G1021

BEFORE THE BOARD OF SUPERVISORS OF THE
COUNTY OF AMADOR, STATE OF CALIFORNIA

IN THE MATTER OF:

RESOLUTION APPROVING APPLICATION FOR)
CALFED BAY-DELTA PROGRAM FUNDING FOR)
CLEAN UP OF NEWTON COPPER MINE) RESOLUTION NO. 98-232

BE IT RESOLVED by the Board of Supervisors of the County of Amador, State of California, that said Board does hereby approve the application for funding from CALFED Bay-Delta Program as it relates to clean up of the Newton Mine; and

BE IT FURTHER RESOLVED that the Chairman of said Board is hereby authorized to sign and execute necessary documents on behalf of the County of Amador.

The foregoing resolution was duly passed and adopted by the Board of Supervisors of the County of Amador at a regular meeting thereof, held on the 30th day of June, 1998, by the following vote:

AYES: Richard P. Vinson, Edward T. Bamert, Mario Biagi and Rich F. Escamilla

NOES: None

ABSENT: Louis D. Boitano

Chairman, Board of Supervisors

ATTEST:

LISA M. BAKER-DALMAU, Clerk of the
Board of Supervisors, Amador County,
California

Deputy

Attachment H

COVER SHEET (PAGE 1 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: RECLAMATION OF COPPER CREEK AND NEWTON COPPER MINE SITE
Applicant Name: COUNTY OF AMADOR
Mailing Address: 108 COURT STREET
Telephone: 209/223-6375
Fax: 209/223-0749

Amount of funding requested: $ 548,700.00 for 3 years

Indicate the Topic for which you are applying (check only one box). Note that this is an important decision: see page __ of the Proposal Solicitation Package for more information.

- ☐ Fish Passage Assessment
- ☐ Fish Passage Improvements
- ☐ Floodplain and Habitat Restoration
- ☐ Gravel Restoration
- ☐ Fish Harvest
- ☐ Species Life History Studies
- ☒ Watershed Planning/Implementation
- ☐ Education
- ☐ Fish Screen Evaluations - Alternatives and Biological Priorities

Indicate the geographic area of your proposal (check only one box):

- ☐ Sacramento River Mainstem
- ☐ Sacramento Tributary: _____
- ☐ Delta
- ☐ East Side Delta Tributary _____
- ☐ Suisun Marsh and Bay
- ☐ San Joaquin Tributary: MOKELUMNE
- ☒ San Joaquin River Mainstem
- ☐ Other: _____
- ☐ Landscape (entire Bay-Delta watershed)
- ☐ North Bay: _____

Indicate the primary species which the proposal addresses (check no more than two boxes):

- ☐ San Joaquin and East-side Delta tributaries fall-run chinook salmon
- ☐ Winter-run chinook salmon
- ☒ Spring-run chinook salmon
- ☐ Late-fall run chinook salmon
- ☐ Fall-run chinook salmon
- ☐ Delta smelt
- ☐ Longfin smelt
- ☐ Splittail
- ☐ Steelhead trout
- ☐ Green sturgeon
- ☐ Striped bass
- ☒ Migratory birds

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Indicate the type of applicant (check only one box):

☐	State agency	☐	Federal agency
☐	Public/Non-profit joint venture	☐	Non-profit
☒	Local government/district	☐	Private party
☐	University	☐	*Other:* _____

Indicate the type of project (check only one box):

☐	Planning	☒	Implementation
☐	Monitoring	☐	Education
☐	Research		

By signing below, the applicant declares the following:

(1) the truthfulness of all representations in their proposal;

(2) the individual signing the form is entitled to submit the application on behalf of the applicant (if applicant is an entity or organization); and

(3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section II.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

(*Signature of Applicant*)

FYI

RECLAMATION OF COPPER CREEK AND NEWTON COPPER MINE SITE

Douglas W Mondani
P.O. Box 1104
Jackson, Ca 95642
Phone: 209-223-3307

Donald A. Mondani
P.O. Box 1195
Ione, Ca 95640
Phone: 209-245-3915

Geraldine Cassinelli
P.O. Box 6648
Tahoe City, Ca 96145
Phone: 916-581-2039

PRIVATE OWNERS

RFP Type: CONTRUCTION

CONTACT PERSON: GERALDINE CASSINELLI
1280 EDELWEISS
PO BOX 6648
TAHOE CITY, CA 96145
PHONE: 916-581-2039
FAX: 916-583-0801
E-MAIL tahoecas@inreach. com

IV. PROJECT DESCRIPTION

A. Project Description and Approach

The proposed reclamation plan is needed to meet compliance with the California Inland Surface Water Plan, and the 1994 Basin Plan for the Sacramento and San Joaquin River Basins as administered by the Regional Water Quality Control Board, Central Valley Region. Regional Board inspections of the property and the adjacent Copper Creek have led to a Cleanup and Abatement Order, issued in 1998.

Previous work by the Regional Board and a consultant have provided the information upon which the proposed work and costs contained herein are based. This previous work is considered somewhat limited in scope, but sufficient for purposes of developing the general cost projection presented herein. Costs are included for any further investigative work needed to support the development of the reclamation plan.

The Newton Mine is an abandoned copper mine located 6 miles west of Jackson, California on U.S. Highway 88. The source of Copper Creek are several springs East of the mine within a radius of one mile. Copper Creek flows past the Newton Mine tailings and waste material, becomes acidic, and contains elevated concentrations of dissolved metals, including copper and iron. A discharge of mine water from the main shaft occurs through a seep at the base of the tailings and hence to the creek. The water meanders through the mine property and CAL TRANS right of way for the highway. The discharge has degraded the water quality in Copper Creek. These discharges have lowered water quality so that fish and most aquatic organisms cannot survive in what was likely a healthy ecosystem. Total copper (12 to 29 milligrams per liter) dissolved in the creek waters and low pH conditions (pH-2.5 to 4.0) are sufficiently intense to cause acute toxicity in aquatic organisms. Copper Creek does not maintain a sport fishery. However, it is large enough to support aquatic microorganisms and fry to supplement the aquatic life in Sutter Creek. Sutter Creek is a tributary of the Mokelumne River which is tributary to the Sacramento River Delta.

The beneficial uses of Copper Creek and downstream waters include stock watering, irrigation, preservation and enhancement of fish and wildlife, recreation and aesthetic enjoyment.

The overall work scope to complete this project will be to encapsulate/remove the point source of the contamination(tailing materials) and/or control the water of the Copper Creek that meanders through CAL TRANS right of way and the mine property.

B. Scope of Work

The objective of the reclamation planning is to isolate the mine waste rock from contact with the surface and ground water. This isolation would result in an increase in water

quality and restoration of the ecosystem around the mine area and in Copper Creek (therefore downstream). The following steps are necessary:

JOBS 1,2&4 ARE INSEPARABLE

Job 1 CHARACTERIZATION OF WASTE ROCK

Field paste test to determine "Hot Spots" will be completed in several areas by a professional company. Samples from the determined locations will be taken by escavation methods, logged, and a chemical analysis completed. The following analytical tests will be performed by a State certified laboratory.

CAM 17 Total Metals (17 Standard Metals)
CAM 17 STLC (Soluable Threshold Limit Concentration)
CAM 17 TCLP (Toxic Characterization Leaching Potential)
AGP-NP Acid Generating Potential Neutralization Potential

The results in terms of waste classification as defined in Title 22 and Title 27 of the State Code will be included. The results will determine the exact amount of waste rock needed to be encapsulized or removed.

Job 2 PLAN WASTE EXCAVATION, ENCAPSULATION-CELL PLACEMENT, AND CELL CONFIGURATION.

A conceptual encapsulation cell would consist of the following layers:

*Soil top dressing and revegetation,
*Clay cover (from local Ione formation),
*Waste rock containing acid producing components (approximately 3000cyd),
*Lime layer (precaution to buffer any acid production from waste rock),
*Clay liner (local Ione clay), and
*Substrate/Foundation- Graded Roasted ore.

The cell would be placed on a pile of roasted ore located on a high flat area, an adequate location for placement of the disposal cell. Local Ione formation clay would be used for a cell-base liner. The one to two foot thick clay liner would be placed directly upon the roasted ore and compacted. An approximately one foot-thick crushed limestone layer would be placed directly upon the clay layer. The 3000 cyd of waste rock and tailings would be placed upon the limestone. The cell would be covered and encapsulated with a layer of Ione formation clay. A number of permits may be required.

Job 3 PLAN GUNITE APPLICATION OF THE EFFECTED ONE-QUARTER MILE REACH OF COPPER CREEK **(if needed after an evaluation of the cell)**

Copper Creek parallels Highway 88 above and below the property boundary, along a drainage ditch. The creek flows between the upstream portion of the tailings and Highway 88 (partially in CAL TRANS) right of way. As it flows through the tailings, the creek waters become acidic (pH-2). As a precautionary measure, to prevent baseflow recharge to ground-water from the presently contaminated flow in the creek it has been proposed to gunite the creek bed over a 500 foot reach. Inspection and reporting should be instituted for at least one year to measure the effectiveness of the restoration activity. A US Army Engineer Corps 404 permit application would be needed for stream alteration.

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Job 4 PLAN FOR THE EVALUATION

A qualified consultant would test the waters of Copper Creek the winter following the completed work. The test would be analyzed by a State certified laboratory.

C. Location

Amador County Sacramento Valley Watershed Region (see maps Exhibit II, III, IV, V)

D. Expected benefit

Primary stressors, species, habitats:

a. Run of salmon
b. Migratory birds stay in waters of Delta and headwaters.
c. Contaminants in headwaters---water quality.

Primary Benefit:

a. Reduce the mineral content of the ground water.
b. Improve the pH to a normal range.
c. Improving the habitat of ecosystem in the area.

Secondary Benefit:

a. Improve the water quality for salmon runs and habitat of migratory birds.
b. Improve and increase aquatic and terrestrial habitats in the watershed of the Bay Delta.

E. Background and Ecological/Biological/Technical Justification

Acid rock and acid mine drainage from the Newton Mine tailing piles contributes metals into Copper Creek, which exceeds narrative toxicity objectives and the numberical water quality objectives for the protection of beneficial uses of Copper Creek. Based on samples collected in 1991 by a staff member of the California Regional Water Quality Control Board, Central Valley Region, water flowing towards the creek from the base of the tailings was very acidic with a pH of 2.0. Samples collected for aquatic bioassay testing also found these concentrations toxic to fathead minnows.

The ERPP objective applied for is G. Local Watershed Stewardship on page 55 of Proposal Solicitation Package of May 1998. The two areas that applies to this project are: implementation of practices to protect and enhance water quality and riparian and habitat restoration. Copper Creek is a tributary of Sutter Creek (Mokhumne River), part of the Sacramento Valley Water Shed. The winter-run of the salmon terminate in Sutter Creek. Also, migratory birds spend winters in the area especially with Pardee, Comanche, Amador Dams in the area.

In attachment C Stressor number 4 (page 76) it states that increased contaminant loads from mine drainage can be a stressor on the ecosystem due to acute or chronic

I-011114

toxicity on aquatic organisms, including fish and may be particularly deleterious for younger stages of fish that may have longer exposure and higher sensitivity to toxic compounds. Most of the small (young) fish are in the headwaters of the watershed of the delta.

To date, water test have been completed by the owners of the mine to identify the pH and mineral content of the water(identification of the problem See exhibit VI. No government/agency assistances has been provided to date. Approximately $10,000. has been spend on reseach to date. At this point, the owners of the property has insufficient funds to complete the project. The owners plan to start the classification of the tailing piles in July, 1998.

F. Monitoring and Data Evaluation

California Regional Water Quality Control Board, Central Valley Region, will approve all phases and plans as per regulations of the state and federal government.

G. Implementability

The Amador County General Services Administration Department under the direction of the Board of Supervisors of Amador County will administer all projects upon the approval of the California Regional Water Quality Control Board, Central Valley Region.

V. COST AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT

A. Budget Costs

All cost are based on an engineer's estimates and one licensed contractor's estimate in each job phase.
The project would be put out to bid with spectifications and three licensed contractors would issue bids. A twenty percent continguency fund has been added to the estimates.

Task	Cost	Comment/Description
Job 1 Classification of Rock	3500. consultant 2000. subcontractors 500. expenses	Classification of tailing to determine the parts that would be encapsulized.
Total	6000.	
Job 2 Encapsulation	10,000. consultant for developing design and plans 298,000. excavation, LCRS, Clay liner, 60 mil HDPE liner, place tailings, one foot clay cap and vegetation cover. 5,000. construction staking and test 6,000. monitoring by a consultant	
Total	319,000.	
Job 3 Gunite Stream	4,800. consultant for developing plan 125,000. Price per foot @ $25.00 x 500 ft.	
Total	129,800	
Job 4 Evaluation	450. Water test @ $150. per test at three location 2,000. Consultant cost gathering samples and evaluation	
Total	2,450	
Total of the project	**457,250.**	
	91,450.	**plus a 20 percent continquency**
Total of proposal	**548,700.**	

B. Schedule Milestones

Payment would relate to the second date in each job.

Job 1 September, 1998 to December 15, 1998

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Job 2	December, 1998 to December 15, 1999
Job 4	December, 1999 to March 1, 1999
Job 3	August 1, 2000 to October 1, 2000

C. No third party impacts

Pg. 16 Sec. III

a. Title of Project - RECLAMATION OF COPPER CREEK AND NEWTON COPPER MINE SITE

b. Applicant: County of Amador
Principle Investigators : Amador County Environmental Health Dept.
Michael Isreal, Director
(209) 223 6439

California Regional Water Quality Control Board
James Brathovde - Area Engineer
(916) 255-3137

c. Type of Organization: Governmental Agency - County Government

Tax Status: Exempt

d. Tax I.D. - 94-6000505

e. Participants in implementation: California Regional Water Quality Control Board
Amador County Environmental Health Dept.
Amador County General Services Administration
Private Geotechnical Firm, yet unnamed
Private Engineering Contractor, yet unnamed

Role of County and projected costs:

The County of Amador will make application for the funds and act as lead agency in the administration of the project.

Upon receipt of funding commitment the County will prepare and distribute (or cause to be prepared and distributed) a "Request for Proposals", (RFP) to Geotechnical Firms familiar with the area. The scope of work will be a comprehensive geotechnical investigation of the mine site and immediate surrounding area. The data generated will be used to validate or amend elements of the tentative project description (included elsewhere in this application), and develop a detailed project plan and specifications suitable for soliciting bids.

Upon development of a definitive reclamation project and approval from the appropriate County and State agencies, the County will solicit bids for construction. A contract will then be prepared and executed, work will commence and progress monitored by the County General Services Administration. The County Environmental Health Department will monitor the project construction for possible impacts on the existing watercourse(s) and the California Regional Water Quality Control Board will be consulted on a regular basis. Testing to determine the effectiveness of the reclamation effort will be conducted by the Geotech. firm in a manner prescribed by the County Environmental Health Department and the Calif. Regional Water

Quality Control Board.

Projected Costs (County staff only)

RFP Preparation, distribution (County...$3,000.00)

RFP Review/Consultant Contract Administration (County....$2,500.00)

Bid Package preparation, advertising & coordination (County ...$2,000.00)

Construction Contract Administration, Inspection (County...$5,000.00

Pg. 17 Sec. IV(g.)

Implementability....

The project has the unwavering support of all involved parties; the landowner, the State Water Resources Dept., Amador County (both elected and appointed officials). The area is rural by nature and there is no defined group actively seeking solutions to the documented pollution problem that this project would eliminate. No known laws, plans, regulations or policies would be compromised with the implementation of this project. Provided the tasks are completed prior to onset of the fall rains, the risk of further or continued contamination by the actual construction is minimized.

Pg. 19 Sec. VI....Applicant Qualifications

Inasmuch as the applicant (County of Amador), intends to function mainly as administrator, it should probably be mentioned that the director and staff of the County General Services Administration have extensive experience in contract administration. The County Environmental Health Department has registered personnel who are familiar with local geology and are eminently qualified to monitor progress and assist in making decisions on scope of work and/or effectiveness of measures taken.

The bulk of the work for which this application is made will be done by independent consultant firms and contractors under agreements drawn up compliant with CALFED requirements and administered by the County of Amador.

Project Staff:

GENERAL SERVICES ADMINISTRATION

Trevor Mottishaw - GSA Director

Dennis Grady - GSA Staff

ENVIRONMENTAL HEALTH DEPT.

Michael Isreal R.E.H.S. - Director, Environmental Health

Margaret Blood - R.E.H.S., Staff Sanitarian

Robert Fourt - R.G. , Staff Geologist

Senate E.I

California Legislature

TIM LESLIE
SENATOR, FIRST DISTRICT

July 24, 1997

CALFED Bay Delta Program
1416 9th Street, Suite 1155
Sacramento, CA 95814

To Whom it May Concern:

I am writing in regard to a proposal submitted by Ms. Gem Cassinelli, Mr. Donald Mondani and Mr. Douglas Mondani, owners of the former Newton Copper Mine site in Amador County, California.

The Newton Mine, adjacent to Highway 88 between the towns of Jackson and Ione, was established in the 1860's as a source for copper during periods of war. The mine was last worked in 1947. In 1994, the owners were requested to clean up the water drainage through the mine by the California Regional Water Quality Board. A consultant was hired, developing a site report, and performed runoff testing during the winters of 1995-1996.

The concluding report presented reclamation efforts beyond the ability of the present owners to complete. The owners, in conjunction with the Soils Agency and Amador County Board of Supervisors, are submitting a proposal requesting Proposition 204 funding for engineering and reclamation of the mine site.

The owners have diligently worked to develop an acceptable plan, but are financially unable to proceed. I would ask that CALFED give this proposal every possible consideration. Tim Murphy in my Roseville district office has been assigned this issue. If you have any questions or comments, please feel free to contact Tim directly. He can be reached by telephone at (916) 969-8232 or in writing at 1200 Melody Lane, Suite 110, Roseville, CA 95678.

Thank you for your prompt attention to this most important matter.

Sincerely,

TIM LESLIE
Senator, First District

TL/tm
cc: Ms. Gerri Cassinelli

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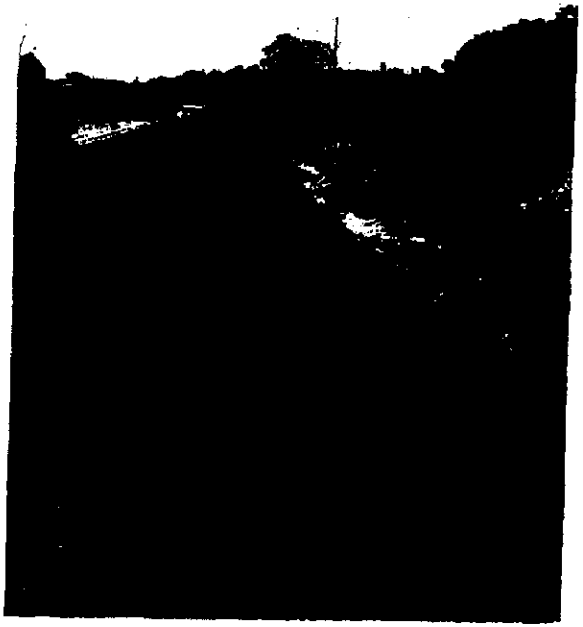
I-011121



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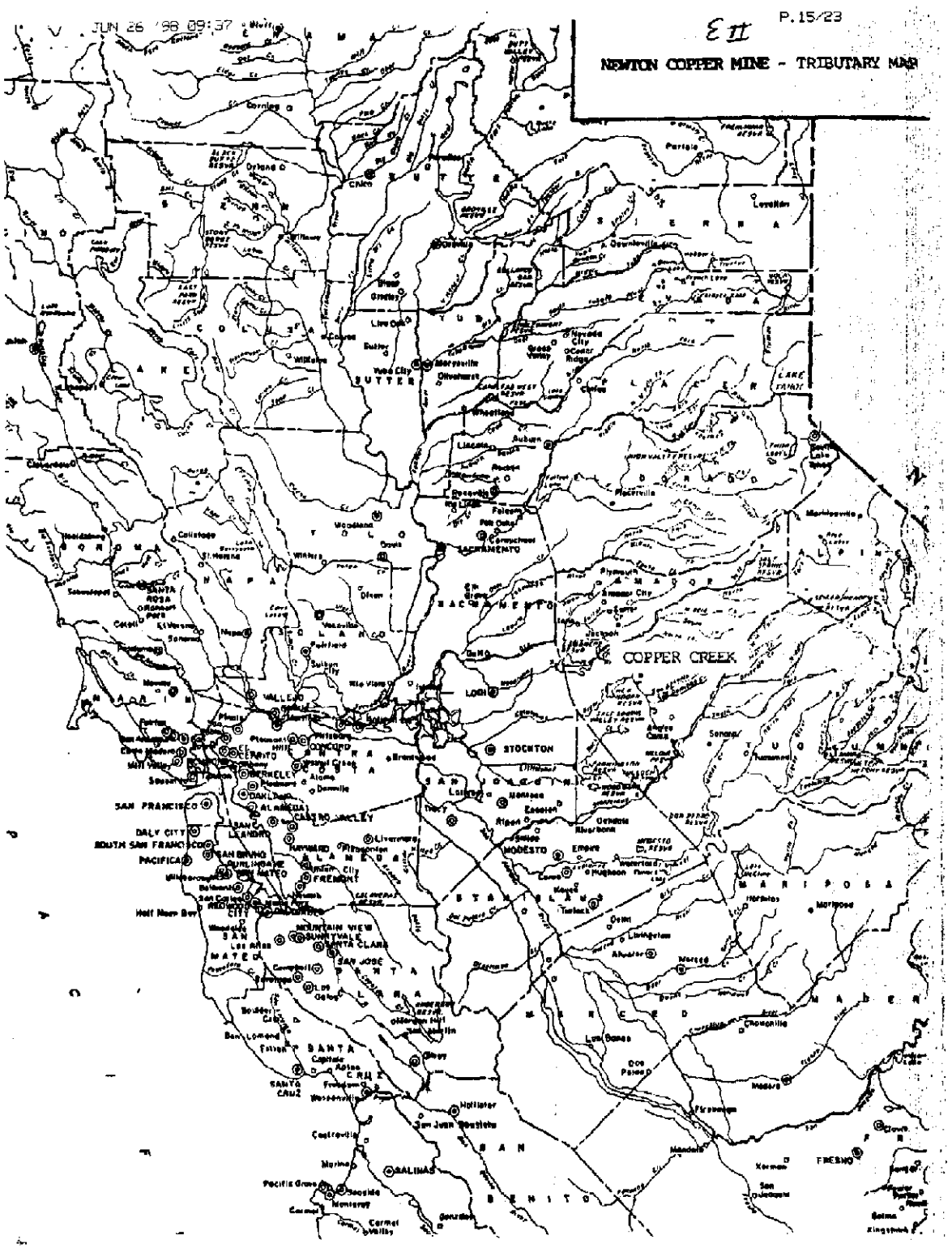
E 17

NEWTON COPPER MINE - COPPER CREEK DRAINAGE

I-011123

E II

NEWTON COPPER MINE - TRIBUTARY MAP



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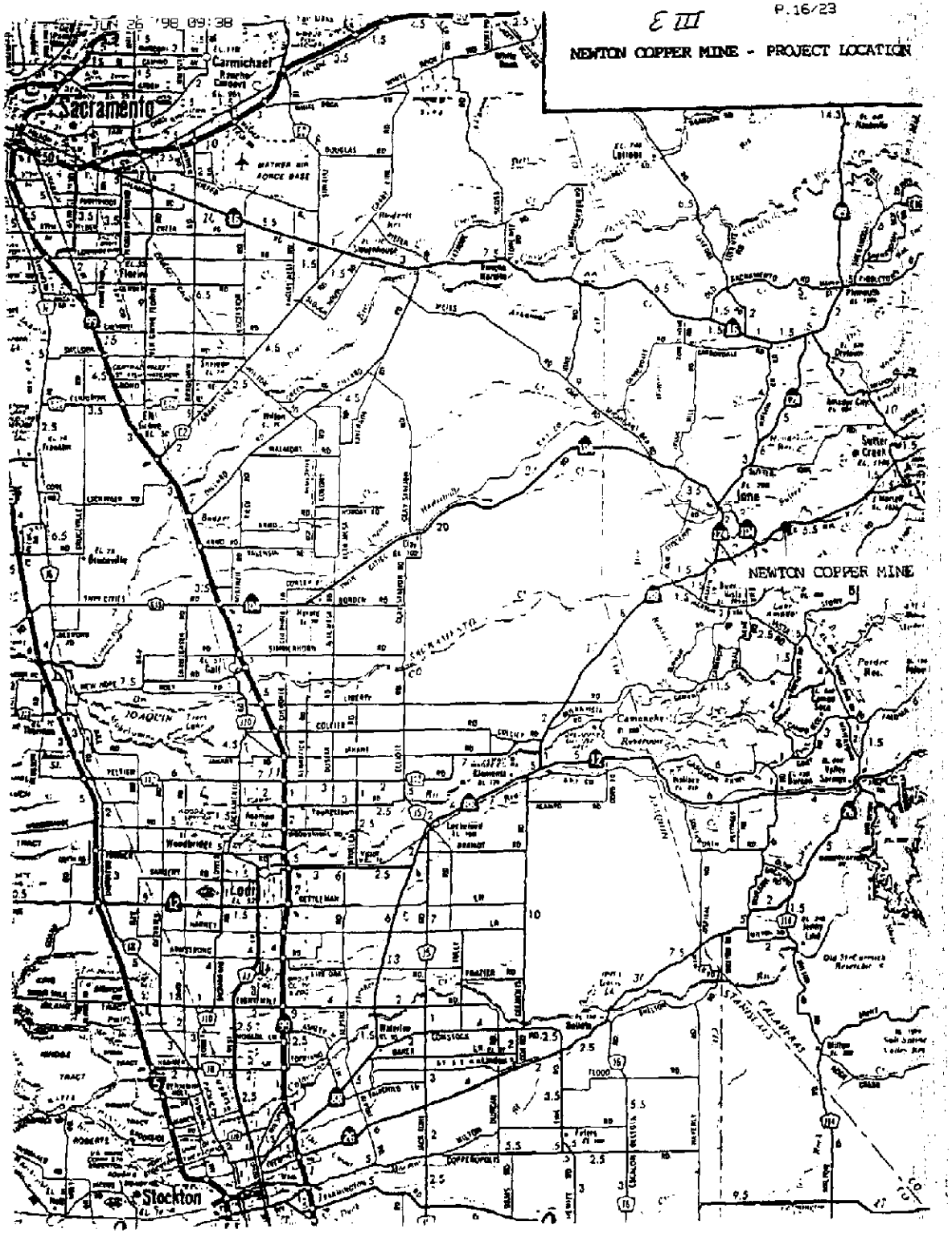
E III

NEWTON COPPER MINE - PROJECT LOCATION



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E VI

NEWTON MINE
SURFACE WATER SAMPLING

Sampling Station : Bridge		Sampling Dates			Water Quality Goal
Parameter	Units	11-02-95	12-30-96	01/30/96	(Note 1)
Alkalinity	mg/l	140	56	76	20 (max)
Acidity	mg/l	–	–	–	No listed goal
Specific Conductance	umho/cm	314	326	274	700
Foaming Agents	mg/l	<0.1	<0.1	<0.1	No listed goal
TDS	mg/l	270	240	220	450
pH	unit	6.5	7.1	7.2	6.5
Hardness	mg/l	190	140	120	No listed goal
Chloride	mg/l	9	18	11	106
Nitrate-N	mg/l	–	10	–	10
Nitrite-N	mg/l	<0.05	<0.02	<0.02	No listed goal
Sulfate	mg/l	34	60	28	250
Calcium	mg/l	38	20	17	No listed goal
Sodium	mg/l	13	12.7	12	No listed goal
Copper	mg/l	0.47	0.38	0.05	0.2
Iron	mg/l	640	2.42	0.26	5
Magnesium	mg/l	20.2	22	19	No listed goal
Manganese	mg/l	1.2	<0.03	<0.03	0.2
Zinc	mg/l	0.11	<0.05	<0.05	2

Sampling Station : Stream Prior		Sampling Dates			Water Quality Goal
Parameter	Units	11-02-95	12-30-95	01/30/96	(Note 1)
Alkalinity	mg/l	60	–	46	20 (max)
Acidity	mg/l	–	360	–	No listed goal
Specific Conductance	umho/cm	391	1310	313	700
Foaming Agents	mg/l	<0.1	<0.1	<0.1	No listed goal
TDS	mg/l	300	760	250	450
pH	unit	6.9	2.9	6.7	6.5
Hardness	mg/l	210	180	140	No listed goal
Chloride	mg/l	5.8	16	13	106
Nitrate-N	mg/l	–	7.6	–	10
Nitrite-N	mg/l	<0.05	<0.02	<0.02	No listed goal
Sulfate	mg/l	140	520	63	250
Calcium	mg/l	33.3	33	21	No listed goal
Sodium	mg/l	13	12.9	12	No listed goal
Copper	mg/l	4	3.88	0.41	0.2
Iron	mg/l	36	112	8.44	5
Magnesium	mg/l	25.6	24	21	No listed goal
Manganese	mg/l	0.83	0.33	0.07	0.2
Zinc	mg/l	0.24	0.27	<0.05	2

Note 1– Water quality goals are based upon the California Regional Water Quality Control Board (Central Valley) Staff Report "A Compilation of Water Quality Goals", Sept. 1991 (Organics, Page 2). Where multiple goals are offered, the Agricultural Water Quality Goal has been utilized.

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Newton Mine
Field Parameters--Four Surface Water Stations

Station and Parameter	Units	Sampling Dates 11-02-95	12-30-95	01-30-96
Bridge				
pH	units	6.5	6.42	6.9
Conductivity	umho/cm	353	323	285
Tempurature	F	60.1	59	53.5
Stream Prior				
pH	units	6.95	3.01	6.56
Conductivity	umho/cm	390	5950	318
Tempurature	F	69.7	63.2	54.4
Western Culvert				
pH	units	3.04	2.73	3.9
Conductivity	umho/cm	1500	2260	583
Tempurature	F	64.3	62.2	54.9
Tailing Pile				
pH	units	2.51	2.2	2.37
Conductivity	umho/cm	3310	6240	4130
Tempurature	F	66.1	61.7	59.2
Precipitation season to date, inches		0	7.3	15.2

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NEWTON MINE
SURFACE WATER SAMPLING
(CONTINUED)

Sampling Station : Western Culvert		Sampling Dates			Water Quality Goal
Parameter	Units	11-02-95	12-30-95	01/30/96	(Note 1)
Alkalinity	mg/l	–	–	–	20 (max)
Acidity	mg/l	340	860	100	No listed goal
Specific Conductance	umho/cm	1420	2180	620	700
Foaming Agents	mg/l	<0.1	<0.1	<0.1	No listed goal
TDS	mg/l	1000	1600	360	450
pH	unit	2.9	2.7	3.5	6.5
Hardness	mg/l	470	290	150	No listed goal
Chloride	mg/l	9.2	50	11	106
Nitrate-N	mg/l	–	5.6	–	10
Nitrite-N	mg/l	<0.05	<0.02	<0.02	No listed goal
Sulfate	mg/l	690	1200	220	250
Calcium	mg/l	69.3	57	23	No listed goal
Sodium	mg/l	15	14.5	12	No listed goal
Copper	mg/l	12.4	12.5	2.97	0.2
Iron	mg/l	32	221	3.69	5
Magnesium	mg/l	52.5	36	22	No listed goal
Manganese	mg/l	3.76	1.04	0.34	0.2
Zinc	mg/l	1.27	1.07	0.28	2

Sampling Station : Tailing Pile		Sampling Dates			Water Quality Goal
Parameter	Units	11-02-95	12-30-95	01/30/96	(Note 1)
Alkalinity	mg/l	–	–	–	20 (max)
Acidity	mg/l	1600	3100	2100	No listed goal
Specific Conductance	umho/cm	3600	5400	4200	700
Foaming Agents	mg/l	<0.1	<0.1	<0.1	No listed goal
TDS	mg/l	2900	5100	3700	450
pH	unit	2.4	2.3	2.3	6.5
Hardness	mg/l	570	800	64	No listed goal
Chloride	mg/l	9.2	25	18	106
Nitrate-N	mg/l	–	1.5	–	10
Nitrite-N	mg/l	<0.05	<0.02	0.03	No listed goal
Sulfate	mg/l	2600	3900	2200	250
Calcium	mg/l	89	118	14	No listed goal
Sodium	mg/l	17	19.4	13	No listed goal
Copper	mg/l	35	50	36	0.2
Iron	mg/l	293	814	478	5
Magnesium	mg/l	61.2	75	7.1	No listed goal
Manganese	mg/l	2.89	2.41	1.94	0.2
Zinc	mg/l	4.19	4.58	3.1	2

Note 1—Water quality goals are based upon the California Regional Water Quality Control Board (Central Valley) 208 Report "A Compilation of Water Quality Goals", Sept. 1991 (Organics, Page 2). Where multiple goals are offered, the Agricultural Water Quality Goal has been utilized.

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SIERRA FOOTHILL LABORATORY

REPORT

25 HWY 49
P.O. BOX 1262 • JACKSON CA 95642
(209) 223-2800

04/25/97 437722 Continued

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
	Blank	<0.05	mg/L				1515	04/22/97	TN
	Standard	41.4	mg/L	40.0		104	1515	04/22/97	TN
	Standard	42.2	mg/L	40.0		106	1515	04/22/97	TN
437718	Duplicate	0.06	mg/L	0.05		18	1515	04/22/97	TN
437704	Spike		mg/L		0.50	97	1515	04/22/97	TN
				Zinc, FAA					
	Blank	<0.05	mg/L				1400	04/23/97	TN
	Standard	40.2	mg/L	40.0		99	1400	04/23/97	TN
	Standard	40.0	mg/L	40.0		100	1400	04/23/97	TN
437721	Duplicate	<0.05	mg/L	<0.05		0	1400	04/23/97	TN
437716	Spike		mg/L		0.50	102	1400	04/23/97	TN

Tony Nurse, Owner/Analyst

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SIERRA FOOTHILL LABORATORY

REPORT

5 HWY 49
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TEST REPORT: 437722

Belt Engineering & Scientific
22049 Yerba Santa Dr
Sonora, CA 95370-
Attention: Bob Belt

Sample Identification: Downstream CalTrans R/W
Collected By: R Belt
Date & Time Taken: 04/17/97 1815

Other Data:
Sample Matrix: Liquid
Report Date: 04/25/97 Received: 04/22/97 Client: BEL3

PARAMETER	RESULTS	UNITS	ANALYZED	EQL	METHOD	BY
Sulfate, Turbidimetric	150	mg/L	0935 04/24/97	1.5	EPA375.4	GK
pH	6.6	unit	1405 04/22/97	0.1	EPA150.1	GK
Copper, FAA	105	mg/L	1105 04/23/97	0.03	EPA220.1	TN
Iron, FAA	920	mg/L	1513 04/22/97	0.05	EPA236.1	TN
Zinc, FAA	0.72	mg/L	1400 04/23/97	0.05	EPA289.1	TN

Sample Preparation Steps for 437722

Nitric Acid Digestion	04/22/97	Date	1400 04/23/97	SM3030E	TN

Quality Assurance for the SET with Sample 437722

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
				Sulfate, Turbidimetric					
	Standard	100	mg/L	150		93	0935	04/24/97	GK
437722	Duplicate	150	mg/L	150		0	0935	04/24/97	GK
437721	Spike		mg/L		28	94	0935	04/24/97	GK
437722	Spike		mg/L		28	102	0935	04/24/97	GK
				pH					
	Standard	7.4	unit	7.4		100	1405	04/22/97	GK
437717	Duplicate	6.6	unit	6.6		0	1405	04/22/97	GK
				Copper, FAA					
	Blank	<0.03	mg/L				1105	04/23/97	TN
	Standard	39.5	mg/L	40.2		98	1105	04/23/97	TN
	Standard	39.9	mg/L	40.2		99	1105	04/23/97	TN
437421	Duplicate	0.04	mg/L	0.04		0	1105	04/23/97	TN
437716	Spike		mg/L		0.50	94	1105	04/23/97	TN
				Iron, FAA					

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