590SERBSF10,634

590SERBSF10,634

Site Name (Subject):	TUNGSTEN QUEEN MINE/ATLAS MINE
Site ID (Document ID):	NCD082362989
Document Name (DocType):	Preliminary Assessment/Site Inspection (PA/SI)
Report Segment:	
Description:	Data Validation Package
Date of Document:	12/19/1991
Date Received:	
Box: *Enter SF and # with no spaces*	SF10,634
Access Level:	PUBLIC
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DATA VALIDATION PACKAGE

For

Tungsten Queen Mine
NCD 082 362 989
Townsville, Vance County
North Carolina

DATA VALIDATION PACKAGE

For

Tungsten Queen Mine
NCD 082 362 989
Townsville, Vance County
North Carolina

CERCLA

INORGANICS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 12/20/91

SUBJECT: Results of Metals Analysis;
92-0206 TUNGSTON QUEEN MINE
NC
SAS NO: NC

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: AL HANKE

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

INORGANIC DATA QUALIFIERS REPORT

Case Number: Martin Manufacturing/Tungston Queen Mine
Project Number: 92-0204 & 92-0206
Site: North Carolina

Element	Flag	Samples Affected	Reasons
A. Water			
Cd, Cr, Cu, Pb, Zn	U	All positives > IDL but < CRDL	Baseline instability
Al, Ba, Ca, Mg, Na	U	All positives > IDL but < 10X contaminant level	Positives in blanks
Cd	JN	All with Fe concentrations in solution > 29,000 ug/L	Suspected positive interference as noted in the contractor ICS
Ag	J	All with Fe concentrations in solution > 50,000 ug/L	Suspected over correction as noted in the contractor ICS
Sb	J	All	Matrix spike recovery - 47.7% Matrix duplicate RPD - 26.4%
Hg	J	All	Matrix spike recovery - 74% Matrix duplicate RPD - 52.4%
Se	J	All	Matrix spike recovery - 70.4%
Ag	J R	All positives All negatives	Matrix spike recovery - 3.3% Matrix duplicate RPD - 33.5%
Tl	J	All	Matrix spike recovery - 55.8%
Al	J	All	Matrix duplicate RPD - 62.1%
Ca	J	All	Matrix duplicate RPD - 36%
Cr	J	All	Matrix duplicate RPD - 25.2%
Cu	J	All	Matrix duplicate RPD - 24.2%
Fe	J	All	Matrix duplicate RPD - 52.4%
K	J	All	Matrix duplicate RPD - 40.1%
Cd	J	All	Serial dilution percent difference - 15%
Na	J	All	Serial dilution percent difference - 15.8%
All Metals	J	MMGW01, 02, & TQGW02	Sample improperly preserved
CN	J	MMGW01, and MMGW02	Sample improperly preserved
As	J	MMGW01	Duplicate injection precision not met
B. Soil			
Cd, Cr, Cu, Pb, Zn	U	All positives > IDL but < CRDL	Baseline instability

INORGANIC DATA QUALIFIERS REPORT (continued)

Case Number: Martin Manufacturing/Tungston Queen Mine
Project Number: 92-0204 & 92-0206
Site: North Carolina

Element	Flag	Samples Affected	Reasons
Ba, Ca, Fe, Mg, Na	U	All positives > IDL but < 10X contaminant level	Positives in blanks
Cd	JN	All with Fe concentrations in solution > 29,000 ug/L	Suspected positive interference as noted in the contractor ICS
Ag	J	All with Fe concentrations in solution > 50,000 ug/L	Suspected over correction as noted in the contractor ICS
As	J R	All positives All negatives	Matrix spike recovery = 8.3%
Mn	J	All positives	Matrix spike recovery = 333.6%
Pb	J	All	Matrix duplicate RPD = 72.5%
V	J	TQSS02	% RSD > 20% for ICP multiple exposures
Co	J	MMSS02 and 03	% RSD > 20% for ICP multiple exposures

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 12/19/91

** PROJECT NO. 92-0206 SAMPLE NO. 63997 SAMPLE TYPE: SOIL PROG ELEM: NC COLLECTED BY: H KASSER **
** SOURCE: TUNGSTON QUEEN MINE CITY: ST: NC **
** STATION ID: SS01 COLLECTION START: 05/21/91 1330 STOP: 00/00/00 **
** CASE NUMBER: 0 SAS NUMBER: NC MD NUMBER: SS01 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
21000	ALUMINUM	18J.	MANGANESE
20U	ANTIMONY	.26U	MERCURY
4.1J	ARSENIC	2.9U	NICKEL
35	BARIUM	600	POTASSIUM
0.63	BERYLLIUM	1U	SELENIUM
10JN	CADMIUM	1.3UJ	SILVER
70U	CALCIUM	140U	SODIUM
48	CHROMIUM	0.51U	THALLIUM
2.9	COBALT	NA	TIN
25	COPPER	120	VANADIUM
59000	IRON	13	ZINC
22J	LEAD	22	PERCENT MOISTURE
4509	MAGNESIUM		

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.   12/19/91

METALS DATA REPORT

** PROJECT NO. 92-0206   SAMPLE NO. 63996   SAMPLE TYPE: SOIL   PROG ELEM: NC   COLLECTED BY: H KASSER **
** SOURCE: TUNGSTON QUEEN MINE   CITY: ST: NC **
** STATION ID: SS02   COLLECTION START: 05/21/91   STOP: 00/00/00 **
** CASE NUMBER: 0   SAS NUMBER: NC   MD NUMBER: SS02 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1600	ALUMINUM	350J	MANGANESE
75	ANTIMONY	0.25U	MERCURY
30J	ARSENIC	4.1	NICKEL
0.51U	BARIUM	630	POTASSIUM
0.36	BERYLLIUM	1U	SELENIUM
14	CADMIUM	8.9	SILVER
13000	CALCIUM	200U	SODIUM
4.7	CHROMIUM	0.49U	THALLIUM
2.5U	COBALT	NA	TIN
360	COPPER	2J	VANADIUM
4700	IRON	810	ZINC
260	LEAD	20	PERCENT MOISTURE
620	MAGNESIUM		

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

METALS DATA REPORT

PROJECT NO. 92-0206 SAMPLE NO. 63998 SAMPLE TYPE: SOIL
SOURCE: TUNGSTON QUEEN MINE
STATION ID: SS03
CASE NUMBER: 0 SAS NUMBER: NC

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 STOP: 00/00/00
MD NUMBER: SS03

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7300	ALUMINUM	50J	MANGANESE
200	ANTIMONY	.25U	MERCURY
110J	ARSENIC	87	NICKEL
13	BARIUM	530	POTASSIUM
0.36	BERYLLIUM	3.3J	SELENIUM
.71JN	CADMIUM	56J	SILVER
4800	CALCIUM	180	SODIUM
8.1	CHROMIUM	0.47U	THALLIUM
73	COBALT	NA	TIN
470	COPPER	47	VANADIUM
1800000	IRON	3000	ZINC
3100J	LEAD	18	PERCENT MOISTURE
1100	MAGNESIUM		

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 12/19/91

PROJECT NO. 92-0206 SAMPLE NO. 64000 SAMPLE TYPE: SOIL
SOURCE: TUNGSTON QUEEN MINE
STATION ID: SS04
CASE NUMBER: 0 SAS NUMBER: NC

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 1610 STOP: 00/00/00
MD NUMBER: SS04

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
8200	ALUMINUM	200J	MANGANESE
240	ANTIMONY	.26U	MERCURY
110J	ARSENIC	38	NICKEL
29	BARIUM	1900	POTASSIUM
0.34	BERYLLIUM	2	SELENIUM
61JN	CADMIUM	34J	SILVER
2200	CALCIUM	310U	SODIUM
10	CHROMIUM	0.45U	THALLIUM
33	COBALT	NA	TIN
1200	COPPER	34	VANADIUM
1100000	IRON	2900	ZINC
2400J	LEAD	14	PERCENT MOISTURE
760	MAGNESIUM		

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 12/19/91

PROJECT NO. 92-0206 SAMPLE NO. 63995 SAMPLE TYPE: GROUNDWA PROG ELEM: NC COLLECTED BY: H KASSER
SOURCE: TUNGSTON QUEEN MINE CITY: ST: NC
STATION ID: GW02 COLLECTION START: 05/21/91 1130 STOP: 00/00/00
CASE NUMBER: 0 SAS NUMBER: NC MD NUMBER: GW02

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
12000J	ALUMINUM	31000J	MANGANESE
190OJ	ANTIMONY	0.38J	MERCURY
210J	ARSENIC	120J	NICKEL
54J	BARIUM	11000J	POTASSIUM
6J	BERYLLIUM	6J	SELENIUM
780J	CADMIUM	190J	SILVER
290000J	CALCIUM	16000J	SODIUM
70J	CHROMIUM	2UJ	THALLIUM
66J	COBALT	NA	TIN
7100J	COPPER	10J	VANADIUM
26000J	IRON	43000J	ZINC
4500	LEAD		
52000J	MAGNESIUM		

REMARKS
SAMPLE IMPROPERLY PRESERVED

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

CYANIDE

SISB/SAS
RECEIVED
DEC 30 1991
EPA - REGION IV
ATLANTA, GA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 12/20/91

SUBJECT: Results of Specified Analysis;
92-0206 TUNGSTON QUEEN MINE
NC
SAS NO: NC

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: AL HANKE

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

SISB/SAS
RECEIVED
DEC 30 1991
EPA - REGION IV
ATLANTA GA

INORGANIC DATA QUALIFIERS REPORT

Case Number: Martin Manufacturing/Tungston Queen Mine
Project Number: 92-0204 & 92-0206
Site: North Carolina

Element	Flag	Samples Affected	Reasons
A. Water			
Cd, Cr, Cu, Pb, Zn	U	All positives > IDL but < CRDL	Baseline instability
Al, Ba, Ca, Mg, Na	U	All positives > IDL but < 10X contaminant level	Positives in blanks
Cd	JN	All with Fe concentrations in solution > 29,000 ug/L	Suspected positive interference as noted in the contractor ICS
Ag	J	All with Fe concentrations in solution > 50,000 ug/L	Suspected over correction as noted in the contractor ICS
Sb	J	All	Matrix spike recovery - 47.7% Matrix duplicate RPD - 26.4%
Hg	J	All	Matrix spike recovery - 74% Matrix duplicate RPD - 52.4%
Se	J	All	Matrix spike recovery - 70.4%
Ag	J R	All positives All negatives	Matrix spike recovery - 3.3% Matrix duplicate RPD - 33.5%
Tl	J	All	Matrix spike recovery - 55.8%
Al	J	All	Matrix duplicate RPD - 62.1%
Ca	J	All	Matrix duplicate RPD - 36%
Cr	J	All	Matrix duplicate RPD - 25.2%
Cu	J	All	Matrix duplicate RPD - 24.2%
Fe	J	All	Matrix duplicate RPD - 52.4%
K	J	All	Matrix duplicate RPD - 40.1%
Cd	J	All	Serial dilution percent difference = 15%
Na	J	All	Serial dilution percent difference = 15.8%
All Metals	J	MMGW01, 02, & TQGW02	Sample improperly preserved
CN	J	MMGW01, and MMGW02	Sample improperly preserved
As	J	MMGW01	Duplicate injection precision not met
B. Soil			
Cd, Cr, Cu, Pb, Zn	U	All positives > IDL but < CRDL	Baseline instability

INORGANIC DATA QUALIFIERS REPORT (continued)

Case Number: Martin Manufacturing/Tungston Queen Mine
Project Number: 92-0204 & 92-0206
Site: North Carolina

Element	Flag	Samples Affected	Reasons
Ba, Ca, Fe, Mg, Na	U	All positives > IDL but < 10X contaminant level	Positives in blanks
Cd	JN	All with Fe concentrations in solution > 29,000 ug/L	Suspected positive interference as noted in the contractor ICS
Ag	J	All with Fe concentrations in solution > 50,000 ug/L	Suspected over correction as noted in the contractor ICS
As	J R	All positives All negatives	Matrix spike recovery = 8.3%
Mn	J	All positives	Matrix spike recovery = 333.6%
Pb	J	All	Matrix duplicate RPD = 72.5%
V	J	TQSS02	% RSD > 20% for ICP multiple exposures
Co	J	MMSS02 and 03	% RSD > 20% for ICP multiple exposures

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0206   SAMPLE NO. 63997  SAMPLE TYPE: SOIL        PROG ELEM: NC    COLLECTED BY: H KASSER            **
**   SOURCE: TUNGSTON QUEEN MINE                                      CITY:                          ST: NC             **
**   STATION ID: SS01                                                 COLLECTION START: 05/21/91  1330   STOP: 00/00/00  **
**   CASE.NO.:     0          SAS NO.: NC                             D. NO.: SS01                MD NO: SS01            **
**                                                                                                                        **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
6.3U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0206   SAMPLE NO. 63996  SAMPLE TYPE: SOIL        PROG ELEM: NC    COLLECTED BY: H KASSER               **
**   SOURCE: TUNGSTON QUEEN MINE                                      CITY:                          ST: NC                 **
**   STATION ID: SS02                                                 COLLECTION START: 05/21/91          STOP: 00/00/00    **
**   CASE.NO.:      0          SAS NO.: NC                            D. NO.: SS02               MD NO: SS02                **
**                                                                                                                          **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
6.2U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

SPECIFIED ANALYSIS DATA REPORT

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*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
**   PROJECT NO. 92-0206   SAMPLE NO. 63998  SAMPLE TYPE: SOIL          PROG ELEM: NC    COLLECTED BY: H KASSER              **
**   SOURCE: TUNGSTON QUEEN MINE                                        CITY:                      ST: NC                    **
**   STATION ID: SS03                                                   COLLECTION START: 05/21/91       STOP: 00/00/00      **
**   CASE.NO.:      0          SAS NO.: NC                              D. NO.: SS03              MD NO: SS03                **
**                                                                                                                           **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
6U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0206 SAMPLE NO. 64000 SAMPLE TYPE: SOIL PROG ELEM: NC COLLECTED BY: H KASSER
SOURCE: TUNGSTON QUEEN MINE CITY: ST: NC
STATION ID: SS04 COLLECTION START: 05/21/91 1610 STOP: 00/00/00
CASE.NO.: 0 SAS NO.: NC D. NO.: SS04 MD NO: SS04

RESULTS	UNITS	PARAMETER
5.4U	MG/KG	CYANIDE

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

SPECIFIED ANALYSIS DATA REPORT

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*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
**   PROJECT NO. 92-0206   SAMPLE NO. 63995  SAMPLE TYPE: GROUNDWA    PROG ELEM: NC    COLLECTED BY: H KASSER                **
**   SOURCE: TUNGSTON QUEEN MINE                                      CITY:                        ST: NC                   **
**   STATION ID: GW02                                                 COLLECTION START: 05/21/91  1130   STOP: 00/00/00     **
**   CASE.NO.:     0          SAS NO.: NC                             D. NO.: GW02                MD NO: GW02               **
**                                                                                                                          **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
10UJ	UG/L	CYANIDE

FOOTNOTES
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VOLATILES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 12/20/91

SUBJECT: Results of Purgeable Organic Analysis;
92-0206 TUNGSTON QUEEN MINE
NC
SAS NO: NC

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: AL HANKE

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

WPB/SAS
RECEIVED
JAN 6 1992
EPA - REGION IV
ATLANTA, GA

ORGANIC DATA QUALIFIER REPORT

Case Number Tungston Queen Mine Project No. 92-0206
Martin Manufacturing 92-0204

Affected Samples	Compound or Fraction	Flag Used	Reason
Volatiles			
63986	all positives	J	surrogate recovery high
63983	ethylbenzene	J	<quantitation limit
Extractables			
63986,63987	2-methylnaphthalene	J	<quantitation limit

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.   12/19/91

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0206   SAMPLE NO. 63997   SAMPLE TYPE: SOIL   PROG ELEM: NC   COLLECTED BY: H KASSER
SOURCE: TUNGSTON QUEEN MINE   CITY: ST: NC
STATION ID: SS01   COLLECTION START: 05/21/91 1330   STOP: 00/00/00

CASE NO.: 0   SAS NO.: NC   D. NO.: SS01

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE	13U	1,2-DICHLOROPROPANE
13U	BROMOMETHANE	13U	CIS-1,3-DICHLOROPROPENE
13U	VINYL CHLORIDE	13U	TRICHLOROETHENE(TRICHLOROETHYLENE)
13U	CHLOROETHANE	13U	DIBROMOCHLOROMETHANE
13U	METHYLENE CHLORIDE	13U	1,1,2-TRICHLOROETHANE
13U	ACETONE	13U	BENZENE
13U	CARBON DISULFIDE	13U	TRANS-1,3-DICHLOROPROPENE
13U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE).	13U	BROMOFORM
13U	1,1-DICHLOROETHANE	13U	METHYL ISOBUTYL KETONE
13U	1,2-DICHLOROETHENE (TOTAL)	13U	METHYL BUTYL KETONE
13U	CHLOROFORM	13U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U	1,2-DICHLOROETHANE	13U	1,1,2,2-TETRACHLOROETHANE
13U	METHYL ETHYL KETONE	13U	TOLUENE
13U	1,1,1-TRICHLOROETHANE	13U	CHLOROBENZENE
13U	CARBON TETRACHLORIDE	13U	ETHYL BENZENE
13U	BROMODICHLOROMETHANE	13U	STYRENE
		13U	TOTAL XYLENES
		22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 12/19/91

PROJECT NO. 92-0206 SAMPLE NO. 63996 SAMPLE TYPE: SOIL
SOURCE: TUNGSTON QUEEN MINE
STATION ID: SS02

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 STOP: 00/00/00

CASE NO.: O SAS NO.: NC D. NO.: SS02

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE	12U	1,2-DICHLOROPROPANE
12U	BROMOMETHANE	12U	CIS-1,3-DICHLOROPROPENE
12U	VINYL CHLORIDE	12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	CHLOROETHANE	12U	DIBROMOCHLOROMETHANE
12U	METHYLENE CHLORIDE	12U	1,1,2-TRICHLOROETHANE
12U	ACETONE	12U	BENZENE
12U	CARBON DISULFIDE	12U	TRANS-1,3-DICHLOROPROPENE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	12U	BROMOFORM
12U	1,1-DICHLOROETHANE	12U	METHYL ISOBUTYL KETONE
12U	1,2-DICHLOROETHENE (TOTAL)	12U	METHYL BUTYL KETONE
12U	CHLOROFORM	12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,2-DICHLOROETHANE	12U	1,1,2,2-TETRACHLOROETHANE
12U	METHYL ETHYL KETONE	12U	TOLUENE
12U	1,1,1-TRICHLOROETHANE	12U	CHLOROBENZENE
12U	CARBON TETRACHLORIDE	12U	ETHYL BENZENE
12U	BROMODICHLOROMETHANE	12U	STYRENE
		12U	TOTAL XYLENES
		20	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 12/19/91

PROJECT NO. 92-0206 SAMPLE NO. 63998 SAMPLE TYPE: SOIL
SOURCE: TUNGSTON QUEEN MINE
STATION ID: SS03

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 STOP: 00/00/00

CASE NO.: 0 SAS NO.: NC D. NO.: SS03

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
18	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 12/19/91

PROJECT NO. 92-0206 SAMPLE NO. 64000 SAMPLE TYPE: SOIL
SOURCE: TUNGSTON QUEEN MINE
STATION ID: SS04

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 1610 STOP: 00/00/00

CASE NO.: 0 SAS NO.: NC D. NO.: SS04

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
14	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0206 SAMPLE NO. 63995 SAMPLE TYPE: GROUNDWA PROG ELEM: NC COLLECTED BY: H KASSER
SOURCE: TUNGSTON QUEEN MINE CITY: ST: NC
STATION ID: GW02 COLLECTION START: 05/21/91 1130 STOP: 00/00/00
CASE NO.: 0 SAS NO.: NC D. NO.: GW02

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	10U	1,2-DICHLOROPROPANE
10U	BROMOMETHANE	10U	CIS-1,3-DICHLOROPROPENE
10U	VINYL CHLORIDE	10U	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	CHLOROETHANE	10U	DIBROMOCHLOROMETHANE
10U	METHYLENE CHLORIDE	10U	1,1,2-TRICHLOROETHANE
10U	ACETONE	10U	BENZENE
10U	CARBON DISULFIDE	10U	TRANS-1,3-DICHLOROPROPENE
10U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	10U	BROMOFORM
10U	1,1-DICHLOROETHANE	10U	METHYL ISOBUTYL KETONE
10U	1,2-DICHLOROETHENE (TOTAL)	10U	METHYL BUTYL KETONE
10U	CHLOROFORM	10U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	1,2-DICHLOROETHANE	10U	1,1,2,2-TETRACHLOROETHANE
10U	METHYL ETHYL KETONE	10U	TOLUENE
10U	1,1,1-TRICHLOROETHANE	10U	CHLOROBENZENE
10U	CARBON TETRACHLORIDE	10U	ETHYL BENZENE
10U	BROMODICHLOROMETHANE	10U	STYRENE
		10U	TOTAL XYLENES

REMARKS

REMARKS

FOOTNOTES
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SEMI-VOLATILES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 12/20/91

SUBJECT: Results of Extractable Organic Analysis;
92-0206 TUNGSTON QUEEN MINE
NC
SAS NO: NC

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: AL HANKE

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

WPB/SAS
RECEIVED
JAN 6 1992
EPA - REGION IV
ATLANTA, GA

ORGANIC DATA QUALIFIER REPORT

Case Number Tungston Queen Mine Project No. 92-0206
Martin Manufacturing 92-0204

Affected Samples	Compound or Fraction	Flag Used	Reason
Volatiles			
63986	all positives	J	surrogate recovery high
63983	ethylbenzene	J	<quantitation limit
Extractables			
63986,63987	2-methylnaphthalene	J	<quantitation limit

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 92-0206 SAMPLE NO. 63997 SAMPLE TYPE: SOIL
** SOURCE: TUNGSTON QUEEN MINE
** STATION ID: SS01
**
** CASE NO.: 0 SAS NO.: NC D. NO.: SS01

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 1330 STOP: 00/00/00

UG/KG	ANALYTICAL RESULTS
420U	PHENOL
420U	BIS(2-CHLOROETHYL) ETHER
420U	2-CHLOROPHENOL
420U	1,3-DICHLOROBENZENE
420U	1,4-DICHLOROBENZENE
420U	1,2-DICHLOROBENZENE
420U	2-METHYLPHENOL
420U	2,2'-CHLOROISOPROPYLETHER
420U	(3-AND/OR 4-)METHYLPHENOL
420U	N-NITROSODI-N-PROPYLAMINE
420U	HEXACHLOROETHANE
420U	NITROBENZENE
420U	ISOPHORONE
420U	2-NITROPHENOL
420U	2,4-DIMETHYLPHENOL
420U	BIS(2-CHLOROETHOXY) METHANE
420U	2,4-DICHLOROPHENOL
420U	1,2,4-TRICHLOROBENZENE
420U	NAPHTHALENE
420U	4-CHLOROANILINE
420U	HEXACHLOROBUTADIENE
420U	4-CHLORO-3-METHYLPHENOL
420U	2-METHYLNAPHTHALENE
420U	HEXACHLOROCYCLOPENTADIENE (HCCP)
420U	2,4,6-TRICHLOROPHENOL
1000U	2,4,5-TRICHLOROPHENOL
420U	2-CHLORONAPHTHALENE
1000U	2-NITROANILINE
420U	DIMETHYL PHTHALATE
420U	ACENAPHTHYLENE
420U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1000U	3-NITROANILINE
420U	ACENAPHTHENE
1000U	2,4-DINITROPHENOL
1000U	4-NITROPHENOL
420U	DIBENZOFURAN
420U	2,4-DINITROTOLUENE
420U	DIETHYL PHTHALATE
420U	4-CHLOROPHENYL PHENYL ETHER
420U	FLUORENE
1000U	4-NITROANILINE
1000U	2-METHYL-4,6-DINITROPHENOL
420U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
420U	4-BROMOPHENYL PHENYL ETHER
420U	HEXACHLOROBENZENE (HCB)
1000U	PENTACHLOROPHENOL
420U	PHENANTHRENE
420U	ANTHRACENE
420U	CARBAZOLE
420U	DI-N-BUTYLPHTHALATE
420U	FLUORANTHENE
420U	PYRENE
420U	BENZYL BUTYL PHTHALATE
420U	3,3'-DICHLOROBENZIDINE
420U	BENZO(A)ANTHRACENE
420U	CHRYSENE
420U	BIS(2-ETHYLHEXYL) PHTHALATE
420U	DI-N-OCTYLPHTHALATE
420U	BENZO(B AND/OR K)FLUORANTHENE
420U	BENZO-A-PYRENE
420U	INDENO (1,2,3-CD) PYRENE
420U	DIBENZO(A,H)ANTHRACENE
420U	BENZO(GHI)PERYLENE
22	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0206 SAMPLE NO. 63996 SAMPLE TYPE: SOIL
SOURCE: TUNGSTON QUEEN MINE
STATION ID: SS02

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 STOP: 00/00/00

CASE NO.: 0 SAS NO.: NC D. NO.: SS02

UG/KG	ANALYTICAL RESULTS
400U	PHENOL
400U	BIS(2-CHLOROETHYL) ETHER
400U	2-CHLOROPHENOL
400U	1,3-DICHLOROBENZENE
400U	1,4-DICHLOROBENZENE
400U	1,2-DICHLOROBENZENE
400U	2-METHYLPHENOL
400U	2,2'-CHLOROISOPROPYLETHER
400U	(3-AND/OR 4-)METHYLPHENOL
400U	N-NITROSODI-N-PROPYLAMINE
400U	HEXACHLOROETHANE
400U	NITROBENZENE
400U	ISOPHORONE
400U	2-NITROPHENOL
400U	2,4-DIMETHYLPHENOL
400U	BIS(2-CHLOROETHOXY) METHANE
400U	2,4-DICHLOROPHENOL
400U	1,2,4-TRICHLOROBENZENE
400U	NAPHTHALENE
400U	4-CHLOROANILINE
400U	HEXACHLOROBUTADIENE
400U	4-CHLORO-3-METHYLPHENOL
400U	2-METHYLNAPHTHALENE
400U	HEXACHLOROCYCLOPENTADIENE (HCCP)
400U	2,4,6-TRICHLOROPHENOL
980U	2,4,5-TRICHLOROPHENOL
400U	2-CHLORONAPHTHALENE
980U	2-NITROANILINE
400U	DIMETHYL PHTHALATE
400U	ACENAPHTHYLENE
400U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
980U	3-NITROANILINE
400U	ACENAPHTHENE
980U	2,4-DINITROPHENOL
980U	4-NITROPHENOL
400U	DIBENZOFURAN
400U	2,4-DINITROTOLUENE
400U	DIETHYL PHTHALATE
400U	4-CHLOROPHENYL PHENYL ETHER
400U	FLUORENE
980U	4-NITROANILINE
980U	2-METHYL-4,6-DINITROPHENOL
400U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
400U	4-BROMOPHENYL PHENYL ETHER
400U	HEXACHLOROBENZENE (HCB)
980U	PENTACHLOROPHENOL
400U	PHENANTHRENE
400U	ANTHRACENE
400U	CARBAZOLE
400U	DI-N-BUTYLPHTHALATE
400U	FLUORANTHENE
400U	PYRENE
400U	BENZYL BUTYL PHTHALATE
400U	3,3'-DICHLOROBENZIDINE
400U	BENZO(A)ANTHRACENE
400U	CHRYSENE
400U	BIS(2-ETHYLHEXYL) PHTHALATE
400U	DI-N-OCTYLPHTHALATE
400U	BENZO(B AND/OR K)FLUORANTHENE
400U	BENZO-A-PYRENE
400U	INDENO (1,2,3-CD) PYRENE
400U	DIBENZO(A,H)ANTHRACENE
400U	BENZO(GHI)PERYLENE
20	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0206   SAMPLE NO. 63998   SAMPLE TYPE: SOIL
SOURCE: TUNGSTON QUEEN MINE
STATION ID: SS03

PROG ELEM: NC   COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91   STOP: 00/00/00

CASE NO.: 0   SAS NO.: NC   D. NO.: SS03

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
390U	PHENOL	950U	3-NITROANILINE
390U	BIS(2-CHLOROETHYL) ETHER	390U	ACENAPHTHENE
390U	2-CHLOROPHENOL	950U	2,4-DINITROPHENOL
390U	1,3-DICHLOROBENZENE	950U	4-NITROPHENOL
390U	1,4-DICHLOROBENZENE	390U	DIBENZOFURAN
390U	1,2-DICHLOROBENZENE	390U	2,4-DINITROTOLUENE
390U	2-METHYLPHENOL	390U	DIETHYL PHTHALATE
390U	2,2'-CHLOROISOPROPYLETHER	390U	4-CHLOROPHENYL PHENYL ETHER
390U	(3-AND/OR 4-)METHYLPHENOL	390U	FLUORENE
390U	N-NITROSODI-N-PROPYLAMINE	950U	4-NITROANILINE
390U	HEXACHLOROETHANE	950U	2-METHYL-4,6-DINITROPHENOL
390U	NITROBENZENE	390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	ISOPHORONE	390U	4-BROMOPHENYL PHENYL ETHER
390U	2-NITROPHENOL	390U	HEXACHLOROBENZENE (HCB)
390U	2,4-DIMETHYLPHENOL	950U	PENTACHLOROPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE	390U	PHENANTHRENE
390U	2,4-DICHLOROPHENOL	390U	ANTHRACENE
390U	1,2,4-TRICHLOROBENZENE	390U	CARBAZOLE
390U	NAPHTHALENE	390U	DI-N-BUTYLPHTHALATE
390U	4-CHLOROANILINE	390U	FLUORANTHENE
390U	HEXACHLOROBUTADIENE	390U	PYRENE
390U	4-CHLORO-3-METHYLPHENOL	390U	BENZYL BUTYL PHTHALATE
390U	2-METHYLNAPHTHALENE	390U	3,3'-DICHLOROBENZIDINE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)	390U	BENZO(A)ANTHRACENE
390U	2,4,6-TRICHLOROPHENOL	390U	CHRYSENE
950U	2,4,5-TRICHLOROPHENOL	390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	2-CHLORONAPHTHALENE	390U	DI-N-OCTYLPHTHALATE
950U	2-NITROANILINE	390U	BENZO(B AND/OR K)FLUORANTHENE
390U	DIMETHYL PHTHALATE	390U	BENZO-A-PYRENE
390U	ACENAPHTHYLENE	390U	INDENO (1,2,3-CD) PYRENE
390U	2,6-DINITROTOLUENE	390U	DIBENZO(A,H)ANTHRACENE
		390U	BENZO(GHI)PERYLENE
		18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0206   SAMPLE NO. 63998  SAMPLE TYPE: SOIL          PROG ELEM: NC     COLLECTED BY: H KASSER              **
**   SOURCE: TUNGSTON QUEEN MINE                                         CITY:                        ST: NC                     **
**   STATION ID: SS03                                                    COLLECTION START: 05/21/91         STOP: 00/00/00       **
**   CASE.NO.:     0          SAS NO.: NC                                D. NO.: SS03                 MD NO: SS03                **
**                                                                                                                               **
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ANALYTICAL RESULTS UG/KG

200JN	PHENYLETHANONE
600J	1 UNIDENTIFIED COMPOUND

FOOTNOTES
*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0206   SAMPLE NO. 64000   SAMPLE TYPE: SOIL   PROG ELEM: NC   COLLECTED BY: H KASSER
SOURCE: TUNGSTON QUEEN MINE   CITY: ST: NC
STATION ID: SS04   COLLECTION START: 05/21/91 1610   STOP: 00/00/00

CASE NO.: 0   SAS NO.: NC   D. NO.: SS04

UG/KG	ANALYTICAL RESULTS
380U	PHENOL
380U	BIS(2-CHLOROETHYL) ETHER
380U	2-CHLOROPHENOL
380U	1,3-DICHLOROBENZENE
380U	1,4-DICHLOROBENZENE
380U	1,2-DICHLOROBENZENE
380U	2-METHYLPHENOL
380U	2,2'-CHLOROISOPROPYLETHER
380U	(3-AND/OR 4-)METHYLPHENOL
380U	N-NITROSODI-N-PROPYLAMINE
380U	HEXACHLOROETHANE
380U	NITROBENZENE
380U	ISOPHORONE
380U	2-NITROPHENOL
380U	2,4-DIMETHYLPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE
380U	2,4-DICHLOROPHENOL
380U	1,2,4-TRICHLOROBENZENE
380U	NAPHTHALENE
380U	4-CHLOROANILINE
380U	HEXACHLOROBUTADIENE
380U	4-CHLORO-3-METHYLPHENOL
380U	2-METHYLNAPHTHALENE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)
380U	2,4,6-TRICHLOROPHENOL
910U	2,4,5-TRICHLOROPHENOL
380U	2-CHLORONAPHTHALENE
910U	2-NITROANILINE
380U	DIMETHYL PHTHALATE
380U	ACENAPHTHYLENE
380U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
910U	3-NITROANILINE
380U	ACENAPHTHENE
910U	2,4-DINITROPHENOL
910U	4-NITROPHENOL
380U	DIBENZOFURAN
380U	2,4-DINITROTOLUENE
380U	DIETHYL PHTHALATE
380U	4-CHLOROPHENYL PHENYL ETHER
380U	FLUORENE
910U	4-NITROANILINE
910U	2-METHYL-4,6-DINITROPHENOL
380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	4-BROMOPHENYL PHENYL ETHER
380U	HEXACHLOROBENZENE (HCB)
910U	PENTACHLOROPHENOL
380U	PHENANTHRENE
380U	ANTHRACENE
380U	CARBAZOLE
380U	DI-N-BUTYLPHTHALATE
380U	FLUORANTHENE
380U	PYRENE
380U	BENZYL BUTYL PHTHALATE
380U	3,3'-DICHLOROBENZIDINE
380U	BENZO(A)ANTHRACENE
380U	CHRYSENE
380U	BIS(2-ETHYLHEXYL) PHTHALATE
380U	DI-N-OCTYLPHTHALATE
380U	BENZO(B AND/OR K)FLUORANTHENE
380U	BENZO-A-PYRENE
380U	INDENO (1,2,3-CD) PYRENE
380U	DIBENZO(A,H)ANTHRACENE
380U	BENZO(GHI)PERYLENE
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0206   SAMPLE NO. 64000  SAMPLE TYPE: SOIL        PROG ELEM: NC    COLLECTED BY: H KASSER             **
**   SOURCE: TUNGSTON QUEEN MINE                                      CITY:                      ST: NC                    **
**   STATION ID: SS04                                                 COLLECTION START: 05/21/91  1610   STOP: 00/00/00    **
**   CASE.NO.:     0          SAS NO.: NC                             D. NO.: SS04               MD NO: SS04               **
**                                                                                                                         **
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ANALYTICAL RESULTS UG/KG

10000J   4 UNIDENTIFIED COMPOUNDS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/19/91

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0206 SAMPLE NO. 63995 SAMPLE TYPE: GROUNDWA
SOURCE: TUNGSTON QUEEN MINE
STATION ID: GW02

PROG ELEM: NC COLLECTED BY: H KASSER
CITY: ST: NC
COLLECTION START: 05/21/91 1130 STOP: 00/00/00

CASE NO.: 0 SAS NO.: NC D. NO.: GW02

UG/L	ANALYTICAL RESULTS
11U	PHENOL
11U	BIS(2-CHLOROETHYL) ETHER
11U	2-CHLOROPHENOL
11U	1,3-DICHLOROBENZENE
11U	1,4-DICHLOROBENZENE
11U	1,2-DICHLOROBENZENE
11U	2-METHYLPHENOL
11U	2,2'-CHLOROISOPROPYLETHER
11U	(3-AND/OR 4-)METHYLPHENOL
11U	N-NITROSODI-N-PROPYLAMINE
11U	HEXACHLOROETHANE
11U	NITROBENZENE
11U	ISOPHORONE
11U	2-NITROPHENOL
11U	2,4-DIMETHYLPHENOL
11U	BIS(2-CHLOROETHOXY) METHANE
11U	2,4-DICHLOROPHENOL
11U	1,2,4-TRICHLOROBENZENE
11U	NAPHTHALENE
11U	4-CHLOROANILINE
11U	HEXACHLOROBUTADIENE
11U	4-CHLORO-3-METHYLPHENOL
11U	2-METHYLNAPHTHALENE
11U	HEXACHLOROCYCLOPENTADIENE (HCCP)
11U	2,4,6-TRICHLOROPHENOL
27U	2,4,5-TRICHLOROPHENOL
11U	2-CHLORONAPHTHALENE
27U	2-NITROANILINE
11U	DIMETHYL PHTHALATE
11U	ACENAPHTHYLENE
11U	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
27U	3-NITROANILINE
11U	ACENAPHTHENE
27U	2,4-DINITROPHENOL
27U	4-NITROPHENOL
11U	DIBENZOFURAN
11U	2,4-DINITROTOLUENE
11U	DIETHYL PHTHALATE
11U	4-CHLOROPHENYL PHENYL ETHER
11U	FLUORENE
27U	4-NITROANILINE
27U	2-METHYL-4,6-DINITROPHENOL
11U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
11U	4-BROMOPHENYL PHENYL ETHER
11U	HEXACHLOROBENZENE (HCB)
27U	PENTACHLOROPHENOL
11U	PHENANTHRENE
11U	ANTHRACENE
11U	CARBAZOLE
11U	DI-N-BUTYLPHTHALATE
11U	FLUORANTHENE
11U	PYRENE
11U	BENZYL BUTYL PHTHALATE
11U	3,3'-DICHLOROBENZIDINE
11U	BENZO(A)ANTHRACENE
11U	CHRYSENE
11U	BIS(2-ETHYLHEXYL) PHTHALATE
11U	DI-N-OCTYLPHTHALATE
11U	BENZO(B AND/OR K)FLUORANTHENE
11U	BENZO-A-PYRENE
11U	INDENO (1,2,3-CD) PYRENE
11U	DIBENZO(A,H)ANTHRACENE
11U	BENZO(GHI)PERYLENE

REMARKS

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