500E-14	1.0981E-08	7.2529E-03 Natural
SU-2-11							-41.98 % Diff from Natual
-	0.04	1.1700E-14	2.54255.00	0.040	0.40005.40	4 4 4 0 5 5 0 7	3.2717E+00 This Sample
011.0.40	0.01	1.1700E-14	3.5135E-08	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-2-12							45009.21 % Diff from Natual
-	0.27	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1 11055 07	1.0346E-01 This Sample 7.2529E-03 Natural
011.0.40	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	1326.43 % Diff from Natual
SU-2-13							
-	0.89	8.9200E-13	2.6787E-06	0.246	2.4600E-13	1.1495E-07	4.2914E-02 This Sample 7.2529E-03 Natural
011.0.44	0.69	6.9200E-13	2.0/0/E-00	0.246	2.4600E-13	1.1495E-07	
SU-2-14							491.68 % Diff from Natual
-	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	1.0346E-01 This Sample 7.2529E-03 Natural
SU-4-1	0.37	3.7000E-13	1.111112-00	0.240	2.4600E-13	1.1493E-07	1326.43 % Diff from Natual
30-4-1							3.1121E-01 This Sample
-	0.05	5.3000E-14	1.5916E-07	0.106	1.0600E-13	4.9533E-08	7.2529E-03 Natural
SU-4-2	0.03	3.3000L-14	1.59101-07	0.100	1.0000L-13	4.9333L-00	4190.88 % Diff from Natual
30-4-2							4.6260E-03 This Sample
	2.21	2.2100E-12	6.6366E-06	0.066	6.5700E-14	3.0701E-08	7.2529E-03 Natural
SU-4-3		2.21002 12	0.00002 00	0.000	0.07002 11	0.07012 00	-36.22 % Diff from Natual
00 4 0							3.0677E-01 This Sample
-	0.02	2.1000E-14	6.3063E-08	0.041	4.1400E-14	1.9346E-08	7.2529E-03 Natural
SU-4-4			0.0000				4129.58 % Diff from Natual
							2.5656E-03 This Sample
	20.50	2.0500E-11	6.1562E-05	0.338	3.3800E-13	1.5794E-07	7.2529E-03 Natural
SU-4-5			1 12				-64.63 % Diff from Natual
							2.0774E-01 This Sample
	0.04	4.0000E-14	1.2012E-07	0.053	5.3400E-14	2.4953E-08	7.2529E-03 Natural
SU-4-6							2764.16 % Diff from Natual
							1.0346E-01 This Sample
	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-4-7						·	1326.43 % Diff from Natual
							3.6872E-01 This Sample
	0.05	4.6000E-14	1.3814E-07	0.109	1.0900E-13	5.0935E-08	7.2529E-03 Natural
SU-4-8							4983.76 % Diff from Natual
							1.7466E-02 This Sample
	0.98	9.8000E-13	2.9429E-06	0.110	1.1000E-13	5.1402E-08	7.2529E-03 Natural
SU-4-9							140.81 % Diff from Natual
							1.6235E-01 This Sample
	0.06	6.0000E-14	1.8018E-07	0.063	6.2600E-14	2.9252E-08	7.2529E-03 Natural
SU-4-10							2138.41 % Diff from Natual

## Results of Gamma Spec Analysis for Depleted Uranium in APG Soils

	pCi/g U-238	Total Curies	grams U-238	pCi/g	Total Curies	grams U-235	
Sample ID:	(Th-234)	U-238	per Sample	U-235	U-235	per sample	U-235/U-238 Ratio
	, ,						7.8119E-03 This Sample
	2.47	2.4700E-12	7.4174E-06	0.124	1.2400E-13	5.7944E-08	
SU-4-11				****			7.71 % Diff from Natual
00 1 11							3.0468E-01 This Sample
	0.05	5.0000E-14	1.5015E-07	0.098	9.7900E-14	4.5748E-08	7.2529E-03 Natural
SU-4-12	0.00	0.00002		0.000	0000		4100.77 % Diff from Natual
00 1 12							2.6648E-01 This Sample
	0.08	8.0000E-14	2.4024E-07	0.137	1.3700E-13	6.4019E-08	
SU-4-13	0.00	0.00002 11		00.		01.0.02.00	3574.06 % Diff from Natual
55 1 15							5.2301E-01 This Sample
	0.04	3.6000E-14	1.0811E-07	0.121	1.2100E-13	5.6542E-08	
SU-4-14	0.0 .	0.00002 11		0		0.00 .22 00	7111.06 % Diff from Natual
00 1 11							3.2949E-03 This Sample
	2.98	2.9800E-12	8.9489E-06	0.063	6.3100E-14	2.9486E-08	7.2529E-03 Natural
SU-14-1	2.00	2.00002 12	0.0 .002 00	0.000	0.0.002	2.0 .002 00	-54.57 % Diff from Natual
00 14 1							4.2056E-03 This Sample
	2.22	2.2200E-12	6.6667E-06	0.060	6.0000E-14	2.8037E-08	
SU-14-2	2.22	Z.ZZOOL 1Z	0.0007 2 00	0.000	0.00002 14	2.0007 £ 00	-42.02 % Diff from Natual
00 14 2							2.3806E-03 This Sample
	0.72	7.1900E-13	2.1592E-06	0.011	1.1000E-14	5.1402E-09	
SU-14-3	0.12	7.1300L 13	2.1002L 00	0.011	1.1000L 14	3.140ZL 03	-67.18 % Diff from Natual
30-14-3							4.8736E-03 This Sample
-	3.03	3.0300E-12	9.0991E-06	0.095	9.4900E-14	4.4346E-08	7.2529E-03 Natural
SU-14-4	3.03	3.0300L-12	9.0991L-00	0.033	9.4900L-14	4.4340L-00	-32.80 % Diff from Natual
30-14-4							5.3915E-02 This Sample
-	0.71	7.1000E-13	2.1321E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
CII 14 E	0.7 1	7.1000L-13	2.1321L-00	0.240	2.4000L-13	1.14931-07	643.35 % Diff from Natual
SU-14-5							1.0346E-01 This Sample
-	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-14-6	0.57	3.7000L-13	1.111112-00	0.240	2.4000L-13	1.1493L-07	1326.43 % Diff from Natual
30-14-6							1.0346E-01 This Sample
	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-14-7	0.37	3.7000L-13	1.111112-00	0.240	2.4000L-13	1.1493L-07	1326.43 % Diff from Natual
30-14-7							1.0346E-01 This Sample
	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-14-8	0.37	3.7000L-13	1.111112-00	0.240	2.4000L-13	1.1493L-07	1326.43 % Diff from Natual
30-14-0							3.2430E-03 This Sample
	2 22	3.3300E-12	1.0000E-05	0.060	6 0400E 14	2 24205 00	
SII 14 0	3.33	3.3300E-12	1.00000=05	0.069	6.9400E-14	3.2430E-08	7.2529E-03 Natural
SU-14-9							1.5065E-03 This Sample
	3.45	3.4500E-12	1.0360E-05	0.033	3.3400E-14	1.5607E-08	
SII 14 10	3.43	3.43UUE-12	1.0300E-05	0.033	3.34UUE-14	1.5007 E-06	-79.23 % Diff from Natual
SU-14-10							8.1101E-02 This Sample
	0.47	4 7200E 42	1.4174E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
CII 44 44	0.47	4.7200E-13	1.41/45-06	0.246	2.40UUE-13	1.1493E-07	7.2529E-03 Natural  1018.17 % Diff from Natual
SU-14-11							1.0346E-01 This Sample
	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
CI 1 4 4 4 0	0.37	3.7000E-13	1.111112-06	0.246	2.40UUE-13	1.1493E-07	1326.43 % Diff from Natual
SU-14-12							
	0.07	2 70005 40	4 4444 5 00	0.040	2.46005.40	4 44055 07	1.0346E-01 This Sample
0114440	0.37	3.7000E-13	1.1111E-06	0.246	2.4600E-13	1.1495E-07	7.2529E-03 Natural
SU-14-13							1326.43 % Diff from Natual
	0.00	0.62005.40	0.00405.00	0.040	1 24005 44	6.06475.00	2.1653E-03 This Sample
0114444	0.96	9.6300E-13	2.8919E-06	0.013	1.3400E-14	6.2617E-09	7.2529E-03 Natural
SU-14-14							-70.15 % Diff from Natual

### Sample ID: Example

pCi/g U-238	Grams of Sample		grams U-238 per Sample
14.40	1600	2.3040E-08	6.9189E-02
pCi/g U-235		Total Curies	grams U-235
0.24		3.8880E-10	1.8168E-04

		U-235/U-238 Ratio				
Depleted		2.6259E-03 This Sample				
	0	7.2529E-03	Natural			
	0	-63.80	% Diff from Natual			

Enter pCi/g and grams of sample from analysis report.

Natural Abundance			
0.7200% U-235			
99.2745% U-238			
Specific Activ	vity		
Ci/g = 3.33E-07	t 1/2 =	4.47E+09 yr	
U-238			
Ci/g = 2.14E-06	t 1/2 =	7.1E+08 yr	
U-235			
Ci/g = 2.30E+04	t1/2 =	24.2 days	
Th-234			
Specific Activity Cal	culation	Conversions	
		1dps =	1bq
Ci/g = 1.30E + 08		1bq =	27 pCi
t1/2 (days) x	atomic wt	1Ci =	3.7E9dps

	Bob's Ratio by Activity	У	
Isotope	U238		
Half-life	1.41E+17 sec		
A.W.	238.050788 g	N. Abd.	Activity
SpA	3.36E-07 Ci/g	99.2745	3.33E-05
Isotope	U235		
Half-life	2.22E+16 sec		
A.W.	235.043928 g	0.72	1.55E-06
SpA	2.16E-06 Ci/g		
	,	Ratio Natura	al
Sample	pCi/g	U235/238	0.0466
U235	0.239	Ratio Samp	le
U238	7.78	U235/238	0.0307
		Ratio	
Less than 1	indicates depletion	Samp/Nat	0.6588
Greater than	n 1 indicates enrichment	-34.12 %	Diff from Natual
Look at cou	nting statistics		
to see if und	certainties overlap natural.		

# Sample ID

pCi/g U-238 19.10	Grams of Sample	Total Curies 3.0560E-08
	, , ,	
pCi/g U-235	Grams of Sample	Total Curies



<sup>\*\*</sup>Enter pCi/g from analysis report in Column A

		Ratio	
		U235/238	0.0466
Isotope	U238		
Half-life	1.41E+17 sec		
A.W.	238.050788 g	N. Abd.	Activity Ci
SpA	3.36E-07 Ci/g	99.2745	3.33E-05

Isotope	U235		
Half-life	2.22E+16 sec		
A.W.	235.043928 g	N. Abd.	Activity Ci
SpA	2.16E-06 Ci/g	0.7200	1.55E-06