

Appendix D
Historical Spill Records

SUMMARY OF SPILL OF AUGUST 31, 1990

Arimetco/Copper Tek
107 Burch Drive
Yerington, NV 89447
(702) 463-3125

Description of spill:

On August 31, 1990, sometime in the early morning before dawn, leach solution began leaking through a tear in the edge of the liner into a low spot in the road next to the pad. The tear was most probably due to the edge of the liner being loosened in the wind. A total of 1000 to 2000 gallons of 0.23% acid with 1.1 grams per liter copper poured into the low spot during the next two days while repairs were underway, resulting in the spill of 2.3 to 4.6 gallons of pure acid. The volume of the spill was determined by volumetric measurement, length multiplied by width times depth divided by 7.48 gallons/cubic foot. The spill was contained within the perimeter of the fluid management system defined for per #DEV 88039, and no solution escaped through the clay liner. The measurement was quite accurate since all solution was contained.

Should have multiplied there for spill was 50,000 TO 100,000 gallons

↳ but not the calculations

Corrective action:

Remedial action began immediately on the morning of August 31. The pool in the road was bailed with buckets before noon. The solution on the pad was pumped out the morning of September 1 and the pad liner was inspected. At this time the tear was found. After the solution was pumped out, the road bed was dug out with a loader. Six inches of vat leach tails and the top six inches of clay liner in the roadbed were removed. None of the leaking solution percolated through the clay. The removed earth was placed on the leach pad. About five gallons of solution remained, so the dug out area was coated with eight 50-pound bags of lime. The roadbed was then refilled with clay and vat leach tails and raised in elevation to three feet above the original elevation.

Causes and prevention of recurrence:

↑ The spill was caused by a tear in the liner as a result of high winds. The tear allowed solution to escape without flowing over the berm. Spills of this nature will be prevented in the future through the same diligent and careful welding of pad liner and continuous monitoring of berms as is currently practiced. Furthermore, two backup pumps were obtained in order to prevent delays due to pump failure in any future accidents. The dual liner system is confirmed to be a most effective containment system.

Verbal report by RAY SAID TRUCK HAD RUN INTO BERM and tore it !!!

SPILL/RELEASE RECORD

MINE SITE YERINGTON

1. **Date and Time of Spill:** 1/13/91
2. **Material Spilled:** Pregnant leach solution.
3. **Quantity and Concentration of Spill:** 400,000 gal. of .72 grams per liter copper in dilute sulfuric acid concentration of 6 grams per liter.
4. **Location of Spill:** North end of ore heaps at PLS pond.
5. **Reason for Spill:** Pipeline rupture during pumping, probably during ambient temperature variance.
6. **Material Contaminated:** Ore stockpile.
7. **Remedial Actions taken in Response to Spill:**
(attach analytical results supporting remediation)

Plant shut down. PLS and raffinate lines repaired; restart of system to stop overflow; samples taken of contaminated ore; excavation and removal of same material to leach pad; samples taken again. Lime treatment of entire contaminated area in the amount of 10-15 tons and wetted with water to penetrate and neutralize. Neutralized samples taken again to verify neutralization.
8. **Date Remedial Actions Completed:** 1/14/91
9. **Name of Person Responsible for Spill Remediation:** Gary Snyder
10. **Position:** Project Manager
11. **Signature:** _____
12. **Date:** 1/14/91
13. **Incident No.** DEM H910114D

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. **Date and Time of Spill:** 3/29/91
2. **Material Spilled:** PLS
3. **Quantity and Concentration of Spill:** 100 Gallons PLS,
1.3 gpl Cu, 8 gpl H₂SO₄
4. **Location of Spill:** Organic Trap
5. **Reason for Spill:** Coupling leak, coupling was hit with a backhoe bucket.
6. **Material Contaminated:** Tailings used as fill around the Organic Trap.
7. **Remedial Actions taken in response to Spill:**
(attach analytical results supporting remediation)
Material was excavated. This required a plant shut down to replace the coupling and excavate the material to the leach pad.
8. **Date Remedial Actions Completed:** 3/30/91
9. **Name of Person Responsible for Spill Remediation:** M.H. Shipes
10. **Position:** General Manager
11. **Signature** _____
12. **Date:** 3/30/91

SPILL/RELEASE RECORD

MINE SITE _____

1. Date and Time of Spill: 3-29-91
2. Material Spilled: PLS
3. Quantity and Concentration of Spill: 100 gallons PLS 1.3 gpl Cu
8 gpl H₂SO₄
4. Location of Spill:
Organic Trap
5. Reason for Spill: Coupling leak, coupling was hit with
a backhoe bucket.
6. Material Contaminated: Tailings used as fill around
the organic trap.
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Material was excavated. This required a plant
shut down to replace the coupling and excavate
the material to the leach pond.
8. Date Remedial Actions Completed: 3-30-91
9. Name of Person Responsible for Spill Remediation:
10. Position: G.M.
11. Signature: M. W. Shipes
12. Date: 3-30-91

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. **Date and Time of Spill:** 12/31/91
2. **Material Spilled:** 93% Sulfuric Acid
3. **Quantity and Concentration of Spill:** 3 Gallons, 93% H₂SO₄
4. **Location of Spill:** New Tank Farm
5. **Reason for Spill:** Discharge valve on acid truck was not closed tightly, leak on tailings fill.
6. **Material Contaminated:** Tailings used to backfill around Tank Farm.
7. **Remedial Actions taken in response to Spill:**
(attach analytical results supporting remediation)
Tailings excavated to pad and replaced.
8. **Date Remedial Actions Completed:** 1/3/92
9. **Name of Person Responsible for Spill Remediation:** M.H. Shipes
10. **Position:** General Manager
11. **Signature** _____
12. **Date:** 1/3/92

SPILL/RELEASE RECORD

MINE SITE _____

1. Date and Time of Spill: 12 31-91
2. Material Spilled: 93% sulfuric acid
3. Quantity and Concentration of Spill: 3 gallons, 93% H_2SO_4
4. Location of Spill: New tank farm
5. Reason for Spill: Discharge valve on acid truck was not closed tightly, leak on tailings fill.
6. Material Contaminated:
Tailings used to backfill around tank farm.
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Tailings excavated to pad and replaced.
8. Date Remedial Actions Completed: 1-3-92
9. Name of Person Responsible for Spill Remediation: MT Shipis
10. Position:
11. Signature: *MT Shipis*
12. Date: 1-3-92

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. **Date and Time of Spill:** 3/8/92
2. **Material Spilled:** PLS
3. **Quantity and Concentration of Spill:** 400 Gallons PLS,
1.2 gpl Cu, 4 gpl H₂SO₄
4. **Location of Spill:** Leach Pad
5. **Reason for Spill:** Heap toe washed down into solution ditch
with a very small (3-4 GPM) stream topping the berm. The area
had been checked 1 hour 45 minutes earlier.
6. **Material Contaminated:** Ore pile rock.
7. **Remedial Actions taken in response to Spill:**
(attach analytical results supporting remediation)
Wash out caused by a plug in a leach line which popped out.
This section of pipe was replaced. The ore which was
contaminated was shoveled onto the pad.
8. **Date Remedial Actions Completed:** 3/9/92
9. **Name of Person Responsible for Spill Remediation:** M.H. Shipes
10. **Position:** General Manager
11. **Signature** _____
12. **Date:** 3/9/92

SPILL/RELEASE RECORD

MINE SITE

Yerington

1. Date and Time of Spill: March 8, 1992
2. Material Spilled: PLS
3. Quantity and Concentration of Spill: 400 gal 1.2 % Cu 4 % H_2SO_4
4. Location of Spill: leach pad
5. Reason for Spill: Heap toe washed down into solution ditch with a very small (3-4 gpm) stream topping the berm. The area had been checked 1 hr 45 min earlier.
6. Material Contaminated:
One pile rock.
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Wash out caused by a plug in a leach line which popped out. This section of pipe was replaced.
The ore which was contaminated was shoveled onto the pad.
8. Date Remedial Actions Completed: 3-9-92
9. Name of Person Responsible for Spill Remediation: M.H. Shipes
10. Position: General Manager
11. Signature: M.H. Shipes
12. Date:

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. **Date and Time of Spill:** 4/3/92
2. **Material Spilled:** Raffinate
3. **Quantity and Concentration of Spill:** 400 Gallons, 0.1 gpl Cu, 18 gpl H₂SO₄
4. **Location of Spill:** S E corner of P III-X Leach Pad.
5. **Reason for Spill:** Line split, spraying solution over berm edge.
6. **Material Contaminated:** Soil near pad.
7. **Remedial Actions taken in response to Spill:**
(attach analytical results supporting remediation)
Soil excavated to Pad.
8. **Date Remedial Actions Completed:** 4/3/92
9. **Name of Person Responsible for Spill Remediation:** Ron Quisenberry
10. **Position:** Mine Foreman
11. **Signature** _____
12. **Date:** 3/10/92

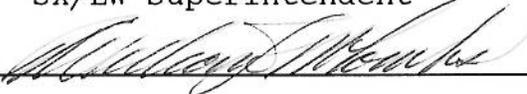
SPILL/RELEASE RECORD

MINE SITE _____

1. Date and Time of Spill: April 3, 1992
2. Material Spilled: Rabbinate
3. Quantity and Concentration of Spill: 300 gallons, oil spl Cu, 18 gpl
H₂SO₄
4. Location of Spill: SE corner of P. 3X Leach Pond
5. Reason for Spill: Line split, spraying solution over
beam edge.
6. Material Contaminated: Soil near pond.
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Soil excavated to pond.
8. Date Remedial Actions Completed: 4-3-92
9. Name of Person Responsible for Spill Remediation: Ron Arisenberry
10. Position: Mine Foreman
11. Signature: _____
12. Date: 4-10-92

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. Date and Time of Spill: 6-20-92
2. Material Spilled: ORGANIC (SX-1 Kerosene) (Acorga Reagent)
3. Quantity and Concentration of Spill: 20 gal
4. Location of Spill: west stripper SX PLANT
5. Reason for Spill: Leak in 2" Temporary line for
Sump pump
6. Material Contaminated: Tailings around plant.
7. Remedial Actions taken in response to Spill:
(attach analytical results supporting remediation)
organic Picked up with vacuum cleaner and
contaminated dirt moved to beach dump area
new tailing Brought in
8. Date Remedial Actions Completed: 6-20-92
9. Name of Person Responsible for Spill Remediation: Bill McCombs
10. Position: SX/EW Superintendent
11. Signature 
12. Date: 6-20-92

Report # H900831A

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. **Date and Time of Spill:** 10/1/92 (Graveyard)
2. **Material Spilled:** Diesel Fuel
3. **Quantity and Concentration of Spill:** +- 15 Gallons
4. **Location of Spill:** Diesel Storage Tank
5. **Reason for Spill:** Overflow of fuel truck.
6. **Material Contaminated:** Parking lot dirt.
7. **Remedial Actions taken in response to Spill:**
(attach analytical results supporting remediation)
Contaminated area scooped and hauled away. Fresh dirt replaced.
8. **Date Remedial Actions Completed:** 10/6/92
9. **Name of Person Responsible for Spill Remediation:** Rick Havenstrite
10. **Position:** Project Manager
11. **Signature** _____
12. **Date:** 10/6/92

SPILL/RELEASE RECORD

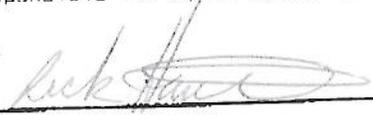
MINE SITE

W. KINGSTON

1. Date and Time of Spill: CRAWFORD 10/1/92
2. Material Spilled: DIESEL FUEL
3. Quantity and Concentration of Spill: +/- 15 GAL
4. Location of Spill: DIESEL STORAGE TANK
5. Reason for Spill: OVERFLOW OF FUEL TRUCK
6. Material Contaminated: PARKING LOT DIRT

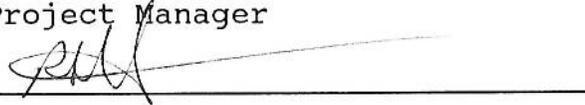
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)

CONTAMINATED AREA SCOOPED + HAULED AWAY - FRESH DIRT REPLACED.

8. Date Remedial Actions Completed: 10/6
9. Name of Person Responsible for Spill Remediation: Rick - Mike T
10. Position: Mgr
11. Signature: 
12. Date: 10/6/92

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. **Date and Time of Spill:** 10/10/92
2. **Material Spilled:** 93% Sulphuric Acid
3. **Quantity and Concentration of Spill:** 200-250 Gallons 93% Sulphuric Acid
4. **Location of Spill:** Acid Storage Tank
5. **Reason for Spill:** Acid tank discharge line ruptured at a fitting.
6. **Material Contaminated:** Ground near Acid storage tank
7. **Remedial Actions taken in response to Spill:**
(attach analytical results supporting remediation)
The spill took place in an unlined but contained area immediately adjacent to the acid storage tank. Any significant drainage in this area is diverted to the #1 leach pad but there wasn't enough quantity for this spill to reach the pad. The area was dug out to dry ground and the contaminated soil was moved to the leach pad area. New soil was hauled in to the spill area.
8. **Date Remedial Actions Completed:** 10/10/92
9. **Name of Person Responsible for Spill Remediation:**
R.Havenstrite
10. **Position:** Project Manager
11. **Signature** 
12. **Date:** 10/12/92

SPILL/RELEASE RECORD

MINE SITE Arimetco/Yerington

1. **Date and Time of Spill:** 1/7/93 (Graveyard)
2. **Material Spilled:** Preg Solution
3. **Quantity and Concentration of Spill:** 8-1200 Gallons
4. **Location of Spill:** Leach Pad
5. **Reason for Spill:** Ice/Snow Accumulation
6. **Material Contaminated:** Ground at foot of Pad
7. **Remedial Actions taken in response to Spill:**
(attach analytical results supporting remediation)
Contaminated area dug out to dry ground and hauled to the leach pad (inside containment) within 2 hours of the event.
8. **Date Remedial Actions Completed:** 1/7/93
9. **Name of Person Responsible for Spill Remediation:** Rick Havenstrite
10. **Position:** Project Manager
11. **Signature**  _____
12. **Date:** 1/7/93

COMPLAINT/SPILL REPORT FORM

Date of incident: 1/7/93 Time: 0700
Date incident reported: 1/8/93 Time: 1030
Reporting person/agency: RICK HAVERTSTRIKE

Address: _____
Phone: 463-3125

Contact person: _____
Phone: _____

Owner/operator of facility: ARIMETCO (MINE)
Address: LYON Co.
Phone: _____

Location of complaint/spill: CHANNEL FROM PREGNANT FOND.

Distance to: surface water _____ Water supply wells _____

Type of material found: H₂SO₄ - PREGNANT SOLN.

Concentrations: 4g/l H₂SO₄

Quantity found: 8,000 - 12,000 GALS

Cause of complaint/spill: CHANNEL CAPACITY REDUCED BY ACCUM. OF ICE & SNOW IN CHANNEL, CAUSING PREGNANT SOLN. TO TOP CHANNEL BANK.

Remedial action taken: CHANNEL CLEARED OF ICE & SNOW BUILDUP. SPILLAGE RETURNED TO FOND. AREA CLEANED UP.

Agencies notified: DEM #H930108B

Report referred to: Bureau MINING
Staff person D. TECCA

Report taken by: D. AMINAO

Comments: _____

NV 930108-02
Report received by superfund program: Initials LA

January 8, 1993

To: All Concerned

From: Rick Havenstrite- Arimetco's Yerington Project

Subject: Class II Spill on 1/7/1993

On the morning of 1/7/1993 approximately 8-12,000 gallons of pregnant solution were accidentally released from containment at the site.

The spill was apparently caused by the accumulation of ice and snow in a ditch which continually carries the PLS solution adjacent to the heap leach pad. The water apparently went over the top of the plastic and eventually partially cut the berm which creates the containment.

The spill was caught quickly (solution showed up on an adjacent haulroad within minutes) and a temporary repair was finished within an hour.

The spilled solution had a very low acid content, about 4 grams per liter. The affected areas were dug out to dry ground and hauled to the pad (inside containment) within 2 hours of the event.

The ditch was thoroughly cleaned out and 2-12 inch pipes were placed in this area to avoid a future reoccurrence.

COMPLAINT/SPILL REPORT FORM
STATE OF NEVADA
DIV. OF ENVIRONMENTAL PROTECTION

DEM # 970204-1784

DATE OF INCIDENT: 2/3/97 TIME: 1845

DATE INCIDENT REPORTED: 2/4/97 TIME: 1040

DO YOU WANT TO REMAIN ANONYMOUS? YES NO

REPORTING PERSON/AGENCY: DENNIS DALTON

ADDRESS: _____ PHONE () Below

CITY: _____ STATE _____ ZIP _____

CONTACT PERSON: ABOVE

ADDRESS: _____ PHONE () _____

CITY: _____ STATE _____ ZIP _____

OWNER/OPERATOR OF FACILITY: ARMISTCO INC.

ADDRESS: 102 BURCH DR. PHONE (702) 463-3125

CITY: YERINGTON STATE NV ZIP 89447

LOCATION OF COMPLAINT/SPILL: NEXT TO PROCESS PLANT

CITY: _____ COUNTY: LYON

T/R/SEC: T13N, R25E QTR. SEC. 9 HWY MARKER: _____ RR MILE: _____

IMPACT/DISTANCE TO: SURFACE WATER NONE SUPPLY WELLS _____

TYPE OF MATERIAL DISCOVERED: H₂SO₄

CONCENTRATION: (ppm, ppb, %) 4g/l

QUANTITY FOUND: 50,000 GALS.

CAUSE OF COMPLAINT/SPILL: OPERATOR ERROR CAUSED POND TO OVERFLOW.

REMEDIAL ACTION TAKEN: CONTAIN SOIL EXCAV. - TO BE TREATED w/ LIME TO NEUTRALIZE.

OVERSIGHT REFERRAL: BUMINING, D. TECCA CCHD _____ WCHD _____

ENFORCEMENT REFERRAL: _____

AGENCIES NOTIFIED: BLM _____ USFS _____ OTHER _____

COMMENTS: _____

(FYI ONLY) CC: _____

REPORT TAKEN BY: Q ANINTAO

NV970204-01

COMPLAINT/SPILL REPORT FORM
STATE OF NEVADA
DIV. OF ENVIRONMENTAL PROTECTION

DEM # NA

DATE OF INCIDENT: 03/30/97 TIME: _____

DATE INCIDENT REPORTED: 03/31/97 TIME: 1030

DO YOU WANT TO REMAIN ANONYMOUS? YES _____ NO _____

REPORTING PERSON/AGENCY: Travis Campbell

ADDRESS: 102 Birch Dr. PHONE () 463-3126

CITY: Yerington STATE NV ZIP 89445

CONTACT PERSON: _____

ADDRESS: _____ PHONE () _____

CITY: _____ STATE _____ ZIP _____

OWNER/OPERATOR OF FACILITY: Arimetco - Copper Mine

ADDRESS: _____ PHONE () _____

CITY: Yerington STATE NV ZIP _____

LOCATION OF COMPLAINT/SPILL: Yerington Project
BEF POND # 4 Leach PAO - CONTAINMENT AREA

CITY: _____ COUNTY: LYON

T/R/SEC: _____ QTR. SEC. _____ HWY MARKER: _____ RR MILE: _____

IMPACT/DISTANCE TO: SURFACE WATER _____ SUPPLY WELLS _____

TYPE OF MATERIAL DISCOVERED: acid solution

CONCENTRATION: (ppm, ppb, %) 8 gm/liter pH 1.8

QUANTITY FOUND: 73,000

CAUSE OF COMPLAINT/SPILL: Sample on going, pumped out
PIPELINE SPLIT - OVER CONTAINMENT BEEM

REMEDIAL ACTION TAKEN: Excavated placed back on heap leach

OVERSIGHT REFERRAL: Mining, Jan Tecca CCHD _____ WCHD _____

ENFORCEMENT REFERRAL: _____

AGENCIES NOTIFIED: ELM _____ USFS _____ OTHER _____

COMMENTS: _____

(FYI ONLY) CC: _____
REPORT TAKEN BY: Marlynn Crockett

SPILL/RELEASE RECORD

To: Roy Shipes

From: Frank Carr

Date: 24, November 1997

Re: PLS Spill/Release [Crusher Surge Pad]

The following table is a Spill/Release Record form that must be kept on file as per the NDEP regulation requirements. This spill/release was estimated to be 300 to 400 gallons of PLS solution. According to the Spill Prevention and Control Plan this is classified as a Class I spill, and is reportable by log entry only and recorded in the Quarterly Water Quality Report.

ITEM	RESPONSE
Date and Time of Spill/Release:	12, November 1997, 4:30 p.m.
Material Spilled:	Pregnant Leach Solution, PLS
Quantity and Concentration of Spill:	~300 to 400 Gallons of PLS, CuSO ₄ Containing <4g/L H ₂ SO ₄
Location of Spill:	West End of Crusher Surge Pad
Reason for Spill/Release:	Heavy rains caused ore fines/silts to fill pad collection ditch, thus plugging drain pipe. Saturated ore fines/silts overflowed pad containment berm.
Material Contaminated:	VLT material.
Remedial Actions Taken in Response to Spill:	A collection sump was dug to contain PLS saturated ore fines/silts. Standing solution was pumped back into containment. The pad drain was unplugged to allow for PLS to drain to VLT pad containment. Additional work may be required to reduce to the chance of future release occurrences.
Date Remedial Actions Completed:	Remedial action is anticipated to be completed by November 24, 1997.
Name of Person Responsible for Spill Remediation:	Joe Sawyer and Paul Davis
Position:	Mine Superintendent and Crusher Foreman Respectively
Signature:	
Date:	

SPILL/RELEASE RECORD

MINE SITE YERLINGTON-MacARTHUR

1. Date and Time of Spill: NOVEMBER 12, 1997 0100 HRS.
2. Material Spilled: PREGNANT LEACH SOLUTION (PLS)
3. Quantity and Concentration of Spill:
300-400 GALLONS @ 17g/L
4. Location of Spill:
EAST SIDE OF CRUSHER-SERGE CONTAINMENT PAD.
5. Reason for Spill:
HEAVY RAINS CAUSED FINES TO FILL UP CONTAINMENT DITCH AND PLUG DISCHARGE PIPE.
6. Material Contaminated:
SURROUNDING EARTHEN MEDIA
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
A COLLECTION SUMP WAS EXCAVATED WITH BERMS TO CONTAIN PLS. PLS WAS THEN PUMPED BACK INTO THE RESPECTIVE CONTAINED PAD. THE DISCHARGE PIPE, WHICH TRANSFER PLS TO THE VLT CONTAINMENT PAD, WAS CLEARED OF DEBRIS, THUS TO ALLOW PLS TO GRAVITY FLOW TO THE VLT CONTAINMENT AREA.
8. Date Remedial Actions Completed: UNKNOWN AT THIS TIME. IT IS ANTICIPATED BY THURSDAY NOVEMBER 13, 1997.
9. Name of Person Responsible for Spill Remediation:
10. Position:
11. Signature: _____
12. Date:

MINE SITE: Yerington/MacArthur Project

SPILL/RELEASE RECORD

To: Roy Shipes

From: Frank Carr

Date: 24, November 1997

Re: PLS Spill/Release [North End of Pad I]

The following table is a Spill/Release Record form that must be kept on file as per the NDEP regulation requirements. This spill/release was estimated to be 650 to 750 of dilute PLS solution. According to the Spill Prevention and Control Plan this is classified as a Class I spill, and is reportable by log entry only and recorded in the Quarterly Water Quality Report.

ITEM	RESPONSE
Date and Time of Spill/Release:	15, November 1997, 4:30 p.m.
Material Spilled:	Pregnant Leach Solution, PLS
Quantity and Concentration of Spill:	~650 to 750 Gallons of PLS, CuSO ₄ Containing <4g/L H ₂ SO ₄
Location of Spill:	North End of Pad I
Reason for Spill/Release:	Ore material sluffed off the pad causing the conveyance ditch to fill. PLS over flowed the containment berm. This was possibly due to heavy rains that fell as well as leach solutions saturating the pad slope.
Material Contaminated:	Soils.
Remedial Actions Taken in Response to Spill:	Pad I leach solution was shut off. Sluffed ore was channeled to allow PLS to drain into its respective pond. All, standing solution, that was out of containment, was pumped into Pad I's PLS pond. Excavation of contaminated material and soils will be excavated and hauled to a lined leach pad.
Date Remedial Actions Completed:	Remedial action is anticipated to be completed by November 24, 1997.
Name of Person Responsible for Spill Remediation:	Robert Schrieder
Position:	Construction/Leach Foreman
Signature:	
Date:	

SPILL/RELEASE RECORD

To: Roy Shipes

From: Frank Carr

Date: 24, Novemeber 1997

Re: PLS Spill/Release

The following table is a Spill/Release Record form that must be kept on file as per the NDEP regulation requirements. This spill/release was estimated, as per Henry Shipes, to be ~800 gallons not exceeding 800 gallons, of dilute PLS solution. According to the Spill Prevention and Control Plan this is classified as a Class I spill, and is reportable by log entry only and recorded in the Quarterly Water Quality Report.

ITEM	RESPONSE
Date and Time of Spill/Release:	20, November 1997
Material Spilled:	Pregnant Leach Solution, PLS
Quantity and Concentration of Spill:	~800 Gallons of PLS, CuSO ₄ Containing <4g/L H ₂ SO ₄
Location of Spill:	North of Check Valves (Near Northern Most Anaconda Vat) PLS Pipe
Reason for Spill/Release:	Plant intake, plant feed pond intake, plugged with debris. Inorder to unplug intake, the PLS feed pipe had to be cut and diverted to the Mega pond. The cut PLS pipe backdrained PLS out of containment.
Material Contaminated:	Soils and Old Anaconda Vat Leach Tails.
Remedial Actions Taken in Response to Spill:	Standing PLS solution was pumped into plastic Tote containers and poured into the Plant Feed Pond. Remaining solution is currently being soaked up with VLT material. This material will then be hauled to a lined heap leach pad. Remaining contaminated material should be excavated to a conservative surface area and depth to remove all contaminated material.
Date Remedial Actions Completed:	Remedial Action Completion date Anticipated for 28, November 1997 or As Soon As Possible.
Name of Person Responsible for Spill Remediation:	Robert Schrieder
Position:	Construction/Leach - Foreman
Signature:	
Date:	

SPILL/RELEASE RECORD

ITEM	RESPONSE
Date and Time of Spill/Release:	20, November 1997
Material Spilled:	Pregnant Leach Solution, PLS
Quantity and Concentration of Spill:	~800 Gallons of PLS, CuSO ₄ Containing <4g/L H ₂ SO ₄
Location of Spill:	North of Check Valves (Near Northern Most Anaconda Vat) PLS Pipe
Reason for Spill/Release:	Plant intake, plant feed pond intake, plugged with debris. Inorder to unplug intake, the PLS feed pipe had to be cut and diverted to the Mega pond. The cut PLS pipe backdrained PLS out of containment.
Material Contaminated:	Soils and Old Anaconda Vat Leach Tails.
Remedial Actions Taken in Response to Spill:	Standing PLS solution is currently being soaked up with VLT material. This material will then be hauled to a lined heap leach pad. Remaining contaminated material will be excavated to a conservative surface area and depth to remove all contaminated material.
Date Remedial Actions Completed:	Remedial Action Completion date Anticipated for 28, November 1997.
Name of Person Responsible for Spill Remediation:	
Position:	
Signature:	
Date:	

SPILL/RELEASE RECORD

To: Roy Shipes

From: Frank Carr

Date: 24, November 1997

Re: PLS Spill/Release [Plant Feed Pond]

The following table is a Spill/Release Record form that must be kept on file as per the NDEP regulation requirements. This spill/release was estimated, as per Larry Houglan and John Williams, to be ~800 gallons not exceeding 800 gallons, of dilute PLS solution. According to the Spill Prevention and Control Plan this is classified as a Class I spill, and is reportable by log entry only and recorded in the Quarterly Water Quality Report. However, since this spill/release was reported to Arimetco by a Weed Heights resident, a phone call was made to the NDEP notifying of the spill.

ITEM	RESPONSE
Date and Time of Spill/Release:	22, November 1997, 7:00 p.m.
Material Spilled:	Pregnant Leach Solution, PLS
Quantity and Concentration of Spill:	~800 Gallons of PLS, CuSO ₄ Containing <4g/L H ₂ SO ₄
Location of Spill:	North End of PLS Plant Feed Pond
Reason for Spill/Release:	A new HDPE pipe extension was fastened to the PLS discharge pipe, that discharges into the PLS Plant Feed Pond. A leak developed in the pipe and caused PLS to over spray out of containment. The PLS flowed down to the main, Weed Heights, access road. This spill was discovered by a Weed Heights resident passing by.
Material Contaminated:	Soils.
Remedial Actions Taken in Response to Spill:	Leak was stopped and repaired. Solution was soaked up with earth material. This material was then hauled to a lined heap leach pad.
Date Remedial Actions Completed:	Remedial action was completed on November 23, 1997.
Name of Person Responsible for Spill Remediation:	John Williams
Position:	Shift Mine Foreman
Signature:	
Date:	

Wabuska

COMPLAINT/SPILL REPORT FORM
STATE OF NEVADA
DIV. OF ENVIRONMENTAL PROTECTION

DEM # 971124-2522

DATE OF INCIDENT: 11-24-97 TIME: 1140

DATE INCIDENT REPORTED: 11-24-97 TIME: 1140

DO YOU WANT TO REMAIN ANONYMOUS? YES NO

REPORTING PERSON/AGENCY: Dotti Davis Arimoto's - Observed leak

ADDRESS: _____ PHONE () 463-3351

CITY: _____ STATE _____ ZIP _____

CONTACT PERSON: Bill Sifford (Arimoto's)

ADDRESS: _____ PHONE (702) 463-3125

CITY: _____ STATE _____ ZIP _____

DISCHARGER/OWNER/OPERATOR OF FACILITY: Arimoto's

ADDRESS: 102 Burch Dr. PHONE (702) 463-3125

CITY: Yerington STATE NV ZIP 89447

LOCATION OF COMPLAINT/SPILL: Lead dock 95 A

CITY/ZIP: Wabuska COUNTY: Lyon

T/R/SEC: _____ Q. Q² _____ MILE MARKER: _____ RR MILE: _____

IMPACT/DISTANCE TO: SURFACE WATER _____ SUPPLY WELLS _____

TYPE OF MATERIAL DISCOVERED: acid - sulfuric

CONCENTRATION: (% , ppm, ppb) _____

QUANTITY FOUND: Unknown

CAUSE OF COMPLAINT/SPILL: tanker backing to soil @ loading dock

REMEDIAL ACTION TAKEN: Unknown, caller will call NHT + DEM

OVERSIGHT REFERRAL: BWM, Tim Murphy CCHD _____ WCHD _____

ENFORCEMENT REFERRAL: _____

AGENCIES NOTIFIED: BLM _____ USFS _____ OTHER _____

COMMENTS: _____

(FYI ONLY) CC: Mining, Dan Tecca

REPORT TAKEN BY: Marilyn Codlett

**QUARTERLY ANNUAL SPILL REPORT RECORD FOR 1998
FOR ARIMETCO, INC**

DATE OF SPILL	TYPE OF SPILL	QUANTITY AND CONCENTRATION	LOCATION OF SPILL	CAUSE OF SPILL	DURATION OF SPILL	REMEDIAL ACTION TAKEN
1st Quarter						
01/15/98	RAFFINATE	>50 GALS	SM SX PLANT	TANK OVERFLOW	2 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD
01/17/98	RAFFINATE	>50 GALS	EAST OF RECIR. TANK	POWER OUTAGE	10 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD
01/17/98	RAFFINATE	>50 GALS	EAST OF RF-1 POND	PACKING ON PUMP LEAKED	10 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD
01/30/98	SULFURIC ACID	50 GALS	EAST OF SX ACID TANK	WELDING TK HIT PIPE	5 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD
02/02/98	RAFFINATE	>50 GALS	SMALL SX PLANT	GRADER BLADE HIT 8" PIPE	2 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD
02/15/98	RAFFINATE	500 GALS.	VLT LEACH PAD	WASHOUT	20 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD
02/20/98	RAFFINATE	100 GALS.	VLT DITCH AND PAD	WELD ON 16" RAF LINE	20 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD
02/21/98	RAFFINATE	240,000 GALS.	SEWAGE LAGOON AREA	WELD ON 16" RAF LINE	EST. 20 TO 30 MIN.	REMOVED CONTAMINATED SOLUTION TO VLT PAD
03/08/98	RAFFINATE	>50 GALS	ROAD VLT SOUTHEND	WELD ON 16" RAF LINE	15 MIN.	REMOVED CONTAMINATED MATERIAL TO VLT PAD

Arimetco, Inc.
26-02106
Yerington, NV 89447

SPILL/RELEASE RECORD

MINE SITE

1. Date and Time of Spill: *Noted on inspection (NOTED INSPECTION)*
2. Material Spilled: *Tailings Crud (oil & water emulsion) (-15-98)*
3. Quantity and Concentration of Spill:
> 50 Gal - Crud (oil & water emulsion)
4. Location of Spill:
East of ~~the~~ Small plant
5. Reason for Spill:
Crud treatment tank overflowed
6. Material Contaminated:
Tailings
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Removed Treatment tank - mined out contaminated material
8. Date Remedial Actions Completed: *2/1/98*
9. Name of Person Responsible for Spill Remediation: *Larry*
10. Position: *SX Foreman*
11. Signature: *Larry W. Douglas*
12. Date: *2-5-98*

GR

To: Roy Shipes
From: Bill Curry, Safety Officer

January 18, 1998

INCIDENT REPORT

At 1930 hours on January 17, 1998, we had a power failure which resulted in a Class I spill around the big tank farm.

The power failure had caused some pumps and lights to shut down. Dennis Creedon saw what was happening and started shutting things down. During the shutdown one of the pumps to the Filter Feed Plant froze-up, causing the main breakers to trip in the Rectifier Room. This then required the plant to be shut down in various places by rapidly closing some crucial valves. In this case, critical time passed while wrenches were found with which to turn them off, since, the valves had no handles on them.

(Point #1-- There need to be handles on the valves.)

By the time the valves were off a Class I spill had occurred into the tank farm forcing personnel to wade knee-deep in organic and electrolyte solutions to turn off suction equipment. These events all happened in minutes.

(Point #2-- Personnel need to be provided with chest high waders that will stand up to organic and electrolytic solutions.)

Larry and Bill Caster were called out to help, and I called out Ron to take care of the electrical problems in connection with the spill. When Ron arrived he did some work in the M.C.C. and in the Rectifier Room. He can't work on the sump pump, in the tank farm, until the area is pumped out and we don't really have any standby pumps to handle an emergency.

(Point #3-- Spare portable pump, for use in emergencies.)

It is now 1300 hours January 18, 1998, and the spill has been cleaned up. The plant will slowly come back online by estimated time -- 1500 hours.

Steve Zimmerman will have worked some 16 hours straight through, and it should be noted that the company has some pretty dedicated employees. They should be recognized for their outstanding work.

Arimetco, Inc.
26-02106
Yerington, NV 89447

SPILL/RELEASE RECORD

MINE SITE

1. Date and Time of Spill: *1/17/98*
2. Material Spilled: *EFFLUENT - ZINC*
3. Quantity and Concentration of Spill:
less than 75 gal
4. Location of Spill:
East of Electrolyte Recirculation Tank
5. Reason for Spill:
Power outage
6. Material Contaminated:
Leach tailings
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
*removed out contaminated material
and hauled to leach pad*
8. Date Remedial Actions Completed: *2/2/98*
9. Name of Person Responsible for Spill Remediation: *Larry*
10. Position: *Sr Foreman*
11. Signature: *Larry at Douglas*
12. Date: *2-5-98*

Report by Jim Zorn
by BMR

NDEP Form 0490

Armetco, Inc.
26-02106
Yerington, NV 89447

PILL/RELEASE RECORD

MINE SITE

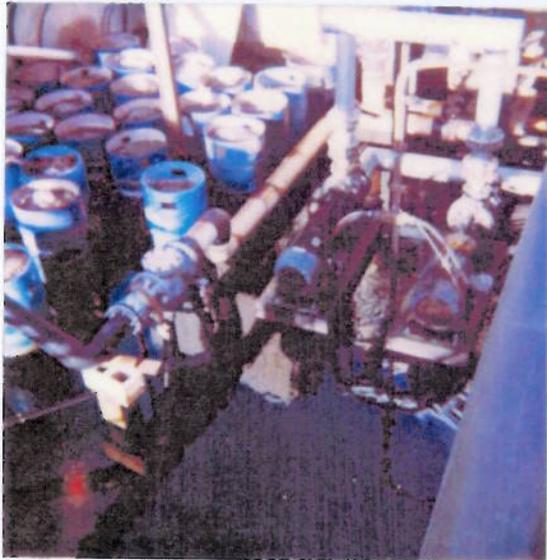
1. ✓ Date and Time of Spill: 1-17-98
2. Material Spilled: Ash/soot
3. ✓ Quantity and Concentration of Spill:
25 gal
4. Location of Spill:
below old ash pond
5. Reason for Spill:
packings on pumps leaked
6. Material Contaminated:
leach code
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Repacked pump; removed contaminated material
8. Date Remedial Actions Completed: 2/2/98
9. Name of Person Responsible for Spill Remediation: Lacy
10. Position: S.K. Foreman
11. Signature: Lacy W. Hough
12. ✓ Date: 2-4-98

Below Raffanite
Pond 1 - Eastside





1-18-98
CLASS I SPILL FROM ELECTROLYTIC
POND
WASHED BACK INTO TANK



1-18-98
TANK FARM FLOODED

SPILL/RELEASE RECORD

MINE SITE YERINGTON

1. Date and Time of Spill: 1/30/98 @ 1400
2. Material Spilled: Acid
3. Quantity and Concentration of Spill: 50 gal 93% Sulfuric Acid
4. Location of Spill: Below SX Acid Tank.
5. Reason for Spill: Welding truck bumped pipe - cracked weld
6. Material Contaminated: Tailings
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Placed out tailing - routed contaminated water to trench pad
8. Date Remedial Actions Completed: 1/30/98 @ 1415
9. Name of Person Responsible for Spill Remediation: Larry
10. Position: SX Foreman
11. Signature: Larry W. Douglas
12. ✓ Date: 2-4-98

Arimetco, Inc.
26-02106
Yerington, NV 89447

ILL/RELEASE RECORD

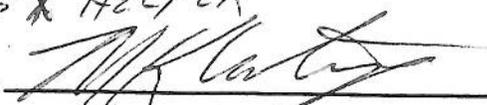
MINE SITE

1. Date and Time of Spill: 2-2-98
2. Material Spilled: Raffinate
3. Quantity and Concentration of Spill:
750 gal.
4. Location of Spill:
Between feed (PLS) Pond and Small Plant
5. Reason for Spill:
Grader blade punctured 8" line
6. Material Contaminated:
Leach tailings
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Cut & welded damaged pipe - removed
Contaminated material and placed on #3 heap.
8. Date Remedial Actions Completed: 2-3-98
9. Name of Person Responsible for Spill Remediation: Robert Schneider
10. Position: Construction Foreman
11. Signature: Robert Schneider
12. Date: 2-6-98

SPILL/RELEASE RECORD

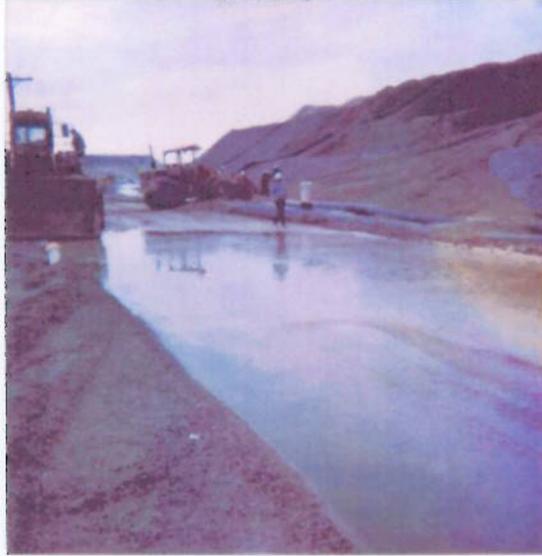
MINE SITE

VERINGTON

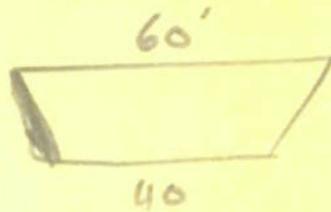
1. Date and Time of Spill: 2-15-98 1930
2. Material Spilled: LEACH SOLUTION (PLS) Raffinate
3. Quantity and Concentration of Spill: (~~1000 GAL.~~ EST.) (500 GALS ACTUAL)
4. Location of Spill: VLT DITCH
5. Reason for Spill: WASH OUT
6. Material Contaminated: YES
7. Remedial Actions taken in Response to Spill: DUG TRENCH TO KEEP
(attach analytical results supporting remediation)
IN ~~LEACH~~ DITCH, CONSTRUCTION WILL CLEAR OUT DITCH
2-16-98.
8. Date Remedial Actions Completed: 2-15-98
9. Name of Person Responsible for Spill Remediation: MAX
10. Position: SX HELPER
11. Signature: 
12. Date: 2-16-98

62-

SLIDE BLOCKED PLS CH.



500 GALLON PLS
2-15-98 . VLT AREA



2.5 inches .

COMPLAINT/SPILL REPORT FORM
STATE OF NEVADA
DIV. OF ENVIRONMENTAL PROTECTION

BS?
No Mining Activity
Behind winners
corner

DEM # 970220-1809

DATE OF INCIDENT: 02/19/97 TIME: 16:30

DATE INCIDENT REPORTED: 02/19/97 TIME: 16:30

DO YOU WANT TO REMAIN ANONYMOUS? YES NO

REPORTING PERSON/AGENCY: Anonymous

ADDRESS: _____ PHONE () _____

CITY: _____ STATE _____ ZIP _____

CONTACT PERSON: _____

ADDRESS: _____ PHONE () _____

CITY: _____ STATE _____ ZIP _____

OWNER/OPERATOR OF FACILITY: Arimateo Copper mine?

ADDRESS: _____ PHONE () _____

CITY: Yerington STATE NV ZIP _____

LOCATION OF COMPLAINT/SPILL: Winners Corner

CITY: Yerington COUNTY: Lyon

T/R/SEC: _____ QTR. SEC. _____ HWY MARKER: _____ RR MILE: _____

IMPACT/DISTANCE TO: SURFACE WATER _____ SUPPLY WELLS _____

TYPE OF MATERIAL DISCOVERED: tailings - Sodium Cyanide?

CONCENTRATION: (ppm, ppb, %) _____

QUANTITY FOUND: ± 4000 sq ft / 100 gds

CAUSE OF COMPLAINT/SPILL: Tractor/scrapor spreading "tailings" 3-4" deep behind convenience store @ winners corner

REMEDIAL ACTION TAKEN: None

OVERSIGHT REFERRAL: Mining, Dan Tecca CCHD _____ WCHD _____

ENFORCEMENT REFERRAL: _____

AGENCIES NOTIFIED: BLM _____ USFS _____ OTHER _____

COMMENTS: _____

(FYI ONLY) CC: _____
REPORT TAKEN BY: Marilyn Crockett

SPILL/RELEASE RECORD

MINE SITE Yerrington, NV.

1. Date and Time of Spill:
2-20-98 9 AM
2. Material Spilled:
Raffinate
3. Quantity and Concentration of Spill:
approximately 1500 gals. - 1400gal Recovered = 100gals
100gals out of containment.
4. Location of Spill:
South side of VLT Leach pad on access Road.
5. Reason for Spill:
Bad weld on 16" Raffinate line.
6. Material Contaminated:
Packed clay and tailings on access Road.
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
The 16" Drisco pipe (Raffinate line) going to the VLT pads sprung a leak in a weld. A pit was dug with the backhoe to capture any spilled solution when the pipe was cut into to reweld. The spilled solution was then pumped into pad #11 on the VLT Pads. The hole was then excavated and contaminated soil was taken to heaps. The hole was then filled with clean tailings
8. Date Remedial Actions Completed:
Monday. 2-23-98
9. Name of Person Responsible for Spill Remediation:
Ray Minifie - Robert Schneider
10. Position:
Lead Miner Construction Foreman
11. Signature: Robert Schneider
12. Date: 2-24-98



SPILL/RELEASE RECORD

MINE SITE YERINGTON MINE

1. Date and Time of Spill: 3-6-98, 5:45 PM.
2. Material Spilled: RAFFINATE SOLUTION
3. Quantity and Concentration of Spill: EST BETWEEN 800-1000 SPILLED
4. Location of Spill: ARIMETCO, INC, YERINGTON MINE ROAD TO VLT AT SOUTHEND OF LEACH PAD.
5. Reason for Spill: RAFFINATE PIPE BROKE AT WORK. MOST THE RAFFINATE STAY IN THE CONTAINMENT DITCH SOME SPILLED OVER INTO THE ROAD
6. Material Contaminated: SOIL ON ROAD AND IMMEDIATE AREA.
7. Remedial Actions taken in Response to Spill: ALL FLUIDS (attach analytical results supporting remediation)
REMOVED WITH FRONT END LOAD. AREA DIKED FOR CONTAINMENT. EST LOSS OF RAFFINATE 750 GALS AFTER CLEAN UP. 750+ GALS IN CONTAINMENT.
8. Date Remedial Actions Completed: 3-6-98
9. Name of Person Responsible for Spill Remediation: GARY ROBERTSON
10. Position: ENVIRONMENTAL MANAGER
11. Signature: Gary Robertson
12. Date: 3-6-98

ATTACHMENT #5

Phone call (702) 687-5300 Reported Spill 6:15 PM.

SPILL/RELEASE RECORD

MINE SITE VERINGTON

1. Date and Time of Spill: ESTIMATE 1230 3/21/98
2. Material Spilled: RAFFINATE SOLUTION, (PH 2.3 tested)
3. Quantity and Concentration of Spill: 240,000 GALLONS OF RAFFINATE
4. Location of Spill: SEWAGE PONDS, NOT IN USE, CLAY LINED.
5. Reason for Spill: LINE COLLAPSED, AT A WELD POINT.
6. Material Contaminated: VLT SOIL AND CLAY IN SEWAGE POND.
7. Remedial Actions taken in Response to Spill: INSTALL 2" 4" LINE (attach analytical results supporting remediation) TO VLT LEACH PAD AND PUMP RAFFINATE SOLUTION TO VLT CONTAINED LEACH PAD.

Returned call 6:03 PM Bolo ? Will notify NDEP.
 DIVISION OF EMERGENCY MGT and NDEP 4:50 PM 2/23/98, WAITED DUTY OFFICE
 Lyon Co Emergency Mgt 4:40 PM 2/23 Rose Peterson CUR
 NRC NOTIFIED CASE # 425736/RUTHERFORD/4:45 PM 2/23

8. Date Remedial Actions Completed:
9. Name of Person Responsible for Spill Remediation: GARY ROBERTSON
10. Position: ENVIRONMENTAL MANAGER
11. Signature: Gary Robertson
12. Date: 2/23/98

Emergency Mgt. # 980224-2668

SPILL / RELEASE RECORD # 980224-2668 MINE SITE: YERINGTON MINE

1. Date and time of spill: At approximately 1230 hours on Feb 21, 1998
2. Material Spilled: Raffinate solution with a pH of 2.3 (solution was tested for pH)
3. Quantity and concentration of spill: 240,000 gallons of raffinate solution with a pH of 2.3
4. Location of spill: Line broke at a weld point directly up hill of two sewage lagoons that were not in service at the time of the spill. This spill was contained on Arimetco property at the Yerington Mine.
5. Reason for spill: Line came apart at a weld point not really sure of cause possibly do to cold weather conditions.
6. Material Contaminated: Sewage pond with clay liner.
7. Remedial Actions taken in response to spill: The line was immediately shut down. A pump and 1000' of 4" drisco pipe was put in place from the sewage ponds to the permitted VLT pad. The raffinate solution was pumped from the sewage ponds to the permitted VLT pad area. The leak detector at the sewage lagoon remained dry throughout this operation. All solution was pumped to the permitted VLT pad. As of March 16, 1998 the lagoon monitor was still dry and the bottom of the lagoon was dry.

Pictures of the cleanup operation are enclosed.

Notification calls were made to NRC, case # 425736/ Rutherford Lyon County Emergency Management, Contact person Rose Peterson. Emergency Management, Mr. Bob Minter was contact person, stated he would contact NDEP. Curiosity Calls to: BLM, Carson City Office and Bureau of Mining Regulations and Reclamation

8. Date remedial actions complete: Feb. 23, 1998.
9. Name of person responsible for spill remediation: Mr. Gary Robertson
10. Position: Environmental Manager for Arimetco, Inc.
12. Date: 2/23/98

If you have any further questions please contact Mr. Gary Robertson at (702) 463-9462, Environmental Office, Arimeto, Inc.

 3-16-98

COMPLAINT/SPILL REPORT FORM
STATE OF NEVADA
DIV. OF ENVIRONMENTAL PROTECTION

DEM # 980224-2668

DATE OF INCIDENT: 02-21-98 TIME: 1900

DATE INCIDENT REPORTED: 02-24-98 TIME: 0815

DO YOU WANT TO REMAIN ANONYMOUS? YES NO

REPORTING PERSON/AGENCY: GARY ROBINSON / ARIMETCO

ADDRESS: 102 BURCH DRIVE PHONE (702) 463-9462

CITY: YERINGTON STATE NV ZIP _____

CONTACT PERSON: GARY ROBINSON

ADDRESS: _____ PHONE () _____

CITY: _____ STATE _____ ZIP _____

DISCHARGER/OWNER/OPERATOR OF FACILITY: ARIMETCO INC.

ADDRESS: _____ PHONE () _____

CITY: _____ STATE _____ ZIP _____

LOCATION OF COMPLAINT/SPILL: _____

CITY/ZIP: _____ COUNTY: LYON

T/R/SEC: _____ Q. Q' _____ MILE MARKER: _____ RR MILE: _____

IMPACT/DISTANCE TO: SURFACE WATER _____ SUPPLY WELLS _____

TYPE OF MATERIAL DISCOVERED: RAFFINATE

CONCENTRATION: (% , ppm , ppb) _____

QUANTITY FOUND: 240,000 GALLONS

CAUSE OF COMPLAINT/SPILL: SPILLED TO SEWAGE PONDS, AS A RESULT OF 12" PIPELINE COLLAPSE.

REMEDIAL ACTION TAKEN: In process of lining ponds + will pump material to heap leach pad

OVERSIGHT REFERRAL: Mining, Dan Tecca CCHD _____ WCHD _____

ENFORCEMENT REFERRAL: _____

AGENCIES NOTIFIED: BLM _____ USFS _____ OTHER _____

COMMENTS: _____

(FYI ONLY) CC: _____

REPORT TAKEN BY: Marilyn Crockett

COMPLAINT/SPILL REPORT FORM
STATE OF NEVADA
DIV. OF ENVIRONMENTAL PROTECTION

DEM # 980309-2693

DATE OF INCIDENT: 03-06-98 TIME: _____

DATE INCIDENT REPORTED: 03-09-98 TIME: _____

DO YOU WANT TO REMAIN ANONYMOUS? YES _____ NO _____

REPORTING PERSON/AGENCY: Gary Robertson / Arimetco

ADDRESS: 102 Burch Dr. PHONE (702) 463-2531

CITY: Yerington STATE NV ZIP 89447

CONTACT PERSON: Gary Robertson

ADDRESS: _____ PHONE () _____

CITY: _____ STATE _____ ZIP _____

DISCHARGER/OWNER/OPERATOR OF FACILITY: Arimetco, Inc

ADDRESS: 102 Burch Dr. PHONE (702) 463-3125

CITY: Yerington STATE NV ZIP 89447

LOCATION OF COMPLAINT/SPILL: Mine Road

CITY/ZIP: Yerington COUNTY: Lyon

T/R/SEC: _____ Q. Q' _____ MILE MARKER: _____ RR MILE: _____

IMPACT/DISTANCE TO: SURFACE WATER _____ SUPPLY WELLS _____

TYPE OF MATERIAL DISCOVERED: Raffinate

CONCENTRATION: (% , ppm , ppb) _____

QUANTITY FOUND: 500-1,000

CAUSE OF COMPLAINT/SPILL: hose failure - release to dirt road

REMEDIAL ACTION TAKEN: Are presently cleaning up by mine personnel

OVERSIGHT REFERRAL: Manning, Dan Jerca CCHD _____ WCHD _____

ENFORCEMENT REFERRAL: _____

AGENCIES NOTIFIED: BLM _____ USFS _____ OTHER _____

COMMENTS: Caller did not report

(FYI ONLY) CC: _____

REPORT TAKEN BY: Marilyn Crockett

3RD CTR.

Class I Spill

ARIMETCO

VERINGTON NV.

SPILL/RELEASE RECORD

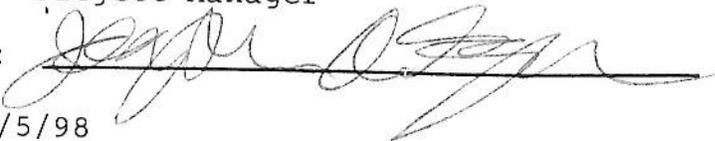
MINE SITE

1. Date and Time of Spill: 7/4/98 - 2:00 P.M.
2. Material Spilled: RAFFINATE SOLUTION.
3. Quantity and Concentration of Spill: 250 GAL - 50' X 50' AREA.
4. Location of Spill: 4X FLOW METER AREA
5. Reason for Spill: WELD ON DRISELL SPLIT.
6. Material Contaminated: GROUND.
7. Remedial Actions taken in Response to Spill: (attach analytical results supporting remediation) TURNED OFF BLT. RAFF LINE. DRAINED LINES. IN BLT DITCH. REPAIRED WELD.
8. Date Remedial Actions Completed: 7/4/98
9. Name of Person Responsible for Spill Remediation: BILL CASLER.
10. Position: SUPER.
11. Signature: Bill Casler
12. Date: 7/6/98

Collected in
VIM
198 SPT.

SPILL/RELEASE RECORD

MINE SITE Yerington

1. Date and Time of Spill: 8/4/98 4:08PM
2. Material Spilled: Raffinate Solution (1% sulfuric acid)
3. Quantity and Concentration of Spill: 50-60 gallons of raffinate 1% H2SO4
4. Location of Spill: VLT pond area. Southwest corner on berm.
5. Reason for Spill: Rupture in pipe
6. Material Contaminated: VLT tailings, which were removed and placed on lined heap leach at VLT.
7. Remedial Actions taken in Response to Spill: Response team called. Low (attach analytical results supporting remediation)
pressure alarm went off at 4:08 PM. At 4:10 project manager called in leak in containment at VLT Pond area. Raffinate to VLT Pond was already being shut down by SX crew. As pressure dropped in line the 50-60 gallon raffinate solution was released and immediately cleaned up and removed to the VLT heap leach lined pad. Environmental was immediately called and responded to initial call. Photo's were taken of release.
8. Date Remedial Actions Completed: 8/4/98 Remedial action completed by 7:00 PM
9. Name of Person Responsible for Spill Remediation: Joseph A. Sawyer
10. Position: Project Manager
11. Signature: 
12. Date: 8/5/98



SPILL/RELEASE RECORD
Phon to EMMER - 9:10 AM & 9:40 AM

SPILL/RELEASE RECORD

MINE SITE

YERINGTON N.D.

1. Date and Time of Spill: 9-7-98
2. Material Spilled: RAFFINATE
3. Quantity and Concentration of Spill: Approx 5000 AT 80% L.
SULFURIC ACID.
4. Location of Spill: SOUTH END. EW+5X PARKING LOT
5. Reason for Spill: WELD FAILED ON 12" DRISSELL LINE
6. Material Contaminated: NATIVE SOIL.
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
REPAIRED LINE AND ARE REMOVING
CONTAMINATED SOIL. PUMPED UP SOLUTION
THAT PUDDLED UP NEXT TO ROADWAY.
8. Date Remedial Actions Completed: 9/8/98
9. Name of Person Responsible for Spill Remediation: BILL CASLER.
10. Position: PLANT SUPER.
11. Signature: Bill Casler
12. Date: 9/8/98

COMPLAINT/SPILL REPORT FORM
STATE OF NEVADA
DIV. OF ENVIRONMENTAL PROTECTION

DEM # NA
DATE OF INCIDENT: 9/7/98 TIME: _____
DATE INCIDENT REPORTED: 9/8/98 TIME: 1527
DO YOU WANT TO REMAIN ANONYMOUS? YES _____ NO _____
REPORTING PERSON/AGENCY: Nicky Bryan / Lyon Co. Commission
ADDRESS: _____ PHONE 702 463-6531
CITY: _____ STATE _____ ZIP _____

CONTACT PERSON: _____
ADDRESS: _____ PHONE () _____
CITY: _____ STATE _____ ZIP _____

DISCHARGER/OWNER/OPERATOR OF FACILITY: Arimetco
ADDRESS: 102 Burch Dr. PHONE (702) 463-3125
CITY: Yerington STATE NV ZIP 89447

LOCATION OF COMPLAINT/SPILL: Arimetco Inc.
W. of Guard shade
CITY/ZIP: Yerington COUNTY: Lyon
T/R/SEC: _____ Q. Q' _____ MILE MARKER: _____ RR MILE: _____

IMPACT/DISTANCE TO: SURFACE WATER _____ SUPPLY WELLS _____
TYPE OF MATERIAL DISCOVERED: Possibly haz. waste

CONCENTRATION: (% , ppm, ppb) _____
QUANTITY FOUND: Unknown

CAUSE OF COMPLAINT/SPILL: White film on Road - bulldozers
moving dirt in area of possible spill

REMEDIAL ACTION TAKEN: _____

OVERSIGHT REFERRAL: Mining, Dan Tecca CCHD _____ WCHD _____
ENFORCEMENT REFERRAL: _____

AGENCIES NOTIFIED: BLM _____ USFS _____ OTHER _____

COMMENTS: Pick Christian - surveyor / Denson Surveying
463-3611
was on scene + noticed this + called it in to
Lyon County.
(FYI ONLY) CC: _____

REPORT TAKEN BY: Marlyn Crockett
Revised 01/14/97
j:\...\spills\spill.frm

SPILL/RELEASE RECORD

MINE SITE VERINGTON N.V.

- 1. Date and Time of Spill: 9/20/98 8:00 PM
- 2. Material Spilled: RELEASED - RAFFINATE
- 3. Quantity and Concentration of Spill: 80 GAL SPILLED WHILE REPAIRING WELD. HAD TO LIFT PIPE OVER BORM.
- 4. Location of Spill: VLT DITCH AT PAD # 11
- 5. Reason for Spill: SPLITE IN 16" DRESSER LINE AT WELD.
- 6. Material Contaminated: NONE

7. Remedial Actions taken in Response to Spill:
 (attach analytical results supporting remediation) CALLED IN CREW TO REPAIR & REPLACE LINE. TURNED LINE BACK ON AT 11:00 PM.

- 8. Date Remedial Actions Completed: 9/20/98
- 9. Name of Person Responsible for Spill Remediation: BILL CASLER
- 10. Position: PLANT SUPER.
- 11. Signature: Bill Casler
- 12. Date: 9/24/98

SPILL/RELEASE RECORD

MINE SITE Verington

1. Date and Time of Spill: 11-4-98
2. Material Spilled: PLS
3. Quantity and Concentration of Spill: 10 gallons
4. Location of Spill: Between 3X & 4X Pads
5. Reason for Spill: Pulled Pipe out of Ditch & it still had a little PLS in it.
6. Material Contaminated: Tailings (VLT)
7. Remedial Actions taken in Response to Spill: Dug it out & put it on Leach Pad.
(attach analytical results supporting remediation)

8. Date Remedial Actions Completed: 11-5-98
9. Name of Person Responsible for Spill Remediation: Dustin Homan
10. Position: Lead man
11. Signature: 
12. Date: 11-5-98

SPILL/RELEASE RECORD

MINE SITE Yerington

1. Date and Time of Spill: 11-5-98
2. Material Spilled: Raff.
3. Quantity and Concentration of Spill: 15 gallons
4. Location of Spill: VLT
5. Reason for Spill: wrap Around on 16" Line was leaking.
6. Material Contaminated: VLT Tailings
7. Remedial Actions taken in Response to Spill: Dug it up + Put it on Leach Pad.
(attach analytical results supporting remediation)

8. Date Remedial Actions Completed: 11-5-98
9. Name of Person Responsible for Spill Remediation: Dustin Aoman
10. Position: Leadman
11. Signature: Dustin Aoman
12. Date: 11-5-98

SPILL/RELEASE RECORD

MINE SITE Yemington

1. Date and Time of Spill: 10/29/99 4am
2. Material Spilled: Electrolyte
3. Quantity and Concentration of Spill:
Approx 20 Gallons 150gpl acid
4. Location of Spill:
North side of EW bldg,
5. Reason for Spill:
Broken supply line to EW Plant
6. Material Contaminated:
Soil adjacent to plant
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
contaminated soil was shoveled
into pickup truck and hauled to
AFX leach Pad for disposal
8. Date Remedial Actions Completed: 10/31/99
9. Name of Person Responsible for Spill Remediation:
10. Position: Project Manager
11. Signature: Joseph D. Ryan
12. Date: 11/01/99

SPILL/RELEASE RECORD

MINE SITE

Yerington

1. Date and Time of Spill: 12/23/99 10am
2. Material Spilled: Dilute Raffinate. Ph 2.5
3. Quantity and Concentration of Spill:
about 50 Gallons of Raffinate
4. Location of Spill:
Between VLT Ditch and Pond, on SE Corner
of Pond.
5. Reason for Spill:
A 16" Gasket began leaking, It allowed
solution to spray 15 feet into the air for about 1 hour
6. Material Contaminated:
soil in Roadway between VLT Pad & Pond,
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)

Damp Soil in roadway was scraped up
with backhoe and hauled onto the
VLT Pad for disposal,

8. Date Remedial Actions Completed: 12/23/99
9. Name of Person Responsible for Spill Remediation: Joe Sawyer
10. Position: Project Mgr
11. Signature: Joe Sawyer
12. Date: 10/23/99

SPILL/RELEASE RECORD

MINE SITE Yerington

1. Date and Time of Spill: 10/5/99 10:30am
2. Material Spilled: Organic Reagent Kerosene
3. Quantity and Concentration of Spill:
Approx. 5 Gallons
4. Location of Spill:
Organic trap
5. Reason for Spill:
Transferring organic from extractor while cleaning
overflowed organic trap
6. Material Contaminated:
Soil next to trap
7. Remedial Actions taken in Response to Spill:
(attach analytical results supporting remediation)
Contaminated soil was shoveled
into buckets and placed on lined
impoundment.
8. Date Remedial Actions Completed: 10/16/99
9. Name of Person Responsible for Spill Remediation: Joe Sawyer
10. Position: Project Manager
11. Signature: Joe Sawyer
12. Date: 10/17/99