

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

**81 Higuera Street, Suite 200
San Luis Obispo, California 93401-5427**

**ORDER NO. 93-47
NPDES No. CA 0049352**

**WASTE DISCHARGE REQUIREMENTS
FOR
BUENA VISTA MINES, INC.
BUENA VISTA MINE CLOSURE, POST-CLOSURE AND SURFACE WATER DISCHARGE
SAN LUIS OBISPO COUNTY, CALIFORNIA**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds:

permit No. CA00049352 by May 15, 1991, and references compliance with CCR Title 23, Division 3, Chapter 15, Article 7.

1. Buena Vista Mines, Inc. (BVMI), 1148 Market Street, Morro Bay, California 93442 (hereafter Discharger), owns an inactive mercury mine, the Buena Vista Mine (BVM). Mr. Harold J. Biaggini is the president of BVMI.
2. The BVM is located approximately 12 miles west of Paso Robles, California, on property owned by the Discharger as shown on Figures 1 and 2, included as part of this order. The Discharger's property which includes the BVM is located in Sections 3 and 4, T27S, R10E, and Sections 33 and 34, T26S, R10E, MDBM, Adelaida 15 minute quadrangle.
3. An application for authorization to discharge wastes under the National Pollutant Discharge Elimination System (NPDES) was submitted on July 10, 1987, by Harold Biaggini. Waste Discharge Requirements, Order No. 88-90, NPDES No. CA 0049352 was issued by the Board on June 10, 1988 and expires June 1, 1993. Surface water discharged offsite from the BVM is regulated by Order No. 88-90.
4. On July 13, 1990, the Board adopted Cease and Desist Order (CDO) No. 90-104, because discharge from the mine did not meet conditions of the NPDES permit. CDO No. 90-104 orders full compliance with NPDES
5. BVM surface waste water is discharged from the site at only one known point. BVM surface waste water is discharged to a culvert under the intersection of Klau Mine Road and Cypress Mountain Road (Figure 3). The discharge then flows in a drainage course on property owned by Raymond E. Dodd, et al., approximately 0.2 miles to the North Fork of Las Tablas Creek. The drainage course intersects the North Fork approximately 8.5 miles upstream of Nacimiento Reservoir as shown on Figure 4 included as part of this Order.
6. Nacimiento Reservoir is a drinking water aquifer recharge source. It has been posted in the past with warnings that fish are mercury contaminated.
7. The Regional Board Clean Water Strategy (CWS) ranks Nacimiento Reservoir A-7, one of the region's highest priority water bodies. Nacimiento Reservoir recharges the Paso Robles Ground Water Basin, also with a very high CWS rank of A-12.
8. The BVM is in structurally deformed, mineralized and chemically altered rocks near the common intersection of several faults. The rocks include silica carbonates, serpentine and the highly deformed sediments of the Franciscan Formation.

9. Ground water surfaces as springs and seeps on the BVM site. However, onsite data regarding depth to ground water, ground water flow directions and rates, chemical and physical ground water properties, etc. have not been generated.
10. Topography of the BVM and surrounding region is steep; 45 degree slopes are not uncommon (Figure 2).
11. The "California Inland Surface Waters Plan", adopted by the State Water Resources Control Board on April 11, 1991, specifies water quality objectives for inland surface waters which became effective April 1, 1992.
12. The Water Quality Control Plan, Central Coastal Basin (Basin Plan), was adopted by the Board on November 17, 1989 and approved by the State Water Resources Control Board on August 16, 1990. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of waters of the State.
13. The Basin Plan specifies existing and anticipated beneficial uses of Las Tablas Creek as:
 - a. municipal and domestic supply;
 - b. agricultural supply;
 - c. ground water recharge;
 - d. water contact recreation;
 - e. non-contact water recreation;
 - f. wildlife habitat;
 - g. warm fresh water habitat; and
 - h. fish spawning.
14. The Basin Plan specifies existing and anticipated beneficial uses of Nacimiento Reservoir as:
 - a. municipal and domestic supply;
 - b. agricultural supply;
 - c. ground water recharge;
 - d. water contact recreation;
 - e. non-contact water recreation;
 - f. wildlife habitat;
 - g. cold fresh water habitat;
 - h. warm fresh water habitat; and
 - i. fish spawning.
15. Specific beneficial uses of the drainage course between BVMI property and Las Tablas Creek, North Fork are not listed in the Basin Plan. Based on the character of the drainage course, presumed beneficial uses are:
 - a. domestic supply
 - b. agricultural supply
 - c. ground water recharged
 - d. water contact recreation
 - e. wildlife habitat
 - f. warm fresh water habitat, and
 - g. fish spawning.
16. California Code of Regulations (CCR) Title 23, Division 3, Chapter 15, Article 7, commencing with Section 2570 (Article 7) regulates Mining Waste Management and contains Sections regarding:
 - Applicability;
 - Groups of Mining Waste;
 - Unit Siting and Construction Standards;
 - Water Quality Monitoring (requiring Article 5 ground water, surface water and vadose zone monitoring); and
 - Closure and Post-Closure Maintenance.

The Section on Closure and Post Closure Maintenance addresses, in part:

- Water quality threat;
 - Closure and Post-Closure Plans;
 - Surface Mining and Reclamation Act (SMARA) approved
 - mining and reclamation plans;
 - Appropriate registered professionals;
 - Surveyed monuments;
 - Containment structures;
 - Financial assurance;
 - Post closure period;
 - Vegetative layers and irrigation for same;
 - Erosion and sedimentation;
 - Final cover requirements;
 - Grading requirements;
 - Containment and cover maintenance;
 - Leachate, collection and removal systems;
 - Ground water, surface water and vadose zone monitoring;
 - Drainage control;
 - Surveyed monuments;
 - Waste management unit free liquid; and
 - Waste management unit contaminated materials.
17. BVM is not in compliance with Article 7.
 18. The BVM contains overburden, waste rock, and/or solid residues, sludges and liquids from the processing of ore as shown on Figures 3 and 5, included as part of this order.
 19. The BVM overburden, waste rock, and solid residues, sludges and liquids from the processing of ore are Group A and/or Group B Mining Waste, defined by Article 7, Section 2571.
 20. Based on inspections, self monitoring reports and academic studies, the BVM, including BVM Group A and Group B Mining Wastes, has caused, and continues to cause, water quality degradation in Las Tablas Creek and in Nacimiento Reservoir.
 21. Based on inspections, self monitoring reports and academic studies, the BVM, including BVM Group A and Group B Mining Wastes, has caused, and continues to cause, discharge violations of NPDES Permit No. CA 0049352 Order No. 88-90 and CDO No. 90-104.
 22. The most recent report intended as a comprehensive assessment of the BVM physical status is "Preliminary Geologic and Hydrologic Investigations. Buena Vista Mine and Carson Drift" by Marvin R. Niccum, California Registered Geologist, dated September 30, 1988 (Report).

23. BVM Mining Waste is subject to Article 7. Based on the Report, individual BVM units potentially regulated by Article 7 include, but are not limited to the following as shown on Figure 5, included as part of this order:

<u>Figure 5-number and/or name</u>	<u>Potential Type of Unit; Article 7 nomenclature</u>
a. Retort Dump -	waste Pile
b. Pit Floor -	surface impoundment
c. 13. Terrace, Cut and Fill-	waste pile and/or surface impoundment and/or tailings pond
d. 14. Old Dumps & Portals-	waste piles
e. 4. Waste Dump -	waste pile
f. 5. & 6. Upper Catchment and Upper Catchment Dam -	tailings pond
g. 2. Surge Pile shed (and surrounding soil) -	waste pile
h. 7. Lower Parking Area -	waste pile
i. 8. & 9. Lower Catchment and Breached Catchment Dam -	waste pile or tailings pond
j. 10. Evaporation Ponds -	surface impoundment or tailings pond
k. 12. Work Yard and Parking -	waste pile
l. 1. Mine Shop -	waste pile
m. 3. Retort -	waste pile
n. BVM, Portal of BVM -	waste pile

24. No information shows ground water has ever been investigated for BVM impacts.
25. Comprehensive mitigation options were proposed by the Report in September, 1988, but have not been implemented.
26. The Discharger was notified of impending Article 7 regulation in correspondence dated March 18, 1991, July 10, 1991 and July 24, 1992. The March 18, 1991 letter listed specific requirements and included a complete copy of the regulations.
27. Waste discharge requirements for this discharge are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et seq.) in accordance with section 13389 of the California Water Code.
28. A permit and the privilege to discharge waste into waters of the State is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and of the Clean Water Act (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. This Order, in part, shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.
29. On March 26, 1993, the Board notified the Discharger and interested parties of its intent to adopt Waste Discharge Requirements for the discharge. The Discharger and interested parties had the opportunity to submit written comments on this proposed Order.

IT IS HEREBY ORDERED, pursuant to authority in Sections 13263 and 13360 of the California Porter-Cologne Water Quality Control Act, that Buena Vista Mines, Inc., its agents, successors and assigns (BVMI) shall comply with the following:

A. Prohibitions

1. Discharge of material to surface waters at a point other than into the South end of the culvert under the intersection of Klau Mine Road and Cypress Mountain Road is prohibited.
2. Discharge of material not contained within the liquid phase (e.g., sediment) into the culvert specified in A.1. above is prohibited.

B. Effluent Limitations

Discharge of the liquid phase to the culvert specified in A.1. above shall not contain total concentrations in excess of the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Limit</u>
Aluminum	mg/L	1.0
Antimony	mg/L	0.006
Arsenic	mg/L	0.005
Barium	mg/L	1.0
Beryllium	mg/L	0.004
Boron	mg/L	0.75
Cadmium	mg/L	0.0086
Chromium	mg/L	0.05
Cobalt	mg/L	0.05
Copper	mg/L	0.03
Iron	mg/L	0.3
Lead	mg/L	0.03
Lithium	mg/L	2.50
Manganese	mg/L	0.05
Mercury	mg/L	0.000012
Molybdenum	mg/L	0.01
Nickel	mg/L	0.1
Selenium	mg/L	0.01
Silver	mg/L	0.013
Sodium	mg/L	69.0
Thallium	mg/L	0.002
Vanadium	mg/L	0.1
Zinc	mg/L	0.2
pH	pH units	between 7.0 and 8.3
Turbidity	NTU	5
Total Dissolved Solids	mg/L	1500
Specific Conductance	umhos	2200
Settleable Solids	ml/L	0.5

<u>Constituent</u>	<u>Units</u>	<u>Limit</u>
Acute Toxicity	There shall be no acute toxicity*	
Chronic Toxicity	TUc**	1.0
Cyanide	mg/L	0.2
Fluoride	mg/L	1.5
Chloride	mg/L	600
Sulfate	mg/L	600
Dissolved Oxygen	mg/L	≥ 5
Color	color units	15
Odor-Threshold	units	3

* Acute toxicity is less than 90% survival, 50% of the time, and less than 70% survival, 10% of the time, of standard test organisms in undiluted effluent in a 96-hour static or continuous-flow test.

** TUc equals 100/NOEL. NOEL (No Observed Effect Level) is the maximum percent test water that causes no observed effect on a test organism, as described in a critical life stage toxicity test listed below:

Critical Life Stage Toxicity Tests

Species	Effect	Test duration (days)	Reference
fathead minnow (<u>Pimephales</u> <u>promelas</u>)	larval survival and growth rate	7	Horning & Weber, 1989
water flea (<u>Cerio-</u> <u>daphnia</u> <u>dubia</u>)	survival; number of young	7	Horning & Weber, 1989
alga (<u>Selanastrum</u> <u>capricornutum</u>)	growth rate	4	Horning & Weber, 1989

Toxicity Test Reference: Horning, W.B. and C.I. Weber (eds.). 1989. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms. Second edition. U.S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-89/001.

C. Receiving Water Limitations

Receiving waters include all waters of the U.S. downstream of the Buena Vista Mine property. Discharge of the liquid phase to the culvert specified in A.1. above shall not cause violation(s) of the following narrative limits.

1. Surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded as a result of the discharge.
2. The natural taste and odor of fish, shellfish, or other surface water resources used for human consumption shall not be impaired.
3. Toxic pollutants shall not be discharged at levels that will bioaccumulate in aquatic resources.
4. The concentration of contaminants in waters of the U.S. shall not occur at levels which are harmful to human health.
5. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses.
6. Waters of the U.S. shall be free of coloration that causes nuisance or adversely affects beneficial uses.
7. Waters of the U.S. shall not contain taste or odor-producing substances in concentrations that cause nuisance, or that adversely affect beneficial uses.
8. Waters of the U.S. shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
9. Waters of the U.S. shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
10. Waters of the U.S. shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
11. Waters of the U.S. shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
12. Waters of the U.S. shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
13. The suspended sediment load of surface waters of the U.S. shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
14. Waters of the U.S. shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.
15. Water temperature shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
16. There shall be no acute toxicity in waters of the U.S.
17. There shall be no chronic toxicity in waters of the U.S.
18. Waters of the U.S. shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use.

D. Provisions:

The Discharger shall eliminate all actual and potential water quality impacts from the BVM by bringing the BVM into compliance with Article 7 in accordance with Provisions 1. through 7 below.

1. The Discharger shall submit a plan by August 14, 1993 describing in detail how BVM will be brought into compliance with Article 7 (Compliance Plan). The Compliance Plan shall describe how the Discharger intends eliminating all actual and potential water quality impacts from the entire BVM. The Compliance Plan shall address, but not necessarily be limited to, all Sections, issues and units contained in Finding Nos. 16 and 23 of this Order.

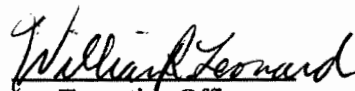
The Compliance Plan shall give detailed descriptions of the entire BVM and of each BVM unit subject to specific Article 7 requirements. The Compliance Plan shall also describe, in detail and with specific citations, which Article 7 Sections apply to which individual units and which Article 7 Sections apply to the complete BVM. The Compliance Plan shall describe the methods of achieving compliance in sufficient detail and with sufficient support and documentation to ensure feasibility, implementation and success. The Compliance Plan shall include a time schedule of events. The Compliance Plan shall be certified by the appropriate registered professionals.

2. Revisions to the Compliance Plan may be required by the Board or Board staff, and shall be submitted within 35 calendar days of written notice that they are required. All revisions shall be certified by appropriate registered professionals and shall render the Compliance Plan acceptable.
3. Implementation of the Compliance Plan shall commence within one calendar month of Executive Officer approval of the Compliance Plan.

4. Full BVM compliance with Article 7 shall be achieved within 24 calendar months of Executive Officer approval of the Compliance Plan.
5. A report certifying how the BVM was brought into compliance with Article 7 (Compliance Certification Report) shall be submitted within two calendar months of completion of Article 7 compliance activities, not to exceed 26 calendar months after Executive Officer approval of the Compliance Plan. The Compliance Certification Report must certify that all terms of the approved Compliance Plan were accomplished and describe in detail how they were accomplished. The Compliance Certification Report shall describe in detail all activities conducted pursuant to this Order and shall be certified by appropriate registered professionals.
6. Written status reports shall be submitted by BVM every three calendar months during implementation of the Compliance Plan. The first status report shall be due three calendar months after the Compliance Plan is implemented (Provision D.3. above). Status report submittals shall continue until submittal of the Compliance Certification Report (Provision D.5. above). Status reports shall be certified by appropriate registered professionals.
7. All Compliance Plan implementation activities shall be conducted under the direct supervision of appropriate registered professionals.
8. Unpredictable events may necessitate revisions to plans, schedules, or activities. The Executive Officer shall have the authority to approve such revisions. However, the Discharger shall not implement any such revision, or discontinue previously approved or ordered terms, plans, schedules or activities prior to receiving Executive Officer approval.

9. Board staff shall be notified at least 96 hours prior to commencement of any physical activity to allow staff presence during such activity.
10. Order No. 88-90 adopted by the Board on June 10, 1988, is hereby rescinded. This rescision is not a waiver of the right of the Regional Board to seek administrative civil liability or take other enforcement action for violations of Order No. 88-90 which have occurred prior to the date of this rescision.
11. Discharger shall comply with "Monitoring and Reporting Program No. 93-47," as specified by the Executive Officer.
12. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January, 1985, (also referred to as "Standard Provisions"), except Item Nos. A.6,7,13; C.3,9; and D.1.
13. The Discharger shall inform his employees of the terms of this Order which pertain to their duties and a copy of this Order shall be available for their reference.
14. This Order expires May 14, 1998. If BVMI wishes to continue the discharge to surface water of the United States after May 14, 1998, it must file a Report of Waste Discharge (ROWD) in accordance with Title 23, of the California Code of Regulations by November 14, 1997.

I, WILLIAM R. LEONARD, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 14, 1993.


Executive Officer

DS:sg

FIGURE 2

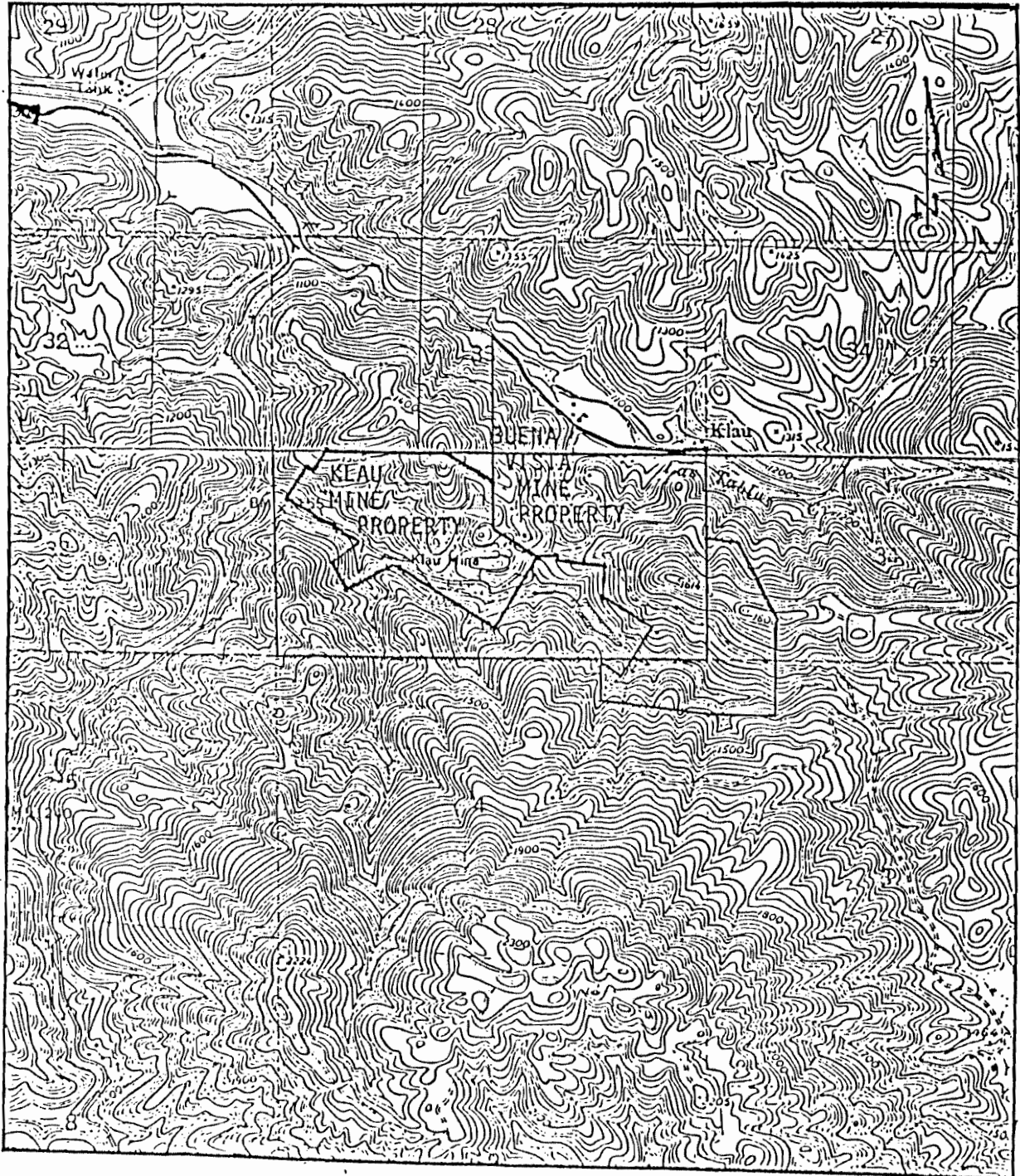


FIGURE 2: BUENA VISTA MINE & KLAU MINE PROPERTIES

Approximate Scale (Miles)

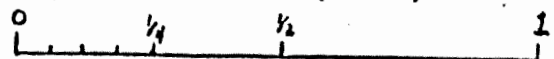
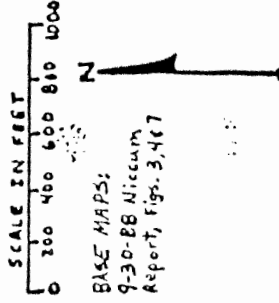


FIGURE 3



BASE MAPS:
9-30-88 Niccum
Report, Figs. 3, 4 & 7

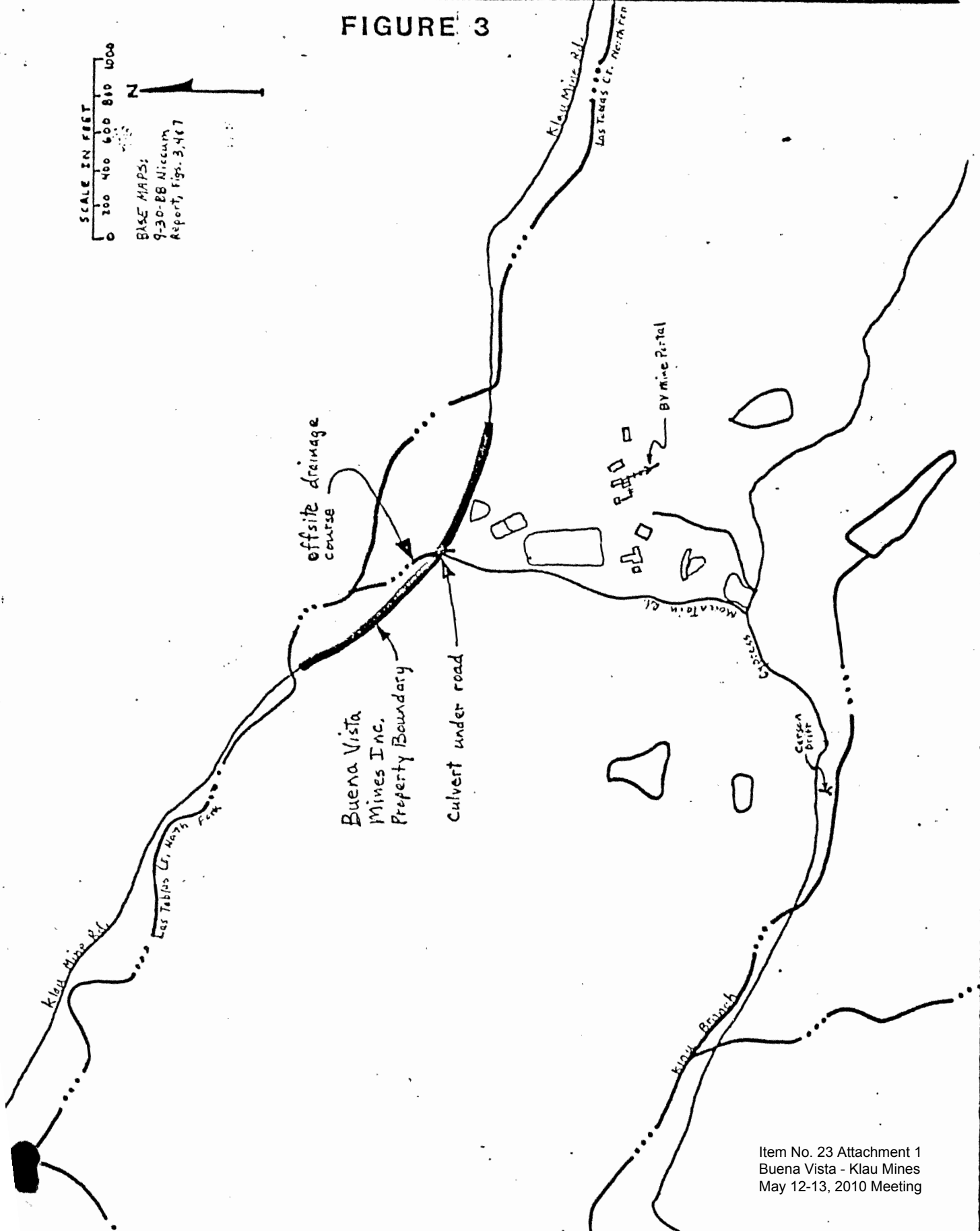


FIGURE 4

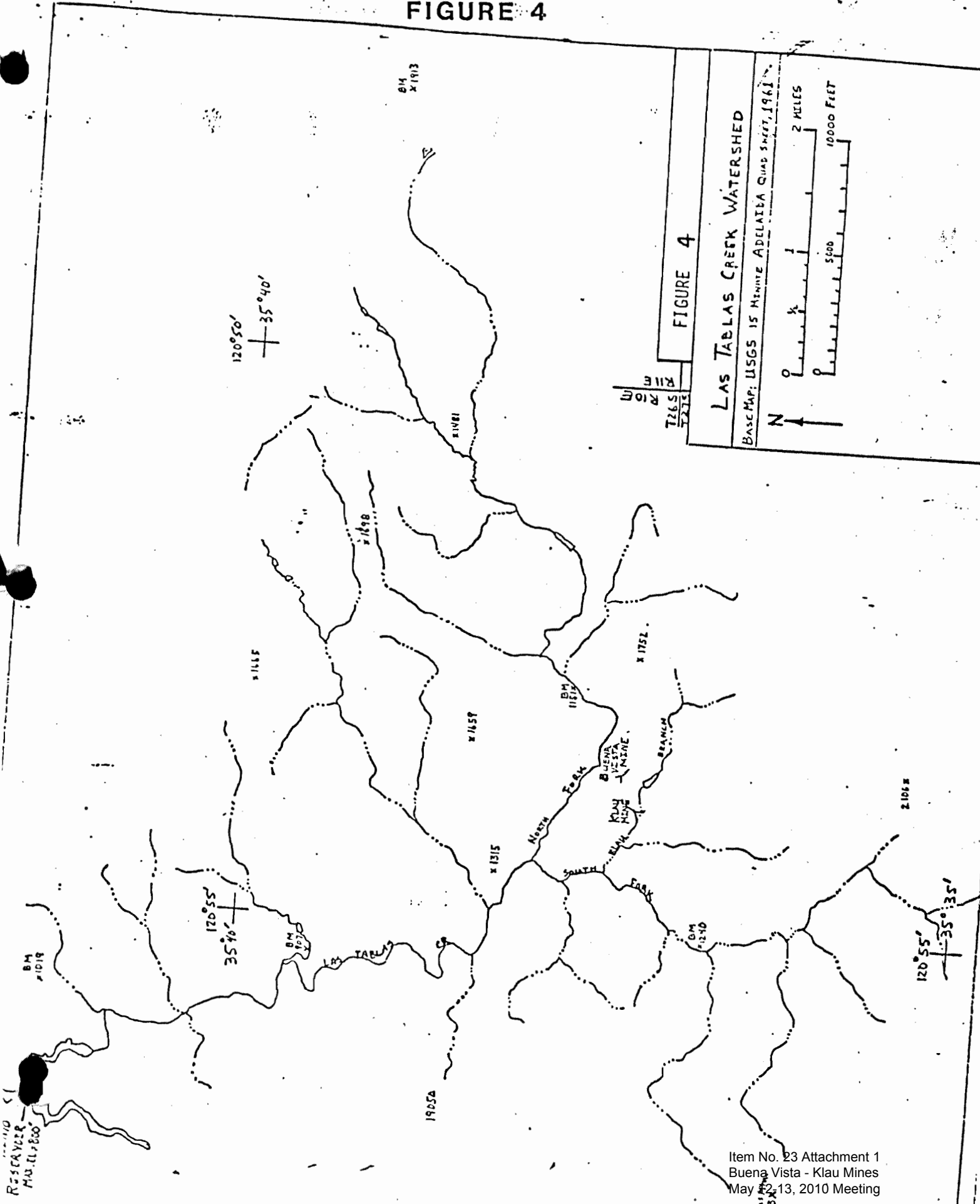
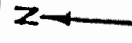
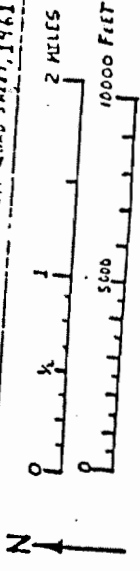


FIGURE 4

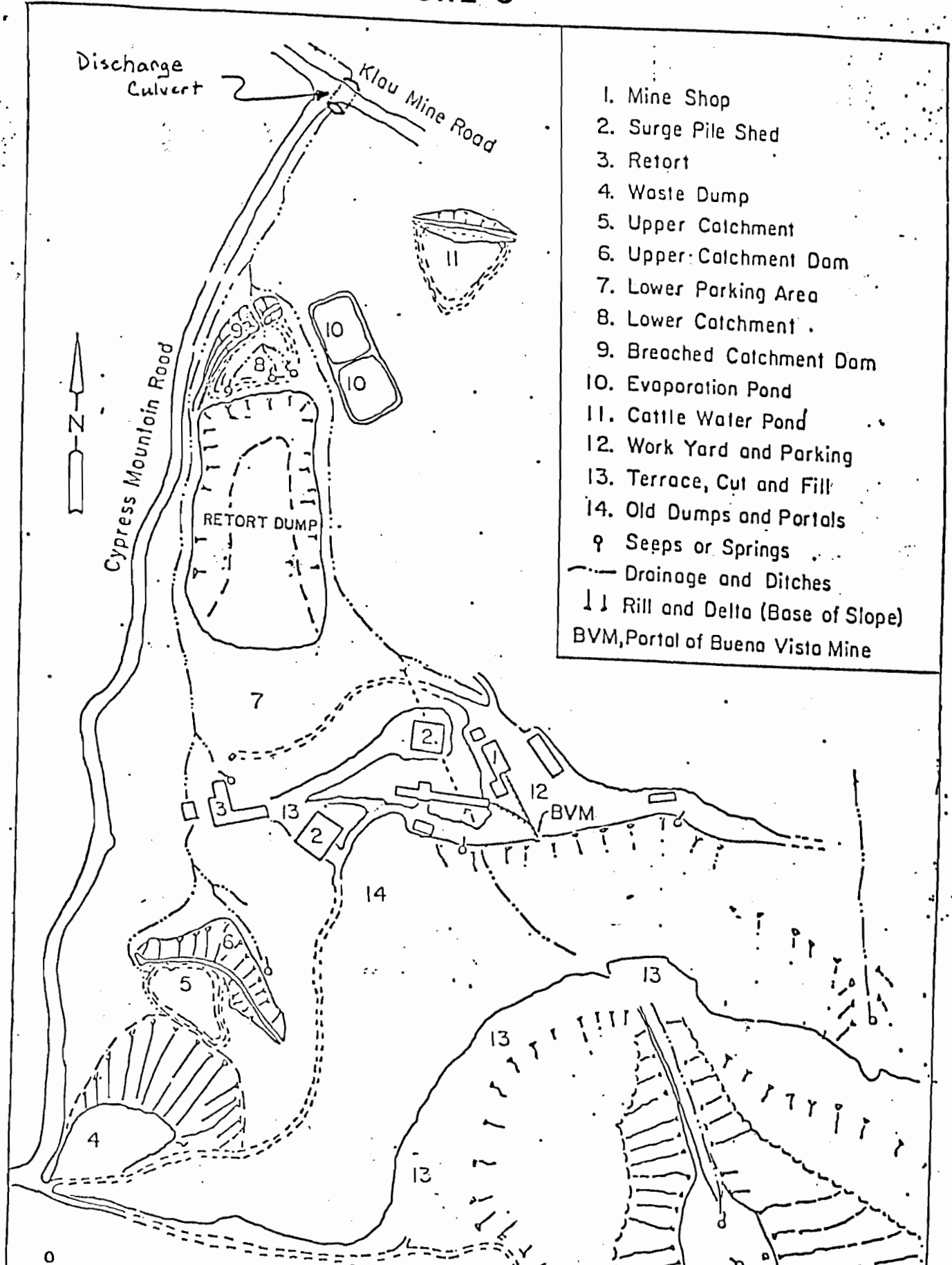
LAS TABLAS CREEK WATERSHED

BASE MAP: USGS 15 MINUTE ADELATA QUAD SHEET, 1961



RESERVED
MAY 11, 1900

FIGURE 5



- 1. Mine Shop
- 2. Surge Pile Shed
- 3. Retort
- 4. Waste Dump
- 5. Upper Catchment
- 6. Upper Catchment Dam
- 7. Lower Parking Area
- 8. Lower Catchment
- 9. Breached Catchment Dam
- 10. Evaporation Pond
- 11. Cattle Water Pond
- 12. Work Yard and Parking
- 13. Terrace, Cut and Fill
- 14. Old Dumps and Portals
- 9 Seeps or Springs
- Drainage and Ditches
- ↓ ↓ Rill and Delta (Base of Slope)
- BVM, Portal of Buena Vista Mine

FIGURE 4. BUENA VESTA MINE SKETCH MAP
NICCIUM, 1982

Item No. 23 Attachment 1
Buena Vista Klau Mines
May 12-13, 2010 Meeting

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 CENTRAL COAST REGION
 81 Higuera Street, Suite 200
 San Luis Obispo, California 93401-5427

MONITORING AND REPORTING PROGRAM NO. 93-47
 FOR
 BUENA VISTA MINES, INC.
 BUENA VISTA MINE
 SAN LUIS OBISPO COUNTY, CALIFORNIA

1. The liquid phase discharged from the Buena Vista Mine (BVM) into the south end of the culvert under the intersection of Klau Mine Road and Cypress Mountain Road (Discharge Point) shall be grab sampled and analyzed as follows:

<u>Constituent</u>	<u>Units</u>	<u>Sampling and Analysis Frequency</u>
pH	pH	Weekly
Turbidity	NTU	Weekly
Specific Conductance	umhos	Weekly
Aluminum	mg/L	Quarterly, during November, February, May and August
Antimony	"	"
Arsenic	"	"
Barium	"	"
Beryllium	"	"
Boron	"	"
Cadmium	"	"
Chromium	"	"
Cobalt	"	"
Copper	"	"
Iron	"	"
Lead	"	"
Lithium	"	"
Manganese	"	"
Mercury	"	"
Molybdenum	"	"
Nickel	"	"
Selenium	"	"
Silver	"	"
Sodium	"	"
Thallium	"	"
Vanadium	"	"
Zinc	"	"

May 14, 1993

<u>Constituent</u>	<u>Units</u>	<u>Sampling and Analysis Frequency</u>
Total Dissolved Solids	mg/L	Quarterly during November, February, May, and August
Settleable Solids	ml/L	Quarterly during NFMA
Acute Toxicity	-	"
Chronic Toxicity	TUc	"
Cyanide	mg/L	"
Fluoride	"	"
Chloride	"	"
Sulfate	"	"
Dissolved Oxygen	"	"
Color	color units	"
Odor-Threshold	units	"

2. This Monitoring and Reporting Program becomes effective May 14, 1993.
3. Monitoring results shall be submitted to the Board by the 30th day of the month following the month of sampling; i.e., November results by December 30, February results by March 30, May results by June 30, and August results by September 30.
4. Monitoring reports shall include observations of receiving waters with regard to compliance with Order No. 93-47, C. Receiving Water Limitations.

ORDERED BY:

William R. Leonard
 EXECUTIVE OFFICER

May 14, 1993
 DATE

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

**81 Higuera Street, Suite 200
San Luis Obispo, California 93401-5427**

**ORDER NO. 93-48
NPDES NO. CA 0049361**

**WASTE DISCHARGE REQUIREMENTS
FOR
BUENA VISTA MINES, INC. AND/OR KLAU MINE INC.
C/O BUENA VISTA MINES, INC.
KLAU MINE CLOSURE AND POST-CLOSURE AND SURFACE WATER DISCHARGE
SAN LUIS OBISPO COUNTY, CALIFORNIA**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds:

1. Buena Vista Mines, Inc. or Klau Mine Inc., c/o Buena Vista Mines, Inc. (BVMI), 1148 Market Street, Morro Bay, California 93442 (hereafter Discharger), owns an inactive mercury mine, the Klau Mine. Mr. Harold J. Biaggini is the president of BVMI.
2. The Klau Mine is located approximately 12 miles west of Paso Robles, California, on property owned by the Discharger as shown on Figures 1 and 2 included as part of this order. The Discharger's property which includes the Klau Mine is located in Section 33, T26S, R10E, MDBM, Adelaida 15 minute quadrangle.
3. Surface water discharged to the Las Tablas Creek, South Fork, Klau Br. from the Carson Drift (a small portion of the Klau Mine) is regulated by Waste Discharge Requirements Order No. 88-92, NPDES No. CA 0049361, adopted by the Board on June 10, 1988.
4. On June 10, 1988, the Board adopted Cease and Desist Order No. 88-93, because discharge from the Carson Drift did not meet conditions of the NPDES permit. CDO No. 88-93 orders full compliance with NPDES permit #CA0049361 by October 1, 1989.
5. Based on inspections and samples, Carson Drift discharge often violates Order No. 88-92 and Order No. 88-93 requirements.
6. Some discharge to surface water from the Klau Mine is not currently regulated by permit.
7. Surface water discharges discontinuously from multiple uncontrolled Klau Mine locations to the Las Tablas Creek, South Fork, Klau Branch approximately 9 miles upstream of Nacimiento Reservoir as shown on Figures 3 and 4, included as part of this order.
8. Nacimiento Reservoir is a drinking water aquifer recharge source. It has been posted in the past with warnings that fish are mercury contaminated.
9. The Regional Board Clean Water Strategy (CWS) ranks Nacimiento Reservoir A-7, one of the region's highest priority water bodies. Nacimiento Reservoir recharges the Paso Robles Ground Water Basin, also with a very high CWS rank of A-12.
10. The Klau Mine is in structurally deformed, mineralized and chemically altered rocks near the common intersection of several faults. The rocks include silica carbonates, serpentine and the highly deformed sediments of the Franciscan Formation.
11. Information at Klau Mine has not been generated regarding depth to ground water, ground water flow directions and rates, chemical and physical ground water properties, etc.
12. Topography of the Klau Mine and surrounding region is steep; 45 degree slopes are not uncommon (Figure 2).

13. The Water Quality Control Plan, Central Coastal Basin (Basin Plan), was adopted by the Board on November 17, 1989 and approved by the State Water Resources Control Board on August 16, 1990. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of waters of the State.
14. The "California Inland Surface Waters Plan", adopted by the SWRCB April 11, 1991 specifies water quality objectives for inland surface waters which became effective April 1, 1992.
15. The Basin Plan specifies existing and anticipated beneficial uses of Las Tablas Creek as:
- a. municipal and domestic supply;
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 - g. warm fresh water habitat; and
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16. The Basin Plan specifies existing and anticipated beneficial uses of Nacimiento Reservoir as:
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 - f. wildlife habitat;
 - g. cold fresh water habitat;
 - h. warm fresh water habitat;
 - and
 - i. fish spawning.
17. California Code of Regulations (CCR) Title 23, Division 3, Chapter 15, Article 7, commencing with Section 2570 (Article 7) regulates Mining Waste Management and contains Sections regarding:
- Applicability;
 - Groups of Mining Waste;
 - Unit Siting and Construction Standards;
 - Water Quality Monitoring (requiring Article 5 ground water, surface water and vadose zone monitoring); and
 - Closure and Post-Closure Maintenance.
- The Section on Closure and Post Closure Maintenance addresses, in part:
- Water quality threat;
 - Closure and Post-Closure Plans;
 - Surface Mining and Reclamation Act (SMARA) approved mining and reclamation plans;
 - Appropriate registered professionals;
 - Surveyed monuments;
 - Containment structures;
 - Financial assurance;
 - Post closure period;
 - Vegetative layers and irrigation for same;
 - Erosion and sedimentation;
 - Final cover requirements;
 - Grading requirements;
 - Containment and cover maintenance;
 - Leachate, collection and removal systems;
 - Ground water, surface water and vadose zone monitoring;
 - Drainage control;
 - Surveyed monuments;
 - Waste management unit free liquid; and
 - Waste management unit contaminated materials.
18. The Klau Mine is not in compliance with Article 7.

19. The Klau Mine contains overburden, waste rock, and/or solid residues, sludges and liquids from the processing of ore.
20. The Klau Mine overburden, waste rock, and solid residues, sludges and liquids from the processing of ore are Group A and/or Group B Mining Waste, defined by Article 7, Section 2571.
21. Based on inspections and academic studies, the Klau Mine, including Klau Mine Group A and Group B Mining Wastes, has caused, and continues to cause, water quality degradation in Las Tablas Creek and likely in Nacimiento Reservoir.
22. Ground water has never been investigated for Klau Mine impacts.
23. The Klau Mine property has never been comprehensively assessed for water quality threat.
24. The Discharger was notified of impending Article 7 regulation in correspondence dated November 19, 1992.
25. Waste discharge requirements for this discharge are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et seq.) in accordance with section 13389 of the California Water Code.
26. A permit and the privilege to discharge waste into waters of the State is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and of the Clean Water Act (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.
27. On March 26, 1993, the Board notified the Discharger and interested parties of its intent to adopt Waste Discharge Requirements for the discharge. The Discharger and interested parties had the opportunity to submit written comments on this proposed Order.

IT IS HEREBY ORDERED, pursuant to authority in Sections 13263 and 13360 of the California Porter-Cologne Water Quality Control Act, that Buena Vista Mines, Inc. and/or Klau Mine Inc., c/o Buena Vista Mines Inc., its agents, successors and assigns (BVMI) shall comply with the following:

A. Prohibitions

1. Discharge of material to surface waters at points other than the approximate discharge locations shown on Figure 4 is prohibited. Exact discharge locations shall be defined by the submittal required in Provision 1 below. That submittal is subject to Executive Officer approval.
2. Discharge of material not contained within the liquid phase (e.g., sediment) at the locations specified in A.1. above is prohibited.

B. Effluent Limitations

Discharge of the liquid phase at locations specified in A.1. above shall not contain total concentrations in excess of the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Limit</u>
Aluminum	mg/L	1.0
Antimony	mg/L	0.006
Arsenic	mg/L	0.005
Barium	mg/L	1.0
Beryllium	mg/L	0.004
Boron	mg/L	0.75
Cadmium	mg/L	0.0086
Chromium	mg/L	0.05
Cobalt	mg/L	0.05
Copper	mg/L	0.03
Iron	mg/L	0.3
Lead	mg/L	0.03
Lithium	mg/L	2.50
Manganese	mg/L	0.05
Mercury	mg/L	0.000012
Molybdenum	mg/L	0.01
Nickel	mg/L	0.1
Selenium	mg/L	0.01
Silver	mg/L	0.013
Sodium	mg/L	69.0
Thallium	mg/L	0.002
Vanadium	mg/L	0.1
Zinc	mg/L	0.2

<u>Constituent</u>	<u>Units</u>	<u>Limit</u>
pH	pH units	between 7.0 and 8.3
Turbidity	NTU	5
Total Dissolved Solids	mg/L	1500
Specific Conductance	umhos	2200
Settleable Solids	ml/L	0.5
Acute Toxicity	There shall be no acute toxicity*	
Chronic Toxicity	TUc**	1.0
Cyanide	mg/L	0.2
Fluoride	mg/L	1.5
Chloride	mg/L	600
Sulfate	mg/L	600
Dissolved Oxygen	mg/L	≥ 5
Color	color units	15
Odor-Threshold	units	3

* Acute toxicity is less than 90% survival, 50% of the time, and less than 70% survival, 10% of the time, of standard test organisms in undiluted effluent in a 96-hour static or continuous-flow test.

** TUc equals 100/NOEL. NOEL (No Observed Effect Level) is the maximum percent test water that causes no observed effect on a test organism, as described in a critical life stage toxicity test listed on the next page:

Critical Life Stage Toxicity Tests

<u>Species</u>	<u>Effect</u>	<u>Test duration (days)</u>	<u>Reference</u>
fathead minnow (<u>Pimephales promelas</u>)	larval survival and growth rate	7	Horning & Weber, 1989
water flea (<u>Ceriodaphnia dubia</u>)	survival; number of young	7	Horning & Weber, 1989
alga (<u>Selenastrum capricornutum</u>)	growth rate	4	Horning & Weber, 1989

Toxicity Test Reference: Horning, W.B. and C.I. Weber (eds.). 1989. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms. Second edition. U.S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-89/001.

C. Receiving Water Limitations

Receiving waters include all waters of the U.S. downstream of the Klau Mine property. Discharge of the liquid phase to the locations specified in A.1. above shall not cause violation(s) of the following narrative limits.

1. Surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded as a result of the discharge.
2. The natural taste and odor of fish, shellfish, or other surface water resources used for human consumption shall not be impaired.
3. Toxic pollutants shall not be discharged at levels that will bioaccumulate in aquatic resources.
4. The concentration of contaminants in waters of the U.S. shall not occur at levels which are harmful to human health.
5. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses.
6. Waters of the U.S. shall be free of coloration that causes nuisance or adversely affects beneficial uses.
7. Waters of the U.S. shall not contain taste or odor-producing substances in concentrations that cause nuisance, or that adversely affect beneficial uses.
8. Waters of the U.S. shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
9. Waters of the U.S. shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
10. Waters of the U.S. shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
11. Waters of the U.S. shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
12. Waters of the U.S. shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
13. The suspended sediment load of surface waters of the U.S. shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
14. Waters of the U.S. shall be free of change in turbidity that cause nuisance or adversely affect beneficial uses.
15. Water temperature shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.
16. There shall be no acute toxicity in waters of the U.S.
17. There shall be no chronic toxicity in waters of the U.S.

18. Waters of the U.S. shall not contain concentrations of chemical constituent in amounts which adversely affect the agricultural beneficial use.

D. Provisions

1. The Discharger shall submit a report by August 14, 1993 proposing exact Klau Mine surface water discharge locations. This report shall be certified by appropriate registered professionals and is subject to Executive Officer approval.

The Discharger shall eliminate all actual and potential water quality impacts from the Klau Mine by bringing the Klau Mine into compliance with Article 7 in accordance with Provisions 2. through 9. below.

2. The Discharger shall submit a plan August 14, 1993, describing in detail how the Klau Mine will be brought into compliance with Article 7. The Compliance Plan shall describe how the Discharger intends eliminating all actual and potential water quality impacts from the entire Klau Mine.

The Compliance Plan shall give detailed descriptions of the entire Klau Mine and of each Klau Mine unit subject to specific Article 7 requirements. The Compliance Plan shall also describe, in detail and with specific citations, which Article 7 sections apply to individual units and which sections apply to the complete Klau Mine. The Compliance Plan shall describe the methods of achieving compliance in sufficient detail and with sufficient support and documentation to ensure feasibility, implementation and success. The Compliance Plan shall be certified by the appropriate registered professionals.

3. Revisions to the Compliance Plan may be required by the Board or Board staff, and shall be submitted within 35 calendar days of written notice that they are required. All revisions shall be certified by appropriate registered professionals and shall render the Compliance Plan acceptable.

4. Implementation of the Compliance Plan shall commence within one calendar month of Executive Officer approval of the Compliance Plan.

5. Full Klau Mine compliance with Article 7 shall be achieved within 36 calendar months of Executive Officer approval of the Compliance Plan.

6. A report certifying how the Klau Mine was brought into compliance with Article 7 (Compliance Certification Report) shall be submitted within two calendar months of completion of Article 7 compliance activities, not to exceed 38 calendar months after Executive Officer approval of the Compliance Plan. The Compliance Certification Report must certify that all terms of the approved Compliance Plan were accomplished and describe in detail how they were accomplished. The Compliance Certification Report shall describe in detail all activities conducted pursuant to this Order and shall be certified by appropriate registered professionals.

7. Written status reports shall be submitted by BVMI every three calendar months during implementation of the Compliance Plan. The first status report shall be due three calendar months after the Compliance Plan is implemented (Provision D.4. above). Subsequent status reports shall be due every three calendar months thereafter. Status report submittals shall continue until submittal of the Compliance Certification Report (Provision D.6. above). Status reports shall be certified by appropriate registered professionals.

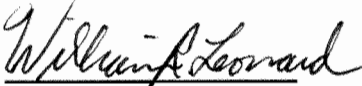
8. All terms of the Executive Officer approved Compliance Plan shall be implemented as specified by the approved Compliance Plan.

9. All Compliance Plan implementation activities shall be conducted under the direct supervision of appropriate registered professionals.

May 14, 1993

10. Unpredictable events may necessitate revisions to plans, schedules, or activities. The Executive Officer shall have the authority to approve such revisions. However, the Discharger shall not implement any such revision, or discontinue previously approved or ordered terms, plans, schedules or activities prior to receiving Executive Officer approval.
11. Board staff shall be notified at least 96 hours prior to commencement of any physical activity to allow staff presence during such activity.
12. Order No. 88-92 adopted by the Board on June 10, 1988, is hereby rescinded. This rescision is not a waiver of the right of the Regional Board to seek administrative civil liability or take other enforcement action for violations of Order No. 88-92 which have occurred prior to the date of this rescision.
13. The Discharger shall comply with "Monitoring and Reporting Program No. 93-48," as specified by the Executive Officer.
14. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January, 1985, (also referred to as "Standard Provisions"), except Item Nos. A.6,7,13; C.3,9; and D.1.
15. The Discharger shall inform his employees of the terms of this Order which pertain to their duties and a copy of this Order shall be available for their reference.
16. This Order expires May 14, 1998. If BVMI wishes to continue the discharge to surface water of the United States after May 14, 1998, it must file a Report of Waste Discharge (ROWD) in accordance with Title 23, of the California Code of Regulations by November 14, 1997.

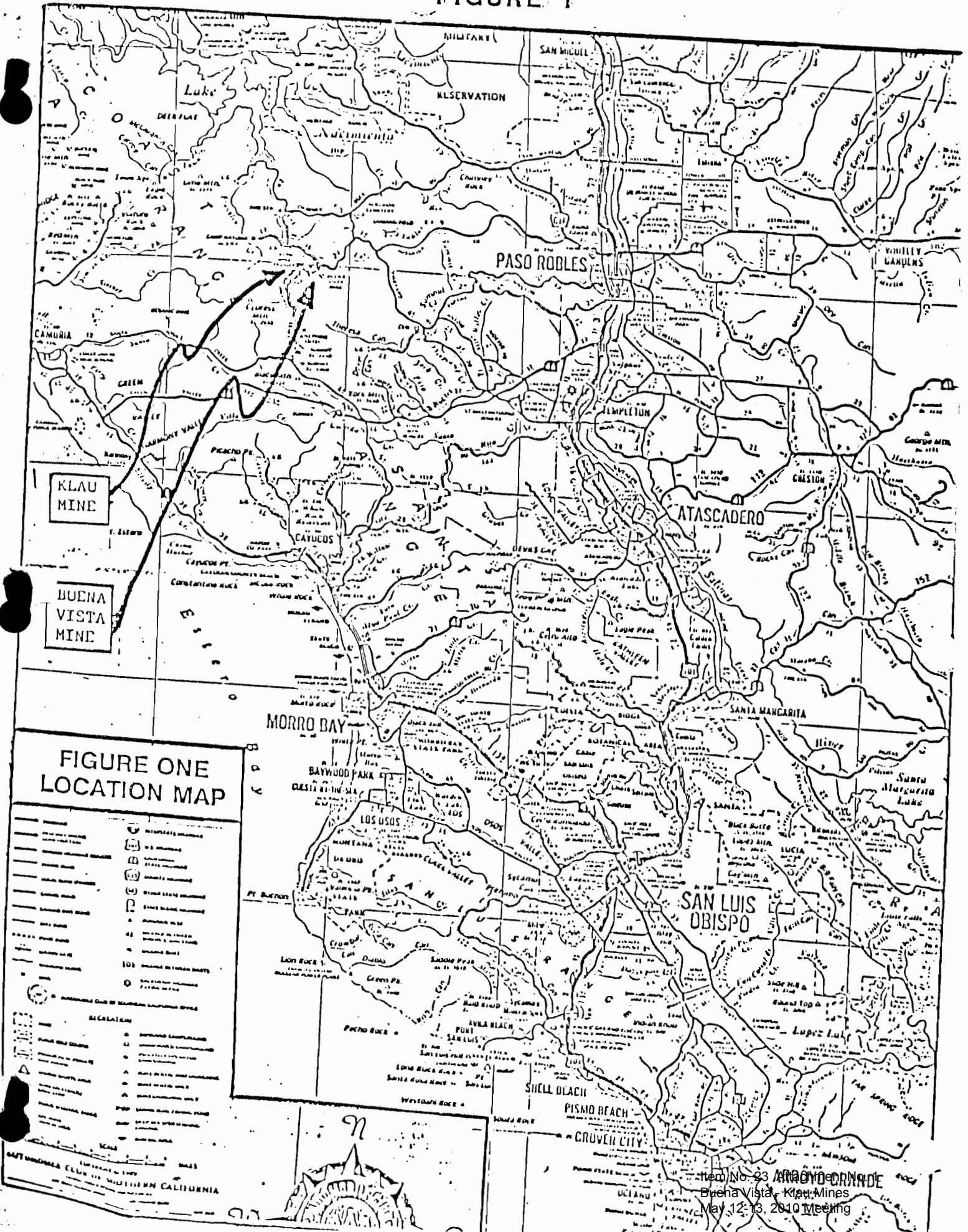
I, WILLIAM R. LEONARD, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on May 14, 1993.


Executive Officer

DS:sg

sg/ds4-93-48.wdr

FIGURE 1



Item No. 23 ANADYOR ORNIDE
 Buena Vista, Klau Mines
 May 12-13, 2010 Meeting

FIGURE 2

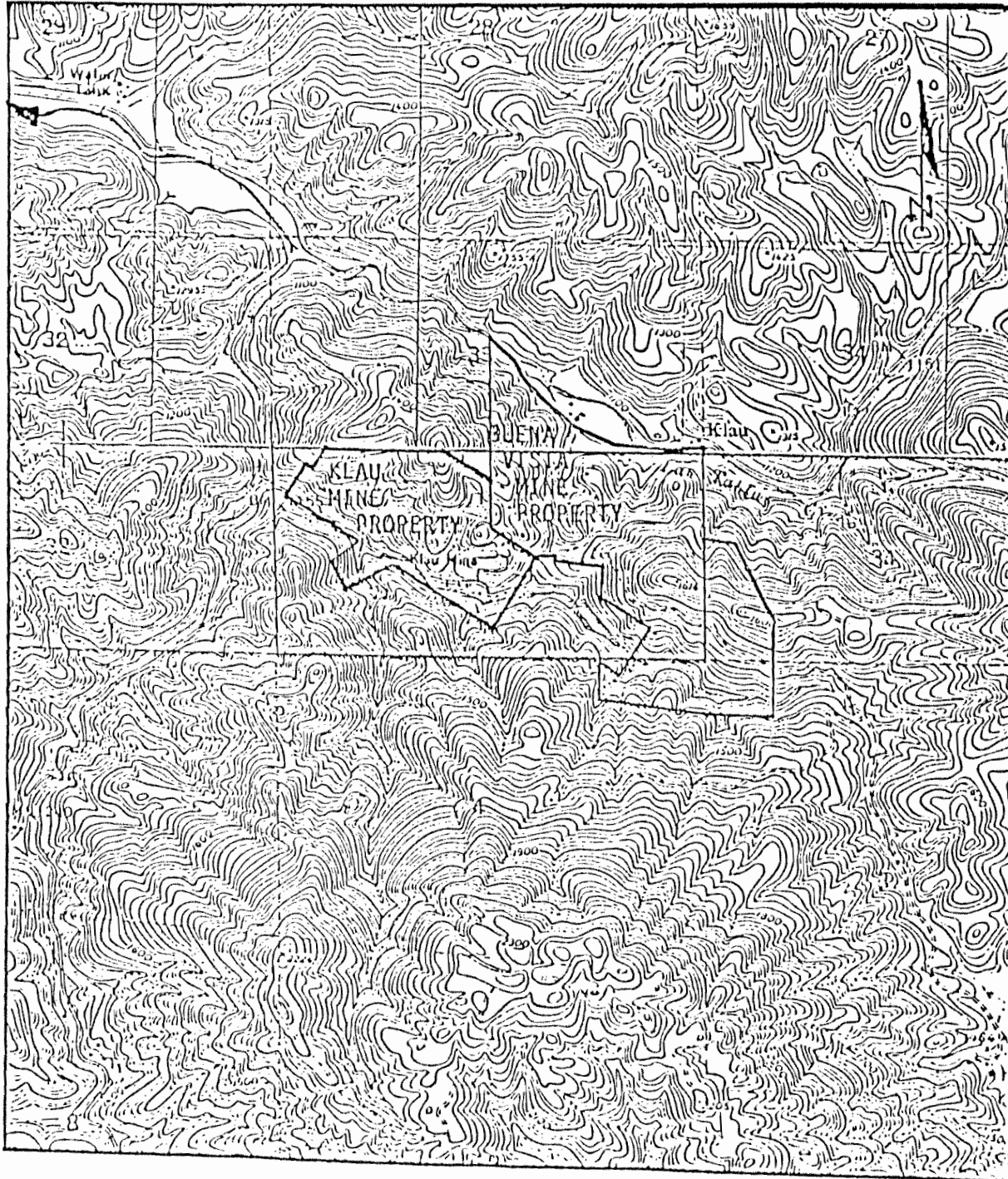


FIGURE 2: BUENA VISTA MINE &
KLAU MINE PROPERTIES

Approximate Scale (Miles)

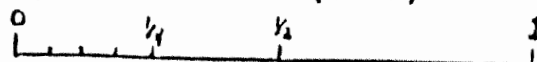


FIGURE 3

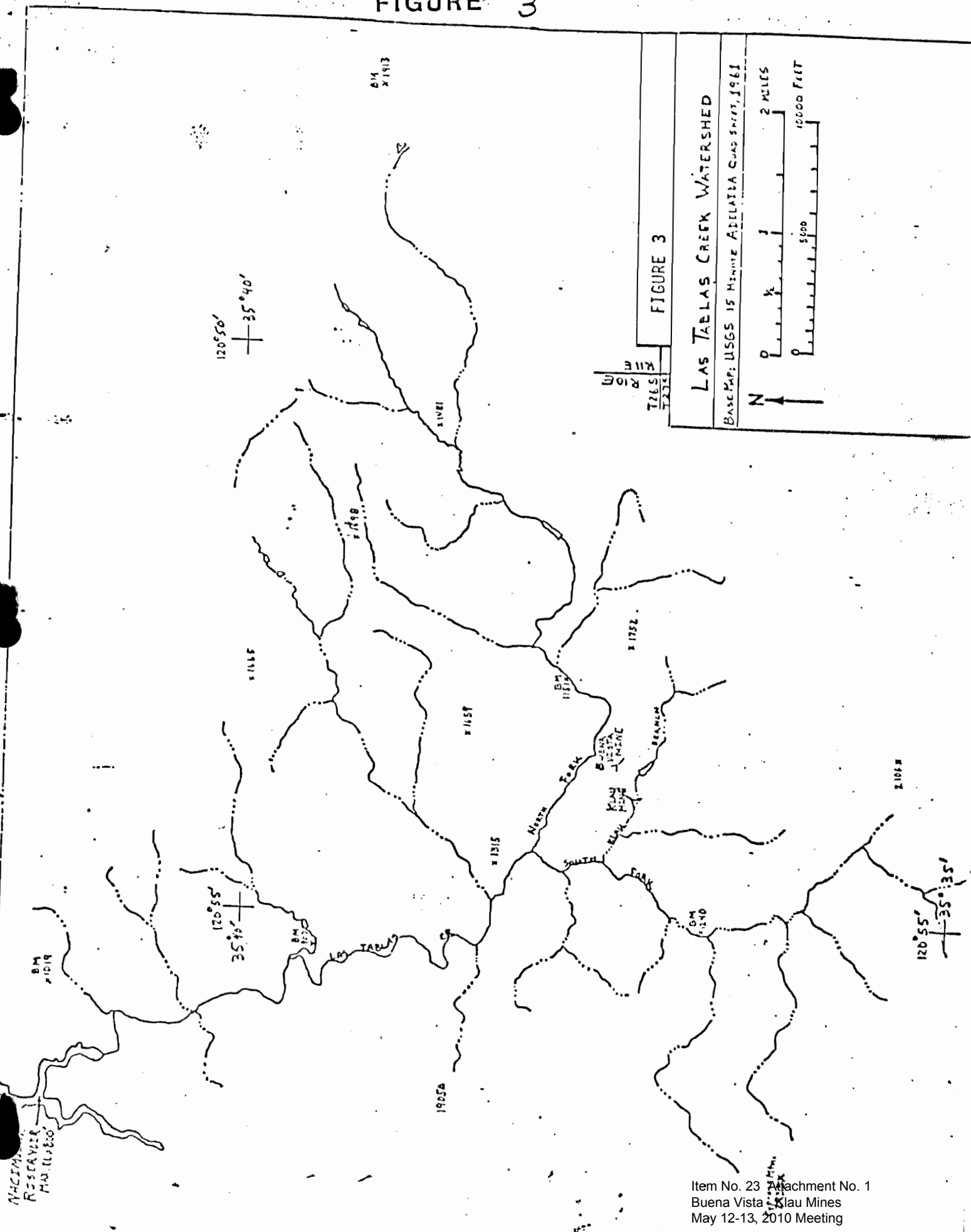


FIGURE 3

LAS TABLAS CREEK WATERSHED

BASE MAP: USGS 15 MINUTE ADRIAN QUAD SHEET, 1961

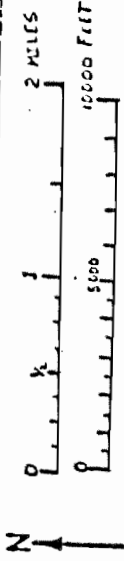
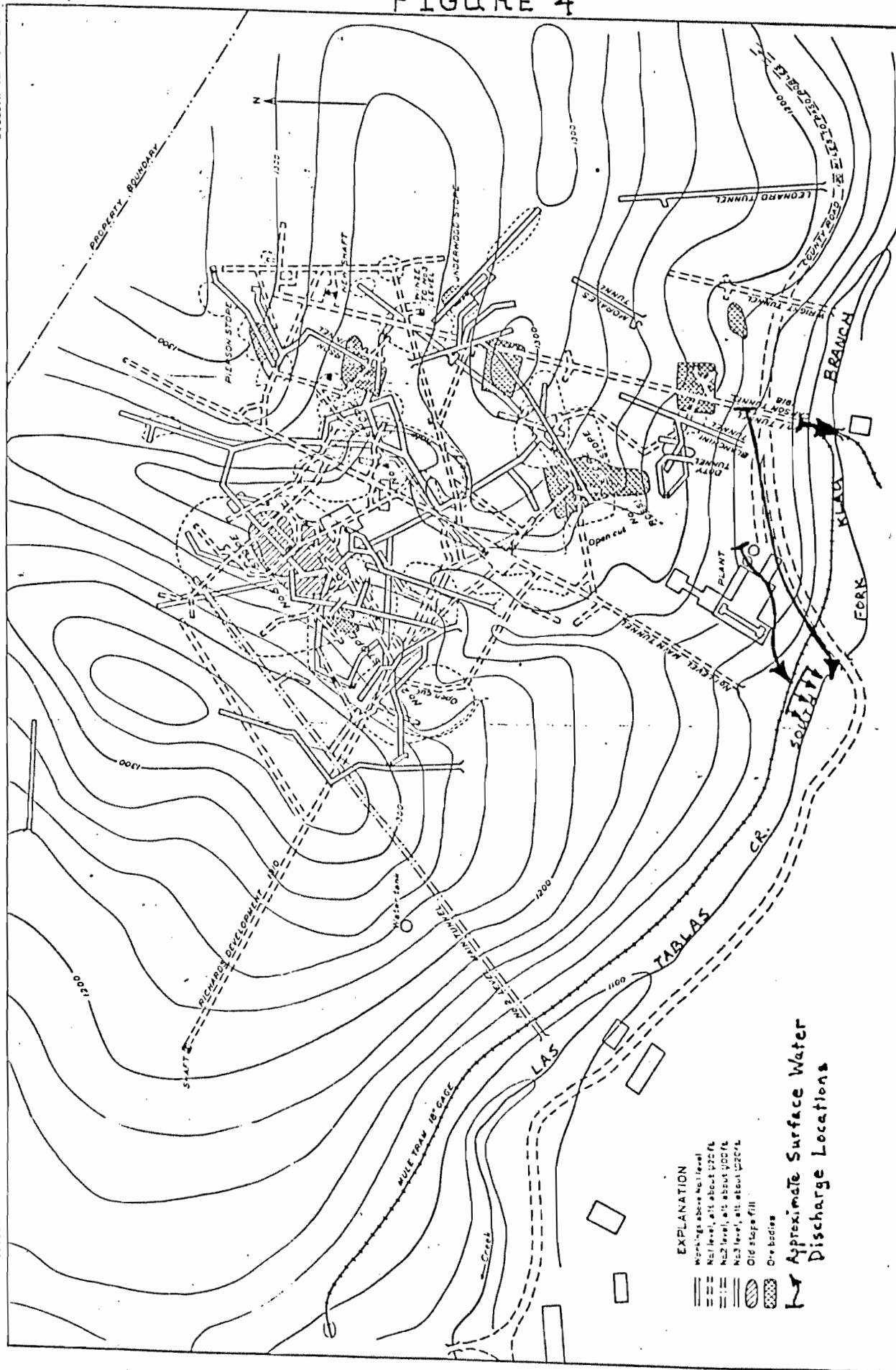


FIGURE 4

ECKEL, 1941
BULLETIN 92 PLATE 11

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



- EXPLANATION**
- Workings above M2 level
 - M2 level, alt. about 1200 ft.
 - M2 level, alt. about 1000 ft.
 - M3 level, alt. about 1200 ft.
 - M3 level, alt. about 1000 ft.
 - Old stopes fill
 - Ore bodies
 - Approximate Surface Water Discharge Locations
 - N

MAP OF KLAU MINE WORKINGS
 0 200 feet
 Contour Interval 20 feet

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 CENTRAL COAST REGION
 81 Higuera Street, Suite 200
 San Luis Obispo, California 93401-5427

MONITORING AND REPORTING PROGRAM NO. 93-48
 FOR
 BUENA VISTA MINES, INC. AND/OR KLAU MINE INC.
 C/O BUENA VISTA MINES INC.
 KLAU MINE
 SAN LUIS OBISPO COUNTY, CALIFORNIA

1. The liquid phase discharged from the Klau Mine to surface waters of the United States from all locations specified in Order No. 93-48 shall be grab sampled and analyzed as follows:

<u>Constituent</u>	<u>Units</u>	<u>Sampling and Analysis Frequency</u>
pH	-	Weekly
Turbidity	NTU	Weekly
Specific Conductance	umhos	Weekly
Aluminum	mg/L	Quarterly during November, February, May, and August
Antimony	"	"
Arsenic	"	"
Barium	"	"
Beryllium	"	"
Boron	"	"
Cadmium	"	"
Chromium	"	"
Cobalt	"	"
Copper	"	"
Iron	"	"
Lead	"	"
Lithium	"	"
Manganese	"	"
Mercury	"	"
Molybdenum	"	"
Nickel	"	"
Selenium	"	"
Silver	"	"
Sodium	"	"
Thallium	"	"
Vanadium	"	"
Zinc	"	"

<u>Constituent</u>	<u>Units</u>	<u>Sampling and Analysis Frequency</u>
Total Dissolved Solids	mg/L	Quarterly during November, February, May and August
Settleable Solids	ml/L	"
Acute Toxicity	-	"
Chronic Toxicity	TUc	"
Cyanide	mg/L	"
Fluoride	"	"
Chloride	"	"
Sulfate	"	"
Dissolved Oxygen	"	"
Color	color units	"
Odor-threshold	units	"

2. This Monitoring and Reporting Program becomes effective May 14, 1993.
3. Monitoring results shall be submitted to the Board by the 30th day of the month following the month of sampling; i.e., November results by December 30, February results by March 30, May results by June 30, and August results by September 30.
4. Monitoring reports will include observations of receiving waters with regard to compliance with Order No. 93-48, C. Receiving Water Limitations.

ORDERED BY: William R. Leonard
 EXECUTIVE OFFICER

May 14, 1993
 DATE