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K.L. Money  
Executive Vice President  
Government Affairs, Environment,  
Health and Safety

April 11, 1996

Ms. Regina Magbie  
CBI Representative  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Mail Code 5305W  
Washington, D.C. 20460

*Re: Release of Confidential Business Information for Public Comment  
in the Phase IV Land Disposal Restrictions Rulemaking*

Dear Ms. Magbie:

I am writing on behalf of Inco United States, Inc., ("Inco") and its wholly owned subsidiary, the International Metals Reclamation Company, Inc., ("INMETCO") to inform you that Inco and INMETCO hereby waive the confidential business information ("CBI") claim that they made in connection with the submission of certain data to EPA in December 1994 and February 1996. The data were Toxicity Characteristic Leaching Procedure ("TCLP") test results for INMETCO's slag.

The data submitted in December 1994 consisted of 40 grab sample TCLP results for each of 12 metals collected in 1994. The data submitted in February 1996 consisted of composite sample results from 1994 and 1995 for nickel and selenium, as well as grab sample data for those two metals collected in 1995. Copies of the various data sheets involved are enclosed with this letter.

As noted above, Inco and INMETCO hereby waive their confidentiality claims and consent to EPA's making the foregoing data available to the public in connection with the Phase IV Land Disposal Restrictions rulemaking.

If you have any questions regarding this matter, please let me know.

Sincerely,

K.L. Money

cc: Ms. Anita Cummings

INCO UNITED STATES, INC.

**TABLE 1**

Treatment Description	Se Results <sup>(1)</sup> (mg/L)	pH Reading <sup>(2)</sup> (s.u.)
As Received (w/o Treatment)	1.07	6.19
5% Portland	3.20	8.57
10% Portland	6.41	10.61
20% Portland	3.59	11.49
1% NaHS, 1% FeSO <sub>4</sub> , 5% Portland	0.916	8.45
1% NaHS, 1% FeSO <sub>4</sub> , 10% Portland	2.83	10.76
1% NaHS, 1% FeSO <sub>4</sub> , 20% Portland	1.78	11.94
1% NaHS, 1% FeSO <sub>4</sub>	1.12	6.80

<sup>(1)</sup>Selenium in the TCLP extract

<sup>(2)</sup>pH of TCLP extract after 16-hour extraction process

It is important to note that, upon reviewing the enclosed data summary sheets, there are several cases in which other metals fail UTS in the pursuit of effective selenium treatment. The most effective (and most difficult to achieve) pH range for the stabilization of Se is between 6.5 and 7.5 upon completion of the 16-hour TCLP extraction process. The optimum pH for the stabilization of other metals (i.e. Cd, Pb, Zn, Ni) is between 9.5 and 11.5.

Additionally, since it was not possible to completely homogenize this co-mingled waste sample under routine practices, the data does not perfectly reflect the relationships between pH and selenium treatments.

The NaHS was added to the mix in an attempt to reduce the solubility of other metals since the pH was lower than 9.5. Unfortunately, this approach is unsuccessful.

The FeSO<sub>4</sub> was added to eliminate excess sulfide and hamper the oxidation-reduction potential as much as possible. No real benefits from this practice have been observed.

With these results, we would propose to keep the treatment standard for Characteristic Waste at 5.7 mg/L, and to raise the UTS standard to 5.7 mg/L for Se.

Per your request during our conference call yesterday, our design capacity for stabilization is 150,000 tons per year. As mentioned during the call, please recall that Highway 36 does not have any permit limits for receiving waste.

Last year we rejected approximately 4,000 tons of waste from Aptus Utah, due to high selenium concentrations.

As promised, the following is the chemical vendor that invested a great deal of time and energy addressing our selenium quandary (without success):

Mr. Stan True                      Phone: (702) 871-1884.  
c/o Fluid Tech, Inc.  
4335 W. Tropicana Suite 3  
Las Vegas, NV 89103

Also enclosed is Attachment (3); a copy of our permit-approved EPA waste codes, taken from our Waste Analysis Plan.

On behalf of Rollins Environmental, Inc., I would like to sincerely thank you for the opportunity to express our concerns and dilemmas. I have very much enjoyed working with you, and the time that you have afforded me is greatly appreciated. I look forward to further discussions following your review of this package. Should you have any immediate questions, please do not hesitate to contact me.

Sincerely,  
for Rollins' Highway 36,



Richard Grondin  
Technical Manager

CC: Mike Fusco, Rollins Environmental, Inc.

**ATTACHMENT 1**

TCLP SAMPLE REPORT

SAMPLE DESCRIPTION

TCLP # 5115-G2-3

Sample # AS RECEIVED

HWY 36 WC # \_\_\_\_\_

Date 5-8-96

MR # \_\_\_\_\_

Date Sampled 5-8-96

Tech RTM

PARAMETERS: Metals X TOC - TOX - VOA - BNA -

SECTION #1: PRELIMINARY EVALUATIONS

- 1) EXTR. FL. 2 a) pH sample + H<sub>2</sub>O 11.57 b) pH sample + H<sub>2</sub>O + HCl 11.21
- 2) % SOLIDS 100% a) wt sample 100g b) wt beaker + residue \_\_\_\_\_ c) wt sample + beaker \_\_\_\_\_
- d) wt filtrate \_\_\_\_\_ e) wt cont \_\_\_\_\_ f) wt cont + filtrate \_\_\_\_\_
- g) wt solid phase \_\_\_\_\_ h) % solids (wt solid phase/wt sample) x 100 = \_\_\_\_\_
- 3) INSUFF SOLID NO a) wt dry solid \_\_\_\_\_ b) wt filter \_\_\_\_\_ c) wt filter + dry solid \_\_\_\_\_
- d) % dry solids (wt dry solid/sample wt) x 100 = \_\_\_\_\_
- 4) COMPAT W/ EXTR FL Yes

SECTION #2: NONVOLATILES METALS EXTRACTION PROCEDURE

- 1) EXTR FL VOL 2000 { (20 x % solid x sample wt) / 100 }
- 2) DATE STARTED 5-8-96 TIME STARTED 12.00
- 3) DATE STOPPED 5-9-96 TIME STOPPED 4.00
- 4) WT FILTRATE 1947 a) wt cont 543 b) wt cont + filtrate 2490
- 5) pH of EXTRACTS a) pH filtrate section #1 - b) pH filtrate section #2 6.19
- 6) COMMENTS

SECTION #3: VOLATILES EXTRACTION PROCEDURE

- 1) OPTIMUM SAMPLE WT \_\_\_\_\_ { (25 / % solids) X 100 }
- 2) EXTR FL #1 VOL \_\_\_\_\_ { (20 X % solids x sample wt) / 100 }
- 3) FIRST FILTRATION WT \_\_\_\_\_ a) WT CONT \_\_\_\_\_ b) wt cont + filtrate \_\_\_\_\_
- 4) DATE STARTED \_\_\_\_\_ TIME STARTED \_\_\_\_\_ PRESSURE \_\_\_\_\_
- 5) DATE STOPPED \_\_\_\_\_ DATE STOPPED \_\_\_\_\_ PRESSURE \_\_\_\_\_
- 6) 2nd FILTRATION WT \_\_\_\_\_ a) wt cont \_\_\_\_\_ b) wt cont + filtrate \_\_\_\_\_

NOTE: 2nd FILTRATION WT MAY ALSO BE COMBINED FILTRATE WT IF FROM 1st AND 2nd FILTRATIONS ARE COMPATIBLE.

CONTROLLED 7) COMMENTS:

ENT

ROLLINS HWY 36 LABORATORY  
METALS ANALYSIS REPORT

Sample Matrix: TCLP-High Selenium

Run #: ICAP 960509 HG 960510

Analysis	Method	Units	DF	Report Limit	Results
ANTIMONY	6010	mg/l		0.030	0.184
ARSENIC	6010	mg/l		0.030	<0.030
BARIUM	6010	mg/l		0.010	0.336
BERYLLIUM	6010	mg/l		0.005	<0.005
CADMIUM	6010	mg/l		0.005	6.40
CHROMIUM	6010	mg/l		0.005	<0.005
LEAD	6010	mg/l		0.030	23.5
NICKEL	6010	mg/l		0.010	2.20
SELENIUM	6010	mg/l		0.050	1.07
SILVER	6010	mg/l		0.050	<0.050
THALLIUM	6010	mg/l		0.070	<0.070
VANADIUM	6010	mg/l		0.005	<0.005
ZINC	6010	mg/l		0.500	52.1
MERCURY	6010	mg/l		0.008	0.154

Analyst: Helene Joral Date: 5/10/96

Tier II Review: Steven W. Schneider Date: 5-10-96

Tier III Review: Emilie Date: 5-16-96

Rollins  
Road  
A 6010

TCLP SAMPLE REPORT

SAMPLE DESCRIPTION

TCLP # 5723-610-2

Sample # 17th St Study 0.05 Port # 1

HWY 36 WC # Camp 1093

Date 5-9-96

MR # N/A

Date Sampled 5-9-96

Tech Royce

PARAMETERS: Metals X TOC - TOX - VOA - BNA -

SECTION #1: PRELIMINARY EVALUATIONS

- 1) EXTR. FL # 2 a) pH sample + H<sub>2</sub>O 12.09 b) pH sample + H<sub>2</sub>O + HCl 12.00
- 2) % SOLIDS 100% a) wt sample 100g b) wt beaker + residue - c) wt sample + beaker -
- d) wt filtrate - e) wt cont - f) wt cont + filtrate -
- g) wt solid phase - h) % solids (wt solid phase/wt sample) x 100 = -
- 3) INSUFF SOLID No a) wt dry solid - b) wt filter - c) wt filter + dry solid -
- b) % dry solids (wt dry solid/sample wt) x 100 = -
- 4) COMPAT W/ EXTR FL Yes

SECTION #2: NONVOLATILES METALS EXTRACTION PROCEDURE

- 1) EXTR FL VOL 2000 { (20 x % solid x sample wt) / 100 }
- 2) DATE STARTED 5-9-96 TIME STARTED 14:00
- 3) DATE STOPPED 5-10-96 TIME STOPPED 6:00
- 4) WT FILTRATE 1950 a) wt cont 540 b) wt cont + filtrate 2490
- 5) pH of EXTRACTS a) pH filtrate section #1 - b) pH filtrate section #2 8.57
- 6) COMMENTS

SECTION #3: VOLATILES EXTRACTION PROCEDURE

- 1) OPTIMUM SAMPLE WT - { (25 / % solids) X 100 }
- 2) EXTR FL #1 VOL - { (20 X % solids x sample wt) / 100 }
- 3) FIRST FILTRATION WT - a) WT CONT - b) wt cont + filtrate -
- 4) DATE STARTED - TIME STARTED - PRESSURE -
- 5) DATE STOPPED - DATE STOPPED - PRESSURE -
- 6) 2nd FILTRATION WT - a) wt cont - b) wt cont + filtrate -

NOTE: 2nd FILTRATION WT MAY ALSO BE COMBINED FILTRATE WT IF FROM 1st AND 2nd FILTRATIONS ARE COMPATIBLE

CONTROLLED 7) COMMENTS:

END

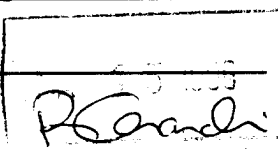
ROLLINS HWY 36 LABORATORY  
METALS ANALYSIS REPORT

Sample Matrix: TCLP-High Selenium + 5% Portland

Run #: ICAP 960510 HG 960510

Analysis	Method	Units	DF	Report Limit	Results
ANTIMONY	6010	mg/l		0.030	0.435
ARSENIC	6010	mg/l		0.030	0.089
BARIUM	6010	mg/l		0.010	0.399
BERYLLIUM	6010	mg/l		0.005	<0.005
CADMIUM	6010	mg/l		0.005	0.038
CHROMIUM	6010	mg/l		0.005	<0.005
LEAD	6010	mg/l		0.030	<0.030
NICKEL	6010	mg/l		0.010	0.105
SELENIUM	6010	mg/l		0.050	3.20
SILVER	6010	mg/l		0.050	<0.050
THALLIUM	6010	mg/l		0.070	<0.070
VANADIUM	6010	mg/l		0.005	<0.005
ZINC	6010	mg/l		0.500	<0.500
MERCURY	6010	mg/l		0.008	0.053

Analyst: Helene Sokol Date: 5/10/96  
 Tier II Review: Stacy W. Schmitt Date: 5-10-96  
 Tier III Review: Ember Date: 5-16-96

CHECKED BY  
  
 P. Crandall  
 H. G. FOSTER



TCLP SAMPLE REPORT

SAMPLE DESCRIPTION

TCLP # 5724-611-2

Sample # 11: Se Study 0.10 Portland

HWY 36 WC # Comp 1053

Date 5-9-96

MR # N/A

Date Sampled 5-9-96

Tech Ryz

PARAMETERS: Metals X TOC - TOX - VOA - BNA -

SECTION #1: PRELIMINARY EVALUATIONS

- 1) EXTR FL# 2
- 2) % SOLIDS 100%
- 3) INSUFF SOLID No
- 4) COMPAT W/ EXTR FL Yes
- a) pH sample + H<sub>2</sub>O 12.17
- b) pH sample + H<sub>2</sub>O + HCl 12.10
- a) wt sample 100g
- b) wt beaker + residue -
- c) wt sample + beaker -
- d) wt filtrate -
- e) wt cont -
- f) wt cont + filtrate -
- g) wt solid phase -
- h) % solids (wt solid phase/wt sample) x 100 = -
- a) wt dry solid -
- b) wt filter -
- c) wt filter + dry solid -
- b) % dry solids (wt dry solid/sample wt) x 100 = -

SECTION #2: NONVOLATILES METALS EXTRACTION PROCEDURE

- 1) EXTR FL VOL 200ml
- 2) DATE STARTED 5-9-96
- 3) DATE STOPPED 5-10-96
- 4) WT FILTRATE 1955
- 5) pH of EXTRACTS -
- 6) COMMENTS -
- (20 x % solid x sample wt) / 100
- TIME STARTED 14:00
- TIME STOPPED 6:00
- a) wt cont 541
- b) wt cpmt + filtrate 2496
- a) pH filtrate section #1 -
- b) pH filtrate section #2 10.61

SECTION #3: VOLATILES EXTRACTION PROCEDURE

- 1) OPTIMUM SAMPLE WT - { (25 / % solids) X 100 }
- 2) EXTR FL #1 VOL - { (20 X % solids x sample wt) / 100 }
- 3) FIRST FILTRATION WT - a) WT CONT - B) wt cont + filtrate -
- 4) DATE STARTED - TIME STARTED - PRESSURE -
- 5) DATE STOPPED - DATE STOPPED - PRESSURE -
- 6) 2nd FILTRATION WT - a) wt cont - b) wt cont + filtrate -
- NOTE: 2nd FILTRATION WT MAY ALSO BE COMBINED FILTRATE WT IF FROM 1st AND 2nd FILTRATIONS ARE COMPATIBLE.

CONTROLLED 7) COMMENTS:



TCLP SAMPLE REPORT

SAMPLE DESCRIPTION

TCLP # 5116-G3-14

Sample # AS Recd + 20% Port

HWY 36 WC # \_\_\_\_\_

Date 5-8-96

MR # \_\_\_\_\_

Date Sampled 5-8-96

Tech RTM

PARAMETERS: Metals X TOC - TOX - VOA - BNA -

SECTION #1: PRELIMINARY EVALUATIONS

- 1) EXTR FL# 2
- 2) % SOLIDS 100%
- 3) INSUFF SOLID NO
- 4) COMPAT W/ EXTR FL Yes
- a) pH sample + H<sub>2</sub>O 12.10
- b) pH sample + H<sub>2</sub>O + HCl 11.46
- a) wt sample 100g
- b) wt beaker + residue \_\_\_\_\_
- c) wt sample + beaker \_\_\_\_\_
- d) wt filtrate \_\_\_\_\_
- e) wt cont \_\_\_\_\_
- f) wt cont + filtrate \_\_\_\_\_
- g) wt solid phase \_\_\_\_\_
- h) % solids (wt solid phase/wt sample) x 100 = \_\_\_\_\_
- a) wt dry solid \_\_\_\_\_
- b) wt filter \_\_\_\_\_
- c) wt filter + dry solid \_\_\_\_\_
- b) % dry solids (wt dry solid/sample wt) x 100 = \_\_\_\_\_

SECTION #2: NONVOLATILES METALS EXTRACTION PROCEDURE

- 1) EXTR FL VOL 2000
- 2) DATE STARTED 5-8-96
- 3) DATE STOPPED 5-9-96
- 4) WT FILTRATE 1948
- 5) pH of EXTRACTS \_\_\_\_\_
- 6) COMMENTS \_\_\_\_\_
- { (20 x % solid x sample wt) / 100 }
- TIME STARTED 12.00
- TIME STOPPED 4.00
- a) wt cont 538
- b) wt cpmt + filtrate 2486
- a) pH filtrate section #1 \_\_\_\_\_
- b) pH filtrate section #2 11.49

SECTION #3: VOLATILES EXTRACTION PROCEDURE

- 1) OPTIMUM SAMPLE WT \_\_\_\_\_ { (25 / % solids) X 100 }
- 2) EXTR FL #1 VOL \_\_\_\_\_ { (20 X % solids x sample wt) / 100 }
- 3) FIRST FILTRATION WT \_\_\_\_\_ a) WT CONT \_\_\_\_\_ b) wt cont + filtrate \_\_\_\_\_
- 4) DATE STARTED \_\_\_\_\_ TIME STARTED \_\_\_\_\_ PRESSURE \_\_\_\_\_
- 5) DATE STOPPED \_\_\_\_\_ DATE STOPPED \_\_\_\_\_ PRESSURE \_\_\_\_\_
- 6) 2nd FILTRATION WT \_\_\_\_\_ a) wt cont \_\_\_\_\_ b) wt cont + filtrate \_\_\_\_\_
- NOTE: 2nd FILTRATION WT MAY ALSO BE COMBINED FILTRATE WT IF FROM 1st AND 2nd FILTRATIONS ARE COMPATIBLE.

CONTROLLED 7) COMMENTS:



TCLP SAMPLE REPORT

SAMPLE DESCRIPTION

TCLP # 5125-612-2

Sample # Hi Se Study 0.01 NaHS + 0.01 Zn + 0.05 Pb

HWY 36 WC # Qm 10 93

Date 5-9-96

MR # N/A

Date Sampled 5-9-96

Tech Roque

PARAMETERS: Metals X TOC — TOX — VOA — BNA —

SECTION #1: PRELIMINARY EVALUATIONS

- 1) EXTR FL 2 a) pH sample + H<sub>2</sub>O 12.10 b) pH sample + H<sub>2</sub>O + HCl 12.00  
 2) % SOLIDS 100% a) wt sample 100g b) wt beaker + residue — c) wt sample + beaker —  
 d) wt filtrate — e) wt cont — f) wt cont + filtrate —  
 g) wt solid phase — h) % solids (wt solid phase/wt sample) x 100 = —  
 3) INSUFF SOLID NO a) wt dry solid — b) wt filter — c) wt filter + dry solid —  
 d) % dry solids (wt dry solid/sample wt) x 100 = —  
 4) COMPAT W/ EXTR FL Yes

SECTION #2: NONVOLATILES METALS EXTRACTION PROCEDURE

- 1) EXTR FL VOL 2000u { (20 x % solid x sample wt) / 100 }  
 2) DATE STARTED 5-9-96 TIME STARTED 14:00  
 3) DATE STOPPED 5-10-96 TIME STOPPED 6:00  
 4) WT FILTRATE 1947 a) wt cont 542 b) wt cont + filtrate 2489  
 5) pH of EXTRACTS a) pH filtrate section #1 — b) pH filtrate section #2 8.45  
 6) COMMENTS

SECTION #3: VOLATILES EXTRACTION PROCEDURE

- 1) OPTIMUM SAMPLE WT — { (25 / % solids) X 100 }  
 2) EXTR FL #1 VOL — { (20 X % solids x sample wt) / 100 }  
 3) FIRST FILTRATION WT — a) WT CONT — b) wt cont + filtrate —  
 4) DATE STARTED — TIME STARTED — PRESSURE —  
 5) DATE STOPPED — DATE STOPPED — PRESSURE —  
 6) 2nd FILTRATION WT — a) wt cont — b) wt cont + filtrate —

NOTE: 2nd FILTRATION WT MAY ALSO BE COMBINED FILTRATE WT IF FROM 1st AND 2nd FILTRATIONS ARE COMPATIBLE.

CONTROLLED 7) COMMENTS:

ROLLINS HWY 36 LABORATORY  
METALS ANALYSIS REPORT

Sample Matrix: TCLP-High Selenium + 1% NaHS + 1% FeSO<sub>4</sub> + 5% Portland

Run #: ICAP 960510 HG 960510

Analysis	Method	Units	DF	Report Limit	Results
ANTIMONY	6010	mg/l		0.030	0.648
ARSENIC	6010	mg/l		0.030	0.069
BARIUM	6010	mg/l		0.010	0.312
BERYLLIUM	6010	mg/l		0.005	<0.005
CADMIUM	6010	mg/l		0.005	<0.005
CHROMIUM	6010	mg/l		0.005	<0.005
LEAD	6010	mg/l		0.030	<0.030
NICKEL	6010	mg/l		0.010	0.229
SELENIUM	6010	mg/l		0.050	0.916
SILVER	6010	mg/l		0.050	<0.050
THALLIUM	6010	mg/l		0.070	<0.070
VANADIUM	6010	mg/l		0.005	<0.005
ZINC	6010	mg/l		0.500	<0.500
MERCURY	6010	mg/l		0.008	<0.008

Analyst: Helene J. [Signature] Date: 5/10/96

Tier II Review: Stacy D. Schneider Date: 5-10-96

Tier III Review: [Signature] Date: 5-16-96

Revised  
10/15/96

TCLP SAMPLE REPORT

SAMPLE DESCRIPTION

TCLP # 5126-613-8

Sample # HIGH Se Study .01MHS + .01 K2SO4 + .10 Pass

HWY 36 WC # Camp 1093

Date 5-9-96

MR # N/A

Date Sampled 5-9-96

Tech Roy

PARAMETERS: Metals X TOC - TOX - VOA - BNA -

SECTION #1: PRELIMINARY EVALUATIONS

- 1) EXTR. FL # 2 a) pH sample + H<sub>2</sub>O 12.17 b) pH sample + H<sub>2</sub>O + HCl 12.15
- 2) % SOLIDS 100% j) wt sample 100g h) wt beaker + residue - c) wt sample + beaker -
- d) wt filtrate - e) wt cont - i) wt cont + filtrate -
- g) wt solid phase - h) % solids (wt solid phase/wt sample) x 100 = -
- 3) INSUFF SOLID? No a) wt dry solid - b) wt filter - c) wt filter + dry solid -
- d) % dry solids (wt dry solid/sample wt) x 100 = -
- 4) COMPAT W/ EXTR FL? Yes

SECTION #2: NONVOLATILES METALS EXTRACTION PROCEDURE

- 1) EXTR FL VOL 2000 ml { (20 x % solid x sample wt) / 100 }
- 2) DATE STARTED 5-9-96 TIME STARTED 1400
- 3) DATE STOPPED 5-10-96 TIME STOPPED 6.00
- 4) WT FILTRATE: 1999 j) wt cont 543 h) wt cont + filtrate 2492
- 5) pH of EXTRACTS a) pH filtrate section #1 - h) pH filtrate section #2 10.76
- 6) COMMENTS

SECTION #3: VOLATILES EXTRACTION PROCEDURE

- 1) OPTIMUM SAMPLE WT - { (25 / % solids) X 100 }
  - 2) EXTR FL #1 VOL - { (20 X % solids x sample wt) / 100 }
  - 3) FIRST FILTRATION WT - a) WT CONT - B) wt cont + filtrate -
  - 4) DATE STARTED - TIME STARTED - PRESSURE -
  - 5) DATE STOPPED - DATE STOPPED - PRESSURE -
  - 6) 2nd FILTRATION WT - a) wt cont - b) wt cont + filtrate -
- NOTE: 2nd FILTRATION WT MAY ALSO BE COMBINED FILTRATE WT IF FROM 1st AND 2nd FILTRATIONS ARE COMPATIBLE.

CONTROLLED 7) COMMENTS:







ROLLINS HWY 36 LABORATORY  
METALS ANALYSIS REPORT

Sample Matrix: TCLP-High Selenium + 1% NaHS + 1% FeSO<sub>4</sub> + 20% Portland

Run #: ICAP 960510 HG 960510

Analysis	Method	Units	DF	Report Limit	Results
ANTIMONY	6010	mg/l		0.030	<0.030
ARSENIC	6010	mg/l		0.030	0.033
BARIUM	6010	mg/l		0.010	0.468
BERYLLIUM	6010	mg/l		0.005	<0.005
CADMIUM	6010	mg/l		0.005	<0.005
CHROMIUM	6010	mg/l		0.005	<0.005
LEAD	6010	mg/l		0.030	<0.030
NICKEL	6010	mg/l		0.010	0.011
SELENIUM	6010	mg/l		0.050	1.78
SILVER	6010	mg/l		0.050	<0.050
THALLIUM	6010	mg/l		0.070	<0.070
VANADIUM	6010	mg/l		0.005	0.010
ZINC	6010	mg/l		0.500	<0.500
MERCURY	6010	mg/l		0.008	<0.008

Analyst: Helene J. Keal Date: 5/10/96

Tier II Review: Steven W. Schneider Date: 5-10-96

Tier III Review: Emilie Date: 5-16-96

Revised

TCLP SAMPLE REPORT

SAMPLE DESCRIPTION

.01 NaHS + .01 FeSO4

TCLP # 5156-G18-16

Sample # Sc Study

HWY 36 WC # N/A

Date 5-14-96

MR # N/A

Date Sampled 5-14-96

Tech Boyer

PARAMETERS: Metals X TOC — TOX — VOA — BNA —

SECTION #1: PRELIMINARY EVALUATIONS

- 1) EXTR. FL# 2
- 2) % SOLIDS 100%
- 3) pH sample + H<sub>2</sub>O 11.90
- 4) INSUFF SOLID' N/A
- 5) COMPAT' W/ EXTR FL' YES
- b) pH sample + H<sub>2</sub>O + HCl 11.90
- c) wt sample 100g
- d) wt filtrate —
- e) wt solid phase —
- f) wt Dry solid —
- g) wt beaker + residue —
- h) wt cont —
- i) % solids (wt solid phase/wt sample) x 100 = —
- j) wt filter —
- k) wt filter + dry solid —
- l) wt cont + filtrate —
- m) % dry solids (wt dry solid/sample wt) x 100 = —

SECTION #2: NONVOLATILES METALS EXTRACTION PROCEDURE

- 1) EXTR FL VOL 2000ml
- 2) DATE STARTED 5-14-96
- 3) DATE STOPPED 5-15-96
- 4) WT FILTRATE: 1950
- 5) pH of EXTRACTS
- 6) COMMENTS
- { (20 x % solid x sample wt) / 100 }
- TIME STARTED 14:00
- TIME STOPPED 06:00
- a) wt cont 5.49
- a) pH filtrate section #1 —
- b) wt cont + filtrate 2499
- b) pH filtrate section #2 6.80

SECTION #3: VOLATILES EXTRACTION PROCEDURE

- 1) OPTIMUM SAMPLE WT — { (25 / % solids) X 100 }
- 2) EXTR FL #1 VOL — { (20 X % solids x sample wt) / 100 }
- 3) FIRST FILTRATION WT — a) WT CONT — b) wt cont + filtrate —
- 4) DATE STARTED — TIME STARTED — PRESSURE —
- 5) DATE STOPPED — DATE STOPPED — PRESSURE —
- 6) 2nd FILTRATION WT — a) wt cont — b) wt cont + filtrate —

NOTE: 2nd FILTRATION WT MAY ALSO BE COMBINED FILTRATE WT IF FROM 1st AND 2nd FILTRATIONS ARE COMPATIBLE.

CONTROLLED 7) COMMENTS:

ROLLINS HWY 36 LABORATORY  
METALS ANALYSIS REPORT

Sample Matrix: TCLP-High Selenium + 1% NaHS + 1% FeSO<sub>4</sub>

Run #: ICAP 960515    HG 960515

Analysis	Method	Units	DF	Report Limit	Results
ANTIMONY	6010	mg/l		0.030	0.137
ARSENIC	6010	mg/l		0.030	<0.030
BARIUM	6010	mg/l		0.010	0.288
BERYLLIUM	6010	mg/l		0.005	<0.005
CADMIUM	6010	mg/l		0.005	2.95
CHROMIUM	6010	mg/l		0.005	<0.005
LEAD	6010	mg/l		0.030	14.7
NICKEL	6010	mg/l		0.010	2.46
SELENIUM	6010	mg/l		0.050	1.12
SILVER	6010	mg/l		0.050	<0.050
THALLIUM	6010	mg/l		0.070	0.152
VANADIUM	6010	mg/l		0.005	<0.005
ZINC	6010	mg/l		0.500	30.1
MERCURY	6010	mg/l		0.008	<0.008

Analyst: \_\_\_\_\_

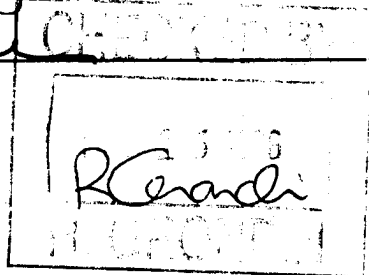
Date: 5/16/96

Tier II Review: \_\_\_\_\_

Date: 5/16/96

Tier III Review: \_\_\_\_\_

Date: 5-16-96



**ATTACHMENT 2**

CONTINUING CALIBRATION VERIFICATION

ROLLINS' HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

QC REPORT # 184  
RUN # 960509  
DATE OF RUN 5/9/96  
UNITS: MG/L  
LAB ID METHOD: TCLP2PT  
TECH INITIALS TR

METHOD SW846/METHOD 6010  
CHECK SAMPLE ID IS: ICV/CCV  
METAL STD # MO 1187  
CHECK SAMPLE SOURCE: SPEX

ELEMENTS	CCV-VAL	ICV	%D	CCV-1	%D	CCV-2	%D
Sb	5.00	5.05	0.98	5.04	0.86	5.04	0.78
As	5.00	4.92	-1.54	4.90	-1.94	4.95	-0.98
Ba	5.00	4.98	-0.42	4.91	-1.78	4.88	-2.46
Be	5.00	5.54	10.88 *	5.42	8.42	5.48	9.60
Cd	5.00	4.94	-1.18	4.95	-1.06	4.97	-0.56
Cr	5.00	5.00	-0.08	4.96	-0.74	5.02	0.36
Co	5.00	5.02	0.38	5.00	-0.04	5.06	1.14
Cu	5.00	4.97	-0.56	4.97	-0.68	5.05	0.98
Se	5.00	5.12	2.36	5.24	4.76	5.36	7.18
Tl	5.00	4.71	-5.82	4.69	-6.12	4.73	-5.38
Ag	0.50	0.47	-5.04	0.48	-4.22	0.47	-5.30
V	5.00	5.07	1.30	5.03	0.64	5.07	1.38
Zn	5.00	5.11	2.16	5.08	1.64	5.13	2.50

\* = OUT OF CONTROL RANGE (%D +/- 10%)  
NR = NOT REPORTED  
%D = ((OBSERVED VALUE/TRUE VALUE)X100)-100

COMMENTS: \* Reference CA# 960423-01 TR

Q/A-Q/C REVIEWER INTL.: TR DATE: 5/10/96

QC 1 of 15

LABORATORY CONTROL SAMPLE

HIGHWAY 36 LAND DEVELOPMENT COMPANY  
 108555 E. HWY 36  
 DEER TRAIL, CO 80105

QC REPORT # 0845  
 RUN # 1CAE940509  
 DATE OF RUN 5/9/96  
 UNITS: MG/L

CHECK SAMPLE ID: LCS ANALYSIS METHOD: SW846 METHOD 6010  
 STANDARD SOURCE: NIST LAB ID METHOD: TCLP2BT  
 CHECK SAMPLE STANDARD # 1186 TECH INITIALS IK

ELEMENT	VALUE	LCS-1ST	%REC	LCS-2ND	%REC
Sb	0.200	0.206	103.05		0.00
As	0.200	0.214	107.15		0.00
Ba	0.100	0.097	97.20		0.00
Be	0.040	0.045	112.75		0.00
Cd	0.100	0.106	106.40		0.00
Cr	0.100	0.093	92.70		0.00
Ni	0.100	0.106	105.60		0.00
Ph	0.200	0.224	111.80		0.00
	0.400	0.416	104.00		0.00
Tl	1.000	0.988	98.79		0.00
Ag	0.150	0.138	91.73		0.00
V	0.040	0.042	106.00		0.00
Zn	1.500	1.627	108.47		0.00

NR = NOT REPORTED  
 \* = OUT OF CONTROL RANGE. (%REC +/- 20%)  
 SD = ((OBSERVED VALUE/TRUE VALUE)X100)-100

COMMENTS: \_\_\_\_\_

QA-Q/C REVIEWER INTL.: IK DATE 5/10/96

QC 2 of 15

BLANKS

ROLLINS' HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

QC REPORT # 1184  
RUN # ICAP 960509  
DATE OF RUN 5/9/96  
UNITS: MG/L

TECH INITIALS IK  
ANALYSIS METHOD # 6010  
PREP BLK #1 960509m

LAB ID METHOD # TECPPT  
PREP BLK #2 \_\_\_\_\_

ELEMENT	CALIBRATION BLANKS				METHOD BLANKS	
	ICB	CCB-1	CCB-2	CCB-3	BLK 1	BLK 2
Sb	BDL	BDL	BDL		BDL	
As	BDL	BDL	BDL		BDL	
Ba	BDL	BDL	BDL		BDL	
Be	BDL	BDL	BDL		BDL	
Cd	BDL	BDL	BDL		BDL	
Cr	BDL	BDL	BDL		BDL	
Ni	BDL	BDL	BDL		BDL	
Ph	BDL	BDL	BDL		BDL	
	BDL	BDL	BDL		BDL	
Tl	BDL	BDL	BDL		BDL	
Ag	BDL	BDL	BDL		BDL	
V	BDL	BDL	BDL		BDL	
Zn	BDL	BDL	BDL		BDL	

NR = NOT REPORTED  
BDL = BELOW DETECTION LIMIT  
\* = VALUE ABOVE LIMIT ( > 5% OF REGULATORY LEVEL )

COMMENTS \_\_\_\_\_  
\_\_\_\_\_

QA-Q/C REVIEWER INTL.: AS DATE 5/10/96



MATRIX SPIKE ADDITION / DUPLICATE RECOVERY

ROLLINS' HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

METALS LAB # V-25603  
QC REPORT # 0780  
RUN # 10AP900509  
DATE OF RUN 5/9/90  
TECH INITIALS in

ANALYSIS METHOD: 6010      PREP METHOD: 3015  
LAB ID METHOD: TCLP2PT      SPIKING SOLUTION # 1186  
MATRIX: WATER, TCLP X, OTHER  
UNITS: mg/L or mg/Kg (Circle One)

ELEMENTS	SPK-ADDED	SAMPLE	SPIKE	%REC	SPIKE-DUP	%REC	RPD
Sb	0.200	0.0319	0.257	112.75	0.253	110.35	1.88
As	0.200	0.0507	0.305	127.00	0.278	113.55	9.24
Ba	0.100	0.8120	0.897	85.00	0.920	107.80	-2.51
Be	0.040	0.0000	0.043	106.25	0.042	106.00	0.24
Cd	0.100	0.0000	0.108	107.90	0.104	104.20	3.49
Cr	0.100	0.0205	0.119	98.80	0.115	94.80	3.41
Mn	0.100	0.0000	0.102	101.60	0.095	94.50	7.24
	0.200	0.0000	0.181	90.25	0.176	88.10	2.41
Se	0.400	0.0000	0.556	138.95	0.554	138.55	0.29
Tl	1.000	0.0000	1.036	103.60	0.957	95.69	7.94
Ag	0.150	0.0000	0.137	91.53	0.134	89.40	2.36
V	0.040	0.0156	0.056	99.75	0.055	98.00	1.27
Zn	1.500	0.0000	1.615	107.67	1.586	105.73	1.81

NR = NOT REPORTED

%REC = ((SPK-SMPL)/SPK-ADDED) X 100

\* = OUT OF CONTROL RANGE (%REC <75% - >125%)

RPD = ((SPIKE-SPIKEDUP)/((SPIKE+SPIKEDUP)/2)) X 100

COMMENTS \* LCS O.K. in 5/9/90

Q/A-Q/C INTL.: DATE 5/10/90

MERCURY ANALYSIS WORKSHEET

SW-846 Method (check one): 7470 (X), 7471 ( )

n #: H69100510

Date: 5/10/96

Standard ID	Absorbance	Calc. Conc. (optional)	Comments			
Blank	0					
0.40 ug/L Std	0.008	0.339				
1.0 ug/L Std	0.020	1.13				
5.0 ug/L Std	0.083	5.26				
10 ug/L Std	0.153	9.86				
15 ug/L Std						

Correlation Coefficient (r): 0.99901

Stds. Traceability:

Stock Std # M1188 ICV/CCV Std # M1188

QC:

Sample ID	Absorbance	Inst. Conc.	D. F.	Sample Result mg/L or mg/Kg	T. V.	% R	Comments
ICV	0.078	4.93 ✓	-	/	5.00	98.6	
ICB	0	<0.40	-	/			
Method Blank	0	L	-	/			
LCS	0.077	4.87 ✓	-	/	5.00	97.4	
V-25646	0	<0.40	20	<0.008			
N-25646ms	0.084	5.33		/	5.00	107	} CPD
N-25646msd	0.083	5.26		/	5.00	105	
V-25654	0	<0.40		<0.008			
O-25648	0						
R-25626	0						
BIK65	0						
high Se 0.05port	0.043	2.64 ✓		0.053 ✓			
CCV	0.083	5.26	/	/	5.00	105	
CCB	0	<0.40	/	/			
high Se 0.01NHS 0.01FeSO4 0.05port	0		20	<0.008			
high Se 0.10port	0						
high Se 0.01NHS 0.01FeSO4 0.20port	0						
high Se 0.01NHS 0.01FeSO4 0.05port	0						
high Se 0.120	0.120	7.69		0.154 ✓			
high Se 20/port	0	<0.40		<0.008			
CCV	0.089	5.66	/	/	5.00	113	
CCB	0	<0.40	/	/			

CONTROLLED



DOCUMENT

Analyst: [Signature]  
 Tier II Review: [Signature]  
 Tier III Review: [Signature]

Date: 5/10/96

Date: 5/14/96

Date: 5-14-96

QC Windows (%):

ICV/CCV 85-115

LCS 80-120

MS/MSD 76-126

RPD Qc 505-15

pg 1 of 2

CONTINUING CALIBRATION VERIFICATION

ROLLINS' HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

QC REPORT # 1185  
RUN # KAD960510  
DATE OF RUN 5/10/96  
UNITS: MG/L  
LAB ID METHOD: TCLP2PT  
TECH INITIALS HS

METHOD SW846/METHOD 6010  
CHECK SAMPLE ID IS: ICV/CCV  
METAL STD # MO 1187  
CHECK SAMPLE SOURCE: SPEX

ELEMENTS	CCV-VAL	ICV	%D	CCV-1	%D	CCV-2	%D
Sb	5.00	5.06	1.26	5.23	4.56	5.06	1.24
As	5.00	4.85	-2.94	5.03	0.54	4.80	-4.00
Ba	5.00	4.96	-0.76	4.77	-4.62	4.97	-0.54
Be	5.00	5.64	12.86	5.55	11.08	5.31	6.26
Cd	5.00	4.84	-3.20	5.14	2.80	4.82	-3.70
Cr	5.00	4.90	-2.00	5.08	1.50	4.91	-1.80
Co	5.00	4.94	-1.18	5.11	2.14	4.94	-1.30
Pb	5.00	4.84	-3.24	5.11	2.24	4.85	-3.04
Se	5.00	5.02	0.32	5.19	3.86	4.94	-1.28
Tl	5.00	4.66	-6.72	4.68	-6.36	4.82	-3.54
Ag	0.50	0.48	-4.64	0.49	-2.30	0.46	-7.46
V	5.00	5.02	0.38	5.07	1.40	4.99	-0.16
Zn	5.00	5.01	0.28	5.28	5.52	4.98	-0.38

X = OUT OF CONTROL RANGE (%D +/- 10%)  
R = NOT REPORTED  
D = ((OBSERVED VALUE/TRUE VALUE)X100)-100

COMMENTS: \* Reference @CA# 96042301 TR 5/11/96

QA-Q/C REVIEWER INTL.: TR DATE: 5/11/96

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CONTINUING CALIBRATION VERIFICATION

COLLINS HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

QC REPORT # 1185 cont  
RUN # 10000510 cont  
DATE OF RUN 5/10/96  
UNITS: MG/L  
LAB ID METHOD: TCLP2PT  
TECH INITIALS RS

METHOD SW846/METHOD 6010  
CHECK SAMPLE ID IS: ICV/CCV  
METAL STD # MO  
CHECK SAMPLE SOURCE: SPEX

ELEMENTS	CCV-VAL	CCV-3	%D	<del>CCV-1</del>	<del>%D</del>	CCV-2	%D
Sb	5.00	4.82	-3.52	<del>5.00</del>	<del>0.00</del>		-100.00
As	5.00	4.60	-8.10	<del>5.00</del>	<del>0.00</del>		-100.00
Ba	5.00	5.09	1.70	<del>5.00</del>	<del>0.00</del>		-100.00
Be	5.00	5.18	3.52	<del>5.00</del>	<del>0.00</del>		-100.00
Cd	5.00	4.53	-9.32	<del>5.00</del>	<del>0.00</del>		-100.00
	5.00	4.72	-5.64	<del>5.00</del>	<del>0.00</del>		-100.00
	5.00	4.71	-5.82	<del>5.00</del>	<del>0.00</del>		-100.00
Pb	5.00	4.55	-9.02	<del>5.00</del>	<del>0.00</del>		-100.00
Se	5.00	4.91	-1.78	<del>5.00</del>	<del>0.00</del>		-100.00
Tl	5.00	4.65	-7.06	<del>5.00</del>	<del>0.00</del>		-100.00
Ag	0.50	0.46	-8.40	<del>0.50</del>	<del>0.00</del>		-100.00
V	5.00	4.87	-2.64	<del>5.00</del>	<del>0.00</del>		-100.00
Zn	5.00	4.70	-5.98	<del>5.00</del>	<del>0.00</del>		-100.00

= OUT OF CONTROL RANGE (%D +/- 10%)  
NR = NOT REPORTED  
%D = ((OBSERVED VALUE/TRUE VALUE)X100)-100

COMMENTS: \_\_\_\_\_

I/A-Q/C REVIEWER INTL.: in DATE: 5/14/96

LABORATORY CONTROL SAMPLE

HIGHWAY 36 LAND DEVELOPMENT COMPANY  
 108555 E. HWY 36  
 DEER TRAIL, CO 80105

QC REPORT # 0846  
 RUN # CA960510  
 DATE OF RUN 5/10/96  
 UNITS: MG/L

CHECK SAMPLE ID: LCS ANALYSIS METHOD: SW846 METHOD 6010  
 STANDARD SOURCE: NIST LAB ID METHOD: TCLP2PT  
 CHECK SAMPLE STANDARD # 1K6 TECH INITIALS KS

ELEMENT	VALUE	LCS-1ST	%REC	LCS-2ND	%REC
Sb	0.200	0.228	114.00		0.00
As	0.200	0.202	101.05		0.00
Ba	0.100	0.096	95.80		0.00
Be	0.040	0.045	113.00		0.00
Cd	0.100	0.104	104.20		0.00
Cr	0.100	0.107	107.20		0.00
	0.100	0.107	107.20		0.00
	0.200	0.229	114.50		0.00
Se	0.400	0.438	109.45		0.00
Tl	1.000	1.000	100.00		0.00
Ag	0.150	0.139	92.60		0.00
V	0.040	0.040	99.50		0.00
Zn	1.500	1.663	110.87		0.00

NR = NOT REPORTED  
 \* = OUT OF CONTROL RANGE (%REC +/- 20%)  
 SD = ((OBSERVED VALUE/TRUE VALUE)X100)-100

COMMENTS: \_\_\_\_\_

QA/QC REVIEWER INTL. : tu DATE 5/14/96

Qc 8 of 15

BLANKS

ROLLINS' HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

QC REPORT # 1185  
RUN # 1000510  
DATE OF RUN 5/10/96  
UNITS: MG/L

TECH INITIALS HS  
ANALYSIS METHOD # 6010  
PREP BLK #1 900510

LAB ID METHOD # TCLP2PT  
PREP BLK #2 \_\_\_\_\_

ELEMENT	CALIBRATION BLANKS				METHOD BLANKS	
	ICB	CCB-1	CCB-2	CCB-3	BLK 1	BLK 2
Sb	BDL	BDL	BDL	BDL	BDL	
As	BDL	BDL	BDL	BDL	BDL	
Ba	BDL	BDL	BDL	BDL	BDL	
Be	BDL	BDL	BDL	BDL	BDL	
Cd	BDL	BDL	BDL	BDL	BDL	
Cr	BDL	BDL	BDL	BDL	BDL	
Mn	BDL	BDL	BDL	BDL	BDL	
Pb	BDL	BDL	BDL	BDL	BDL	
Se	BDL	BDL	BDL	BDL	BDL	
Tl	BDL	BDL	BDL	BDL	BDL	
Aq	BDL	BDL	BDL	BDL	BDL	
V	BDL	BDL	BDL	BDL	BDL	
Zn	BDL	BDL	BDL	BDL	BDL	

R = NOT REPORTED  
DL = BELOW DETECTION LIMIT  
= VALUE ABOVE LIMIT ( > 5% OF REGULATORY LEVEL )

COMMENTS \_\_\_\_\_

QA-Q/C REVIEWER INTL.: HC DATE 5/14/96

QC 9/25/15

MATRIX SPIKE ADDITION / DUPLICATE RECOVERY

ROLLINS HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

METALS LAB # V-25654  
QC REPORT # 0781  
RUN # 2CAP060510  
DATE OF RUN 5/10/96  
TECH INITIALS HS

ANALYSIS METHOD: 6010      PREP METHOD: 3015  
LAB ID METHOD: TCLP2PT      SPIKING SOLUTION # 1186  
MATRIX: WATER, TCLP , OTHER \_\_\_\_\_  
UNITS: (mg/L) or mg/Kg (Circle One)

ELEMENTS	SPK-ADDED	SAMPLE	SPIKE	%REC	SPIKE-DUP	%REC	RPD
Sb	0.200	0.0386	0.288	124.60	0.270	115.80	6.31
As	0.200	0.0000	0.247	123.40	0.244	121.80	1.31
Ba	0.100	0.9767	1.061	84.30	1.090	113.30	-2.70
Be	0.040	0.0000	0.043	108.25	0.043	107.00	1.16
Cd	0.100	0.0000	0.109	108.90	0.106	105.50	3.17
Cr	0.100	0.0793	0.181	102.10	0.172	92.70	5.32
Mn	0.100	0.0000	0.099	99.30	0.093	93.20	6.34
Pb	0.200	0.0000	0.231	115.35	0.219	109.30	5.39
Se	0.100	0.0000	0.534	133.43	0.520	129.88	2.70
Tl	1.000	0.0000	0.935	93.47	0.926	92.55	0.99
Ag	0.150	0.0000	0.137	91.60	0.134	89.47	2.36
V	0.040	0.0103	0.052	103.25	0.049	96.00	5.78
Zn	1.500	0.0000	1.695	113.00	1.644	109.60	3.05

NR = NOT REPORTED  
%REC = ((SPK-SMPL)/SPK-ADDED) X 100  
C = OUT OF CONTROL RANGE (%REC <75% - >125%)  
RPD = ((SPIKE-SPIKEDUP)/((SPIKE+SPIKEDUP)/2)) X 100  
COMMENTS: ALLS OK

QA-Q/C INTL. DATE 5/14/96

ROLLINS HWY 36 LABORATORY  
 MERCURY ANALYSIS WORKSHEET

SW-846 Method (check one): 7470 (X), 7471 ( )

Lab #: H-900515

Date: 5/15/96

Standard ID	Absorbance	Calc. Conc. (optional)	Comments
Blank	0		
0.40 ug/L Std	0.007		
1.0 ug/L Std	0.024		
5.0 ug/L Std	0.114		
10 ug/L Std	0.228		
15 ug/L Std			

Correlation Coefficient (r): 0.99992

Stock Std # M1188 ICV/CCV Std # M1188

Sample ID	Absorbance	Inst. Conc.	D. F.	Sample Result mg/L or mg/Kg	T. V.	% R	Comments
ICV	0.116	5.09	-		5.00	102	
ICB	0	20.40	-				
Method Blank	0	✓	-				
LCS	0.120	5.27	-		5.00	105	
V-25709	0	20.40	20	20.008			
↓ MS	0.116	5.09			5.00	102	} RPD = 2.52
✓ MSD	0.119	5.22			5.00	104	
V-25720	0	20.40	20	20.008			
V-25771	0	↓	↓	↓			
V-25774	0	↓	↓	↓			
P-25720	0	↓	↓	↓			
P-25721	0	↓	↓	↓			
CCV	0.117	5.14			5.00	103	
CCB	0	20.40					
P-25722	0	↓	20	20.008			
P-25723	0	↓	↓	↓			
P-25724	0	↓	↓	↓			
R-25730	0	↓	↓	↓			
R-25736	0	↓	↓	↓			
P-25711	0	↓	↓	↓			
R-25731	0	↓	↓	↓			
V	0.110	4.83			5.00	96.6	
ICB	0	20.40					

CONTROLLED

Analyst: *[Signature]*

Date: 5/15/96

QC Windows (%):



Tier II Review: *[Signature]*

Date: 5/15/96

ICV/CCV 85-115

Tier III Review: *[Signature]*

Date: 5-15-96

LCS 80-120

MS/MSD 75-125

RPD QC 1106 15



CONTINUING CALIBRATION VERIFICATION

ROLLINS' HIGHWAY 36  
 108555 E. HWY 36  
 DEER TRAIL, CO 80105

QC REPORT # 1188  
 RUN # ICAP9000SIS  
 DATE OF RUN 5/15/96  
 UNITS: MG/L  
 LAB ID METHOD: TCLP2PT  
 TECH INITIALS TR

METHOD SW846/METHOD 6010  
 CHECK SAMPLE ID IS: ICV/CCV  
 METAL STD # MO 1187  
 CHECK SAMPLE SOURCE: SPEX

ELEMENTS	CCV-VAL	ICV	%D	CCV-1	%D	CCV-2	%D
Sb	5.00	5.07	1.32	5.11	2.24	5.07	1.30
As	5.00	4.92	-1.56	5.06	1.28	5.11	2.28
Ba	5.00	4.99	-0.22	4.87	-2.54	4.88	-2.38
Be	5.00	5.46	9.18	5.51	10.16*	5.58	11.50*
Cd	5.00	4.86	-2.72	4.91	-1.74	4.80	-4.04
	5.00	4.94	-1.22	5.03	0.58	5.05	0.90
	5.00	4.97	-0.64	5.09	1.80	5.10	2.00
Pb	5.00	4.86	-2.72	5.01	0.22	4.95	-0.98
Se	5.00	5.11	2.20	5.26	5.26	5.30	5.90
Tl	5.00	4.74	-5.18	4.82	-3.54	4.89	-2.14
Ag	0.50	0.47	-5.34	0.47	-6.18	0.46	-8.16
V	5.00	5.06	1.22	5.07	1.42	5.09	1.82
Zn	5.00	5.04	0.82	5.12	2.40	5.06	1.16

\* = OUT OF CONTROL RANGE (%D +/- 10%)  
 NR = NOT REPORTED  
 %D = ((OBSERVED VALUE/TRUE VALUE)X100)-100

COMMENTS: \* Reference CA# 960423-01 TR 5/15/96

Q/A-Q/C REVIEWER INTL.: TR DATE: 5/15/96

QC 12 of 15

LABORATORY CONTROL SAMPLE

HIGHWAY 36 LAND DEVELOPMENT COMPANY  
 108555 E. HWY 36  
 DEER TRAIL, CO 80105

QC REPORT # 0849  
 RUN # 10A9900S15  
 DATE OF RUN 5/15/96  
 UNITS: MG/L

CHECK SAMPLE ID: LCS ANALYSIS METHOD: SW846 METHOD 6010  
 STANDARD SOURCE: NIST LAB ID METHOD: TCLP2PT  
 CHECK SAMPLE STANDARD # 1186 TECH INITIALS TK

ELEMENT	VALUE	LCS-1ST	%REC	LCS-2ND	%REC
Sb	0.200	0.215	107.50		0.00
As	0.200	0.219	109.40		0.00
Ba	0.100	0.099	99.00		0.00
Be	0.040	0.046	114.25		0.00
Cd	0.100	0.103	102.70		0.00
Cr	0.100	0.105	105.20		0.00
Pb	0.100	0.108	108.10		0.00
Li	0.200	0.207	103.65		0.00
Se	0.400	0.417	104.25		0.00
Tl	1.000	1.040	104.00		0.00
Ag	0.150	0.134	89.07		0.00
V	0.040	0.041	101.50		0.00
Zn	1.500	1.611	107.40		0.00

P = NOT REPORTED  
 O = OUT OF CONTROL RANGE (%REC +/- 20%)  
 R = ((OBSERVED VALUE/TRUE VALUE)X100)-100

COMMENTS \_\_\_\_\_

QA/QC REVIEWER INTL.: JK DATE 5/15/96

BLANKS

ROLLINS' HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

QC REPORT # 1188  
RUN # ICAP 940515  
DATE OF RUN 5/15/94  
UNITS: MG/L

TECH INITIALS JK  
ANALYSIS METHOD # 6010  
PREP BLK #1 960515m

LAB ID METHOD # 6010 TCLP 2PT  
PREP BLK #2                     

ELEMENT	CALIBRATION BLANKS				METHOD BLANKS	
	ICB	CCB-1	CCB-2	CCB-3	BLK 1	BLK 2
Sb	BDL	BDL	BDL	BDL	BDL	BDL
As	BDL	BDL	BDL	BDL	BDL	BDL
Ba	BDL	BDL	BDL	BDL	BDL	BDL
Be	BDL	BDL	BDL	BDL	BDL	BDL
Cd	BDL	BDL	BDL	BDL	BDL	BDL
Cr	BDL	BDL	BDL	BDL	BDL	BDL
...	BDL	BDL	BDL	BDL	BDL	BDL
...	BDL	BDL	BDL	BDL	BDL	BDL
Se	BDL	BDL	BDL	BDL	BDL	BDL
Tl	BDL	BDL	BDL	BDL	BDL	BDL
Aq	BDL	BDL	BDL	BDL	BDL	BDL
V	BDL	BDL	BDL	BDL	BDL	BDL
Zn	BDL	BDL	BDL	BDL	BDL	BDL

NR = NOT REPORTED  
BDL = BELOW DETECTION LIMIT  
< = VALUE ABOVE LIMIT ( > 5% OF REGULATORY LEVEL )

COMMENTS \_\_\_\_\_

QA-QC REVIEWER INTL.: JK DATE 5/15/94

Qc 1408 15

MATRIX SPIKE ADDITION / DUPLICATE RECOVERY

ROLLINS' HIGHWAY 36  
108555 E. HWY 36  
DEER TRAIL, CO 80105

METALS LAB # V-25784  
QC REPORT # 0784  
RUN # ICAP90056  
DATE OF RUN 5/15/90  
TECH INITIALS TK

ANALYSIS METHOD: 6010      PREP METHOD: 3015  
LAB ID METHOD: TCLP2PT      SPIKING SOLUTION # 1186  
MATRIX: WATER, TCLP X, OTHER \_\_\_\_\_  
UNITS: mg/L or mg/Kg (Circle One)

ELEMENTS	SPK-ADDED	SAMPLE	SPIKE	%REC	SPIKE-DUP	%REC	RPD
Sb	0.200	0.1549	0.377	111.05	0.374	109.75	0.69
As	0.200	0.0570	0.310	126.65*	0.324	133.25*	-4.17
Ba	0.100	0.1038	0.208	103.70	0.204	99.70	1.95
Be	0.040	0.0000	0.044	110.75	0.044	110.50	0.23
Cd	0.100	0.0253	0.128	102.30	0.127	102.10	0.16
C-	0.100	0.0087	0.110	101.30	0.105	96.50	4.46
	0.100	0.0401	0.143	102.50	0.137	97.20	3.79
Pb	0.200	0.0000	0.252	125.80	0.242	120.90	3.97
Se	0.400	0.0000	0.582	145.48*	0.554	138.60*	4.84
Tl	1.000	0.0000	0.933	93.26	0.977	97.65	-4.60
Ag	0.150	0.0000	0.128	85.60	0.131	87.53	-2.23
V	0.010	0.0000	0.045	111.25	0.041	101.75	8.92
Zn	1.500	0.0000	1.619	107.93	1.646	109.73	-1.65

R = NOT REPORTED  
 REC = ((SPK-SMPL)/SPK-ADDED) X 100  
 \* = OUT OF CONTROL RANGE (%REC <75% - >125%)  
 RPD = (((SPIKE-SPIKEDUP)/((SPIKE+SPIKEDUP)/2)) X 100  
 COMMENTS \* LCS O.K. TK 5/15/90

/A-Q/C INTL.: TK DATE 5/15/90

**ATTACHMENT 3**

**WASTE ANALYSIS PLAN  
APPROVED WASTE CODES**

<b>D Codes</b>	<b>F Codes</b>	<b>K Codes</b>	<b>P Codes</b>	<b>U Codes</b>
D001 thru D043	F001 thru F012 F019 thru F028 F032 F034, F035 F037 thru F039	K001 thru K052 K060 thru K062 K064 thru K066 K069, K071 K073 K083 thru K088 K090, K091 K093 thru K118 K123 thru K126 K131, K132 K136 K141 thru K145 K147 thru K151 K156 thru K161	P001 thru P018 P020 thru P031 P033 thru P051 P054 P056 thru P060 P062 thru P078 P081, P082 P084, P085 P087 thru P089 P092 thru P099 P101 thru P116 P118 thru P123 P127, P128 P185 P188 thru P192 P194 P196 thru P199 P201 thru P205	U001 thru U012 U014 thru U223 U225 thru U249 U271 U277 thru U280 U328, U353, U359 U364 thru U367 U372, U373 U375 thru U379 U381 thru U387 U389 thru U396 U400 thru U404 U407 U409, U410, U411