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***INTERNATIONAL LAND RECLAMATION  
AND MINE DRAINAGE CONFERENCE***

***AND***

***THIRD INTERNATIONAL CONFERENCE  
ON THE ABATEMENT OF  
ACIDIC DRAINAGE***

***Volume 4 of 4: Abandoned Mine Lands and Topical Issues***

Proceedings of a conference held in Pittsburgh, PA on April 24-29, 1994.  
This conference served as the annual meeting for both the American Society for  
Surface Mining and Reclamation and the Canadian Land Reclamation Association.

Copies of this and the three companion volumes can be obtained by through NTIS.

Volume 1: Mine Drainage - SP 06A-94

Volume 2: Mine Drainage - SP 06B-94

Volume 3: Reclamation and Revegetation - SP 06C-94

Volume 4: Abandoned Mine Lands and Topical Issues - SP 06D-94



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## UNIT OF MEASURE ABBREVIATIONS USED IN THESE PROCEEDINGS

Å	angstrom	mg	milligram
ac	acre	Mg	megagram
Bq	becquerel	min	minute
bu	bushel	mL	milliliter
cal	calorie	mm	millimeter
cm	centimeter	mmho	millimho
cmol	centimole	mol	mole
cps	count per second	mmol	millimole
°C	degree Celsius	MPa	megapascal
d	day	mS	millisiemen
dS	decisiemen	mt	metric ton
ft	foot	mV	millivolt
g	gram	MW	megawatt
gal	gallon	µg	microgram
gpd	gallon per day	µL	microliter
gpm	gallon per minute	µm	micrometer
h	hour	µmho	micromho
ha	hectare	µmol	micromole
hL	hectoliter	<u>N</u>	normal
hp	horse power	N	newton
Hz	hertz	nm	nanometer
in	inch	Pa	pascal
J	joule	pCi	picocurie
K	kelvin	ppb	part per billion
kcal	kilocalorie	ppm	part per million
kg	kilogram	ppt	part per thousand
kHz	kilohertz	psi	pound per square inch
km	kilometer	psig	pound per square inch gauge
kmt	kilo metric ton	r	revolution
kN	kilonewton	rad	radian
kPa	kilopascal	rpm	revolutions per minute
kV	kilovolt	s	second
L	liter	st	short ton
lb	pound	vol %	volume percent
m	meter	wt %	weight percent
<u>M</u>	molar	yd	yard
mA	milliampere	yr	year
meq	milliequivalent		

INTERNATIONAL LAND RECLAMATION AND MINE  
DRAINAGE CONFERENCE AND THIRD INTERNATIONAL  
CONFERENCE ON THE ABATEMENT OF ACIDIC DRAINAGE

Proceedings of a conference serving as the annual meetings of the American Society for Surface Mining and Reclamation, the Canadian Land Reclamation Association, and the West Virginia Surface Mine Drainage Task Force, in conjunction with the Third International Conference on the Abatement of Acidic Drainage.

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ABSTRACT

Mine drainage and mine reclamation are topics of major interest to the mining industry, federal and local governments, and the general public. This publication and its companion three volumes are the proceedings of a conference held in Pittsburgh, Pennsylvania, April 24-29, 1994. There were twelve sessions (69 papers) that dealt with mine drainage, including modeling, geochemistry, prediction, treatment, control strategies, characterization, hydrology, and case studies. These sessions comprise volumes 1 and 2. The six sessions (34 papers) that dealt with reclamation and revegetation of disturbed lands are included in volume 3. Volume 4 includes the six sessions (34 papers) that dealt with such topical issues as fires at abandoned mine sites, subsidence, hydrology, mine wastes, and policy. Poster session presentations are represented by 49 papers and 92 abstracts that have been placed in the back of volumes 2, 3, and 4, consistent with the subject of that volume.

Reference to companies and specific products in these papers does not imply endorsement by the Bureau of Mines.