

SEP



United States  
Department of  
Agriculture

Forest  
Service

Plumas  
National  
Forest

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Review

File Code: 2540  
Date: October 21, 2004

04 NOV - 1 PM 2:58

RECEIVED  
SACRAMENTO  
CVRWOCB

Mr. Steve Rosenbaum  
California Regional Water Quality Control Board -  
Central Valley Region  
3443 Routier Road, Suite A  
Sacramento, CA 95827-3003

Dear Mr. Rosenbaum:

Enclosed please find the results of surface water monitoring performed by the U.S. Department of Agriculture, Forest Service, Plumas National Forest, at the Walker Mine Tailings in Plumas County. This report is for samples collected July 12, 2004. All samples were transported to Henrici Water Laboratory, near Quincy, for analysis. The Henrici laboratory sent a portion of these samples to Twining Laboratories, Inc., in Bakersfield, California, for metals analysis.

The 2001 Amended Record of Decision for the Walker Mine Tailings site provides for the diversion of Dolly Creek around the tailings material. A contract was awarded to Ecology and Environment, Inc., of San Francisco for the design of this diversion channel and the design work is now complete. Pending available funding, the Plumas National Forest hopes to implement construction of the diversion channel in summer 2005 or 2006. As in the past four years, one additional water sampling event was conducted this past summer and the analysis results will be reported to your office later this fall. Additionally, the third installment of in-stream bio-assessment sampling has been completed and the macro invertebrate and periphyton analysis results will be available next spring. Negotiations with the Atlantic Richfield Company (ARCO), a Potentially Responsible Party, over remediation costs are still pending.

Please call Joe Hoffman of this office at (530)-283-7868 if you have questions.

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in the attached documents and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

Sincerely,

For JAMES M. PEÑA  
Forest Supervisor



607530141



## MONITORING REPORT

**Discharger:** USDA Forest Service, Plumas National Forest

**Facility:** Walker Mine Tailings, Plumas County

**Reporting Frequency:** Quarterly

**Monitoring Period:** July 2004

**Summary:** Surface water samples were collected July 12, 2004. The sample collected at the compliance station, R-5 Little Grizzly Creek near Brown's Cabin, remains in noncompliance with the limitation for copper (see Table 1). The remaining R-5 constituents are in compliance with the monitoring program's prescribed limitations. The release of copper from the tailings area to Dolly Creek, as measured at R-2, continues to far exceed the limitation. The concentration of iron does not exceed the compliance limitation at any of the sampling sites. Concentrations of zinc were detected in the samples taken at the five sites, but none of these concentrations exceeded the limitation.

No groundwater samples were collected in July, as prescribed by the monitoring program.

## TABLE OF CONTENTS

### Table 1: SURFACE WATER SUMMARY

Map of the tailings area with the surface water monitoring sites

Discharge Measurement Notes

Chain-of-Custody record for surface water samples

Henrici Water Laboratory Analysis Reports for surface water tests

**JULY 2004**

**SURFACE WATER TEST RESULTS  
AND  
SUPPORTING DOCUMENTATION**

# Table 1. SURFACE WATER SUMMARY REPORT

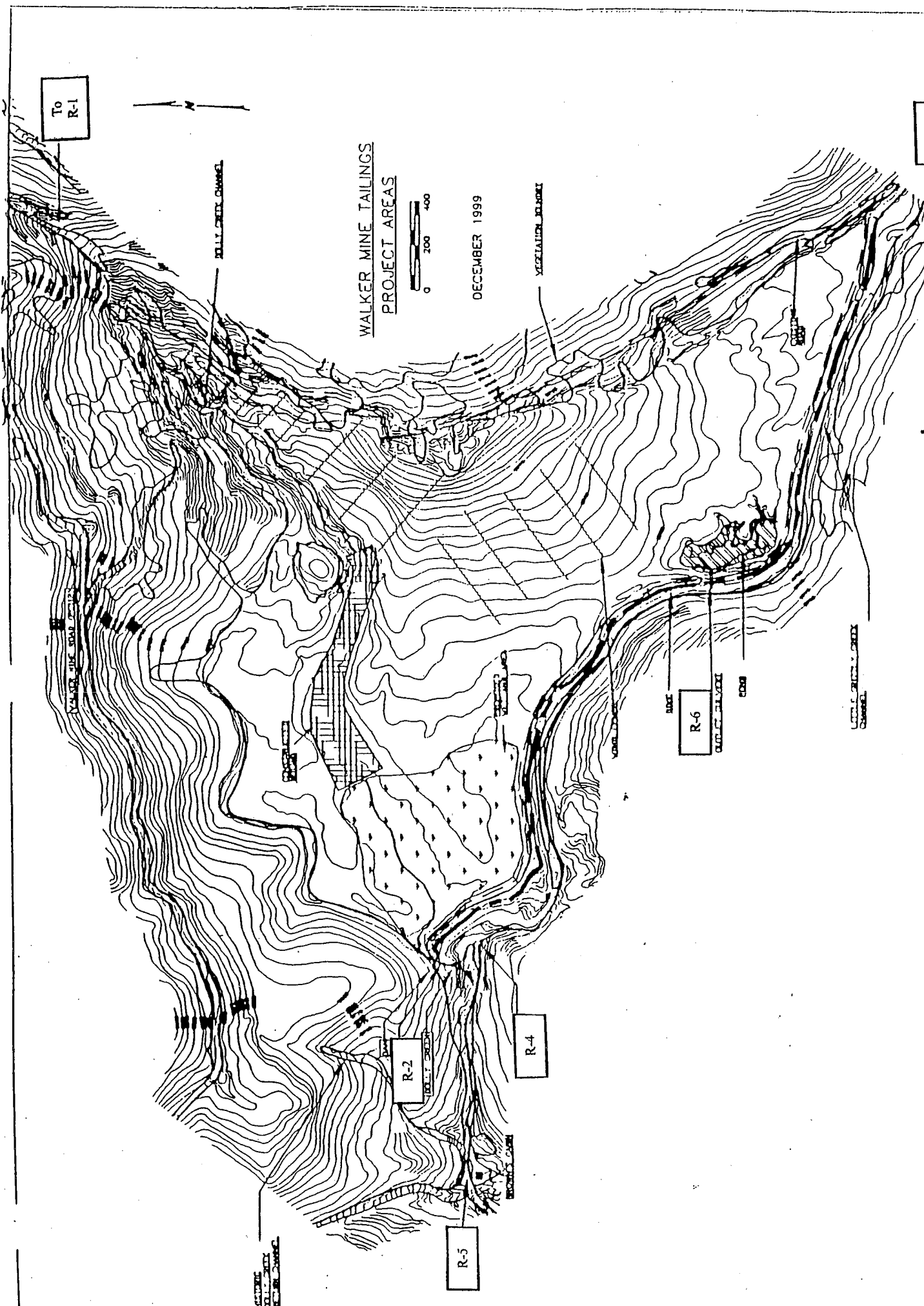
MONITORING AND REPORTING PROGRAM No. 5-00-028  
 U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE, PLUMAS NATIONAL FOREST  
 WALKER MINE TAILINGS, PLUMAS COUNTY  
 JULY 2004

CONSTITUENT	UNITS	DETECTION LIMITS		MONITORING STATIONS						LIMITATION @ R-5 <sup>3</sup>
		R-1	R-2	R-3 <sup>1</sup>	R-4	R-5 <sup>2</sup>	R-6			
<u>Field Parameters</u>										
Flow	cfs	N/A	0.34	0.67	0.32	1.99	0	N/A		
pH	number	N/A	8.15	7.84	7.78	7.93	N/A	N/A		
Specific Conductance	umhos/cm	N/A	131	85	127	111	N/A	N/A		
Air Temperature	°C	N/A	19.0	17.5	19.5	13.5	N/A	N/A		
Water Temperature	°C	N/A	18.2	13.3	15.1	12.5	N/A	N/A		
<u>Laboratory</u>										
Total Hardness as CaCO <sub>3</sub>	mg/l	7	71	48	68	68	N/A	N/A		
Total Alkalinity	mg/l	1	72	64	77	70	N/A	N/A		
Sulfate	mg/l	0.5	6.5	2.2	12.9	10.6	N/A	N/A		
Turbidity	NTU	0.05	1.9	0.56	0.83	1.4	N/A	N/A		1.6
Dissolved Iron	ug/l	50	518	226	405	568	N/A	N/A		1000
Dissolved Copper	ug/l	1.0	220	ND	ND	67	N/A	N/A		6.4
Dissolved Zinc	ug/l	1.0	18	1.3	2.3	6.7	N/A	N/A		85

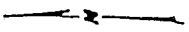
<sup>1</sup> R-3 is the background station located above the tailings area on Little Grizzly Creek.

<sup>2</sup> R-5 is the compliance station located near Brown's Cabin, downstream from the confluence of Dolly Creek with Little Grizzly Creek.

<sup>3</sup> The compliance values for copper and zinc are calculated with the R-5 hardness value of 68 mg/l as CaCO<sub>3</sub>.



To  
R-1



WALKER MINE TAILINGS  
PROJECT AREAS



DECEMBER 1999

VEGETATION POINT

R-3

WALKER MINE TAILINGS

MILL TAIL CHANNEL

WALKER MINE TAILINGS  
PROJECT AREAS

R-2

R-4

R-5

R-6

DRAINAGE CANAL

CRUISE

LITTLE SPUR DRAINAGE CHANNEL















**HENRICI WATER LABORATORY**  
1832 BUTTERFLY VALLEY ROAD, QUINCY, CALIFORNIA 95971  
PHONE (530) 281-6588

Plumas National Forest  
Supervisor's Office  
P.O. Box 11500  
Quincy, CA 95971

Account: 11616  
Date: 09/30/04  
Page: 1

ANALYSIS REPORT

Laboratory Number: C36598      Date Received: 07/12/04  
Location: Walker Mine R-1  
Date of Collection : 07/12/04      Time: 1250      Collector: Flynn

Hardness, dissolved copper, dissolved iron, and dissolved zinc analysis by  
Twining Laboratory, Bakersfield, CA.

Analysis	Date of Analysis	Method	Detection Limits	Results	Units
Total Hardness	09/23/04	EPA 200.7	7	68	mg/L
Total Alkalinity	07/12/04	SM 2320 B	1	62	mg/L
Sulfate	07/26/04	SM 375.4	0.5	1.9	mg/L
Turbidity	07/12/04	SM 2130B	0.05	0.71	NTU
Dissolved Iron	09/23/04	EPA 200.7	0.050	0.392	mg/L
Dissolved Copper	09/23/04	EPA 200.7	0.0050	0.021	mg/L
Dissolved Zinc	09/23/04	EPA 200.7	0.0050	<0.0050	mg/L

These results were obtained by following standard laboratory procedures; the liability of the laboratory shall not exceed the amount paid for this report.

Dawn M. Henton  
Laboratory Director

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ANALYSIS REPORT

Laboratory Number: C36599      Date Received: 07/12/04  
Location: Walker Mine R-2  
Date of Collection : 07/12/04      Time: 1130      Collector: Flynn

Hardness, dissolved copper, dissolved iron, and dissolved zinc analysis by  
Twining Laboratory, Bakersfield, CA.

Analysis	Date of Analysis	Method	Detection Limits	Results	Units
Total Hardness	09/23/04	EPA 200.7	7	71	mg/L
Total Alkalinity	07/12/04	SM 2320 B	1	72	mg/L
Sulfate	07/26/04	SM 375.4	0.5	6.5	mg/L
Turbidity	07/12/04	SM 2130B	0.05	1.9	NTU
Dissolved Iron	09/23/04	EPA 200.7	0.050	0.518	mg/L
Dissolved Copper	09/23/04	EPA 200.7	0.0050	0.22	mg/L
Dissolved Zinc	09/23/04	EPA 200.7	0.0050	0.018	mg/L

These results were obtained by following  
standard laboratory procedures; the liability  
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ANALYSIS REPORT

Laboratory Number: C36600      Date Received: 07/12/04  
Location: Walker Mine R-3  
Date of Collection : 07/12/04    Time: 1050    Collector: Flynn

Hardness, dissolved copper, dissolved iron, and dissolved zinc analysis by  
Twining Laboratory, Bakersfield, CA.

Analysis	Date of Analysis	Method	Detection Limits	Results	Units
Total Hardness	09/23/04	EPA 200.7	7	48	mg/L
Total Alkalinity	07/12/04	SM 2320 B	1	64	mg/L
Sulfate	07/26/04	SM 375.4	0.5	2.2	mg/L
Turbidity	07/12/04	SM 2130B	0.05	0.56	NTU
Dissolved Iron	09/23/04	EPA 200.7	0.050	0.226	mg/L
Dissolved Copper	09/23/04	EPA 200.7	0.0050	<0.0050	mg/L
Dissolved Zinc	09/23/04	EPA 200.7	0.0050	<0.0050	mg/L

These results were obtained by following standard laboratory procedures: the liability of the laboratory shall not exceed the amount paid for this report.

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ANALYSIS REPORT

Laboratory Number: C36601 Date Received: 07/12/04  
Location: Walker Mine R-4  
Date of Collection : 07/12/04 Time: 1150 Collector: Flynn

Hardness, dissolved copper, dissolved iron, and dissolved zinc analysis by  
Twining Laboratory, Bakersfield, CA.

Analysis	Date of Analysis	Method	Detection Limits	Results	Units
Total Hardness	09/23/04	EPA 200.7	7	68	mg/L
Total Alkalinity	07/12/04	SM 2320 B	1	77	mg/L
Sulfate	07/26/04	SM 375.4	0.5	12.9	mg/L
Turbidity	07/12/04	SM 2130B	0.05	0.83	NTU
Dissolved Iron	09/23/04	EPA 200.7	0.050	0.405	mg/L
Dissolved Copper	09/23/04	EPA 200.7	0.0050	<0.0050	mg/L
Dissolved Zinc	09/23/04	EPA 200.7	0.0050	<0.0050	mg/L

These results were obtained by following  
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Dawn M. Henton  
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ANALYSIS REPORT

Laboratory Number: C36602 Date Received: 07/12/04  
Location: Walker Mine R-5  
Date of Collection : 07/12/04 Time: 0935 Collector: Flynn

Hardness, dissolved copper, dissolved iron, and dissolved zinc analysis by  
Twining Laboratory, Bakersfield, CA.

Analysis	Date of Analysis	Method	Detection Limits	Results	Units
Total Hardness	09/23/04	EPA 200.7	7	68	mg/L
Total Alkalinity	07/12/04	SM 2320 B	1	70	mg/L
Sulfate	07/26/04	SM 375.4	0.5	10.6	mg/L
Turbidity	07/12/04	SM 2130B	0.05	1.4	NTU
Dissolved Iron	09/23/04	EPA 200.7	0.050	0.568	mg/L
Dissolved Copper	09/23/04	EPA 200.7	0.0050	0.067	mg/L
Dissolved Copper	09/23/04	EPA 200.7	0.0050	0.0067	mg/L

These results were obtained by following  
standard laboratory procedures: the liability  
of the laboratory shall not exceed the  
amount paid for this report.

Dawn M. Henton  
Laboratory Director


### Henrici Water Laboratory Chain of Custody

Purveyor: *USFS Plumas Nat Forest*  
*159 Lawrence St*  
*Quincy, CA 95971*  
*Attn: Joe Herten* (530) 283 2050

Sampler's Signature  


Type of Analyses		No. of Containers	Location	Time	Date	Relinquished By	Date	Time	Received By
Hardness as CaCO <sub>3</sub>	Alkalinity as CaCO <sub>3</sub>								
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X

Detection Limits  
*Cu = 1 ug/L*  
*Zn = 2 ug/L*  
*Fe = 50 ug/L*

Relinquished By  


Date  
*7/12/04*

Time  
*1500*

Received By  
*DM Herten*