4.3

Pan American
MINERALS CORP.

COPY

March 8, 1995

Pat Hallinan
Department of Ecology
Eastern Regional Office
N4601 Monroe, Suite 100
Spokane, Washington
99205-1295

RECEIVED
MAR 13 1995

Dear Pat:

Re: Van Stone Mine 1995 First Quarter Water Sample Results

Enclosed are Excel data sheets for ground and surface water sampling sites, as well as Amtest analytical data and quality control sheets.

The next quarterly sampling will be carried out in early April.

At the request of Monica Rolluda of EPA Region 10 we have surveyed residents along Lotze Creek to establish whether they take their water from surface creeks or shallow wells. We have plotted locations on a topographic base map which has been mailed to the EPA directly. Once we receive the head office copies we will mail one to you for your general information.

Zinc prices remain poor, and the mine continues on a care and maintenance basis apart from ongoing reclamation.

Regards,

PAN AMERICAN MINERALS CORP.

Jenna Hardy
Manager, Technical Administration

cc: Monica Rolluda-EPA Region 10

JLH:bjp

ref: 95300055

USEPA SF
1249771

1500-625 HOWE STREET, VANCOUVER, BC CANADA V6C 2T6 • TEL 604.684.1175 • FAX 604.684.0147

Pan American
MINERALS CORP

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Jenna L. Hardy MS, MBA
MANAGER, TECHNICAL ADMINISTRATION

		Van Stone Mine			
		Summary of Water Quality Data			
Name	**1 SW**				
Location	**West Fork Onion Creek**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		15.4	10.7		2.4
pH		8.46	8.35		8.46
Spec. Cond.(1)		286	378		322
Turbidity(2)		0.45	0.25		0.40
Tot. Susp. Solids		4	4		2
Tot. Dislv. Solids		150	280		150
Dissolved Oxy.		9	4.5		13
Chloride		<1	<1		1
Sulfate		35	56		41
Nitrate		0.1	0.14		0.14
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		<0.02
Arsenic		<.001	0.001		0.001
Calcium		42	47		42
Cadmium		0.00005	0.0002		0.00016
Iron		0.05	0.02		0.06
Mercury		<.01	<.01		<0.0002
Magnesium		8.8	12		9.1
Manganese		0.007	0.003		0.003
Sodium		3.5	4.2		3.2
Nickel		<.01	<.01		<0.01
Lead		0.001	0.006		0.008
Silicon		8.3	8.3		7.3
Silver		<.01	<.01		<0.01
Zinc		0.024	0.007		0.048

	Van Stone Mine				
		Summary of Water Quality Data			
Name	**2 SW**				
Location	**Unnamed Creek**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		12	9.1		1.6
pH		8.3	8.14		8.09
Spec. Cond.(1)		287	512		343
Turbidity(2)		2.4	0.48		1.2
Tot. Susp. Solids		8	2		2
Tot. Dislv. Solids		230	350		200
Dissolved Oxy.		7.2	5		7.1
Chloride		<1	<1		1.8
Sulfate		42	110		71
Nitrate		0.05	<.05		0.13
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		<0.02
Arsenic		<.001	0.002		0.002
Calcium		33	50		43
Cadmium		0.00018	0.00015		0.00018
Iron		0.39	0.09		0.23
Mercury		<.01	<.01		<0.0002
Magnesium		11	21		16
Manganese		0.051	0.1		0.046
Sodium		10	11		12
Nickel		<.01	<.01		<0.01
Lead		0.003	0.005		0.002
Silicon		19	15		16
Silver		<.01	<.01		<0.01
Zinc		0.007	<.002		0.016

	Van Stone Mine				
		Summary of Water Quality Data			
Name	**3 SW**				
Location	**Unnamed Creek**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		11	8.9		2.2
pH		8.34	8.31		8.32
Spec. Cond.(1)		189.3	230		199
Turbidity(2)		2.6	1		2.3
Tot. Susp. Solids		3	2		5
Tot. Dislv. Solids		180	180		150
Dissolved Oxy.		6.7	7.2		9.3
Chloride		<1	<1		<1
Sulfate		14	1		16
Nitrate		0.05	<.05		0.14
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		>0.02
Arsenic		0.002	0.002		0.001
Calcium		25	28		25
Cadmium		0.00011	0.00016		0.00111
Iron		0.41	0.15		0.42
Mercury		<.01	<.01		<0.002
Magnesium		5	5.8		5.1
Manganese		0.032	0.053		0.048
Sodium		9.9	10		9.6
Nickel		<.01	<.01		<0.01
Lead		0.002	0.006		0.018
Silicon		19	16		15
Silver		0.058	<.01		<0.01
Zinc		0.008	<.002		0.027

	Van Stone Mine				
		Summary of Water Quality Data			
Name	**4 SW**				
Location	**West Fork Onion Creek**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		17.2	17.2		0.7
pH		8.47	8.3		8.36
Spec. Cond.(1)		277	313		260
Turbidity(2)		0.45	0.48		0.29
Tot. Susp. Solids		12	2		3
Tot. Dislv. Solids		200	240		150
Dissolved Oxy.		10	6.4		9.8
Chloride		<1	<1		<1
Sulfate		41	51		34
Nitrate		0.08	0.09		0.14
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		<0.02
Arsenic		<.001	0.001		0.001
Calcium		44	44		38
Cadmium		0.00019	0.00018		0.00012
Iron		0.42	0.03		0.04
Mercury		<.01	<.01		<0.0002
Magnesium		8.8	10		8.1
Manganese		0.006	0.044		0.003
Sodium		2.9	3.2		2.4
Nickel		<.01	<.01		<0.01
Lead		0.001	0.005		0.002
Silicon		8.2	7.7		6.3
Silver		<.01	<.01		<0.01
Zinc		0.032	0.02		0.041

	Van Stone Mine				
		Summary of Water Quality Data			
Name	**5 SW**				
Location	**East Fork Onion Creek**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		13	10.3		0.01
pH		8.46	8.45		8.54
Spec. Cond.(1)		206	202		161
Turbidity(2)		0.25	0.15		0.23
Tot. Susp. Solids		5	2		1
Tot. Dislv. Solids		130	140		82
Dissolved Oxy.		7.8	8		8.7
Chloride		<1	<1		<1
Sulfate		4.2	76		3.1
Nitrate		<.05	<.05		<0.01
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		<0.02
Arsenic		<.001	<.001		<0.001
Calcium		31	34		24
Cadmium		0.00004	0.00093		0.00014
Iron		0.02	0.04		0.03
Mercury		<.01	<.01		<0.0002
Magnesium		3.9	4.3		3.5
Manganese		<.002	0.044		<0.002
Sodium		1.8	1.8		1.4
Nickel		<.01	<.01		<0.01
Lead		0.001	0.025		0.002
Silicon		6.4	6.7		5.2
Silver		<.01	<.01		<0.01
Zinc		0.003	0.012		0.013

	Van Stone Mine				
		Summary of Water Quality Data			
Name	**6 SW**				
Location	**West Fork Onion Creek**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		13.6	8.2		2.0
pH		8.48	8.37		8.63
Spec. Cond.(1)		334	390		395
Turbidity(2)		0.39	0.16		0.25
Tot. Susp. Solids		<1	1		4
Tot. Dislv. Solids		230	270		200
Dissolved Oxy.		8.9	6.6		7.9
Chloride		<1	<1		<1
Sulfate		79	66		63
Nitrate		0.19	0.16		0.27
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		<0.02
Arsenic		<.001	0.001		<0.001
Calcium		44	59		49
Cadmium		0.00039	0.00033		0.0002
Iron		0.04	0.02		0.09
Mercury		<.01	<.01		<0.0002
Magnesium		12	16		14
Manganese		0.005	0.004		0.003
Sodium		3.2	4.1		3.3
Nickel		<.01	0.03		<0.01
Lead		<0.001	0.005		0.002
Silicon		8.3	9.4		7.1
Silver		<.01	<.01		<0.01
Zinc		0.055	0.066		0.083

	Van Stone Mine				
		Summary of Water Quality Data			
Name	**7 SW**				
Location	**Middle Fork Onion Creek**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		10.4	5.2		na
pH		8.44	8.2		na
Spec. Cond.(1)		141.5	126.8		na
Turbidity(2)		0.27	0.21		na
Tot. Susp. Solids		<1	1		na
Tot. Dislv. Solids		100	86		na
Dissolved Oxy.		9.4	11		na
Chloride		<1	<1		na
Sulfate		11	82		na
Nitrate		<.05	<.05		na
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		na
Arsenic		<.001	0.001		na
Calcium		23	18		na
Cadmium		0.0001	0.00022		na
Iron		0.13	0.04		na
Mercury		<.01	<.01		na
Magnesium		4	3		na
Manganese		0.003	0.004		na
Sodium		1.5	1.3		na
Nickel		<.01	<.01		na
Lead		<0.001	0.006		na
Silicon		6	5.1		na
Silver		<.01	<.01		na
Zinc		0.004	<.002		na
NB: Insuffficient water to take January 1995 sample					

		Van Stone Mine			
		Summary of Water Quality Data			
Name	**8 SW**				
Location	**Creek Near Mine House**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)		10.6	6.9		1.3
pH		8.4	8.42		8.61
Spec. Cond.(1)		194.6	318		269
Turbidity(2)		0.51	0.26		0.35
Tot. Susp. Solids		12	5		5
Tot. Dislv. Solids		130	190		140
Dissolved Oxy.		8.2	5.1		10
Chloride		<1	<1		<1
Sulfate		4.2	11		3.7
Nitrate		0.39	0.26		0.42
Water Chemistry-EPA Method 200.7					
Antimony		<.02	<.02		<0.02
Arsenic		<.001	<.001		<0.001
Calcium		30	38		39
Cadmium		0.00015	0.00018		<0.00002
Iron		0.06	0.07		0.18
Mercury		<.01	<.01		<0.0002
Magnesium		6.3	8.7		9.1
Manganese		0.003	0.01		0.014
Sodium		3.3	3.9		3.8
Nickel		<.01	<.01		<0.01
Lead		0.001	0.007		0.003
Silicon		8.6	7.9		8.3
Silver		<.01	<.01		<0.01
Zinc		0.006	0.004		0.019

		Van Stone Mine			
		Summary of Water Quality Data			
Name	**1 GW**				
Location	**Northwest Corner Of Containment Dike**				
Field & Water	1994				**1995**
Quality Data		July	October		**January**
Temp.(c)					
pH					
Spec. Cond.(1)					
Turbidity(2)		n/a	n/a		n/a
Tot. Susp. Solids		n/a	n/a		n/a
Tot. Dislv. Solids		n/a	n/a		n/a
Dissolved Oxy.		n/a	n/a		n/a
Chloride		n/a	n/a		n/a
Sulfate		n/a	n/a		n/a
Nitrate		n/a	n/a		n/a
Water Chemistry-EPA Method 200.7					
Antimony		n/a			n/a
Arsenic		n/a			n/a
Calcium		n/a			n/a
Cadmium		n/a			n/a
Iron		n/a			n/a
Mercury		n/a			n/a
Magnesium		n/a			n/a
Manganese		n/a			n/a
Sodium		n/a			n/a
Nickel		n/a			n/a
Lead		n/a			n/a
Silicon		n/a			n/a
Silver		n/a			n/a
Zinc		n/a			n/a
Sample to be retaken in September, assuming sufficent volume					
No Water Volume for analysis in October Sample.					
No Water Volume for analysis in January 1995 sample.					

		Van Stone Mine			
		Summary of Water Quality Data			
Name	**2 GW**				
Location	**2nd Well at Tailings**				
Field & Water	1994				**1995**
Quality Data		July	October*		**January**
Temp.(c)			13.2		4.5
pH			7.24		7.56
Spec. Cond.(1)			1086		1071
Turbidity(2)		n/a	920		1200
Tot. Susp. Solids		n/a	600		980
Tot. Dislv. Solids		n/a	890		520
Tot. Organic Carbon		n/a	<1		12
Chloride		n/a	2.1		1.4
Sulfate		n/a	340		370
Nitrate+Nitrite		n/a	2.3		2.0
Water Chemistry-EPA Method 200.7					
Antimony		n/a	0.08		0.09
Arsenic		n/a	0.029		0.016
Calcium		n/a	210		200
Cadmium		n/a	0.00961		0.00425
Iron		n/a	110		64
Mercury		n/a	<.0002		<0.0002
Magnesium		n/a	78		64
Manganese		n/a	3.1		1.5
Sodium		n/a	23		21
Nickel		n/a	0.08		0.06
Lead		n/a	2.9		0.39
Silicon		n/a	130		96
Silver		n/a	<.01		<0.01
Zinc		n/a	0.91		0.45
Sample to be retaken in September, assuming sufficent volume					
* Water level extremely low, difficulty obtaining sufficent sample.					

2/10/95

AMTEST

AmTest Inc.

Professional
Analytical
Services

14603 N.E. 87th St.
Redmond, WA
98052

Fax: 206 883 3495

Tel: 206 885 1664

Pan American Minerals
P.O. Box 32
Colville, WA 99114
Attention: Randy Miller

Dear Randy Miller:

Enclosed you will find the analytical data for the Van Stone Mine project.

The following is a cross correlation of client and laboratory identification for your convenience.

CLIENT ID	MATRIX	AM TEST ID	TEST
SW 8 Creek By Houses	Water	95-A001330	CONV, MET,
SW 6 Creek at Culvert	Water	95-A001331	CONV, MET,
SW 5 Creek above Culvert	Water	95-A001332	CONV, MET,
SW 4 Creek at Bunkhouse	Water	95-A001333	CONV, MET,
SW 3 Creek Above Tailing	Water	95-A001334	CONV, MET,

Your five (5) samples were received at AM TEST on 1/25/95. At the time of receipt, the samples were logged in and properly maintained prior to their subsequent analyses.

The analytical procedures used in the laboratory are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers. Following the analytical data you will find the "Methodology Report". This table includes information relative to detection limits, analysis dates and method references.

Please note that the detection limits that are listed in the body of the report refer to Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
Director of Inorganic Laboratory

Project #: 235

BACT = Bacteriological CONV = Conventional MET = Metal ORG = Organic

ANALYSIS REPORT AMTEST

AmTest Inc.
Professional Analytical Services
14603 N.E. 87th St.
Redmond, WA 98052
Fax: 206 883 3495
Tel: 206 885 1664

Pan American Minerals
P.O. Box 32
Colville, WA 99114
Attention: Randy Miller

Date Received: 1/25/95
Date Reported: 2/10/95

Project Name: Van Stone Mine
Project #: 235

WATER SAMPLES

AM TEST Identification Number	95-A001330
Client Identification	SW 8 Creek By Houses
Sampling Date	1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Chloride (mg/l)	< 1		1.0
Cyanide Weak Acid Diss (mg/l)	< 0.005		0.005
Dissolved Oxygen (mg/l)	10.		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	0.42		0.01
Total Dissolved Solids (mg/l)	140		1.0
Total Suspended Solids (mg/l)	5.0		1.0
Sulfate (mg/l)	3.7		1.0
Turbidity (NTU)	0.35		0.01
Total Metals			
Antimony (mg/l)	< 0.02		0.02
Arsenic (mg/l)	< 0.001		0.001
Calcium (mg/l)	39.		0.10
Cadmium (mg/l)	< 0.00002		0.00002
Iron (mg/l)	0.18		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	9.1		0.10
Manganese (mg/l)	0.014		0.002
Sodium (mg/l)	3.8		0.1
Nickel (mg/l)	< 0.01		0.01
Lead (mg/l)	0.003		0.001
Silicon (mg/l)	8.3		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.019		0.002

ANALYSIS REPORT AMTEST

Pan American Minerals
Randy Miller

Date Received: 1/25/95
Date Reported: 2/10/95

WATER SAMPLES

AM TEST Identification Number 95-A001331
Client Identification SW 6 Creek at Culvert
Sampling Date 1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Chloride (mg/l)	< 1		1.0
Cyanide Weak Acid Diss (mg/l)	< 0.005		0.005
Dissolved Oxygen (mg/l)	7.9		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	0.27		0.01
Total Dissolved Solids (mg/l)	200		1.0
Total Suspended Solids (mg/l)	4.0		1.0
Sulfate (mg/l)	63.		10
Turbidity (NTU)	0.25		0.01
Total Metals			
Antimony (mg/l)	< 0.02		0.02
Arsenic (mg/l)	< 0.001		0.001
Calcium (mg/l)	49.		0.10
Cadmium (mg/l)	0.00020		0.00002
Iron (mg/l)	0.09		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	14.		0.10
Manganese (mg/l)	0.003		0.002
Sodium (mg/l)	3.3		0.1
Nickel (mg/l)	< 0.01		0.01
Lead (mg/l)	0.002		0.001
Silicon (mg/l)	7.1		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.083		0.002

ANALYSIS REPORT AMTEST

Pan American Minerals
Randy Miller

Date Received: 1/25/95
Date Reported: 2/10/95

WATER SAMPLES

AM TEST Identification Number 95-A001332
Client Identification SW 5 Creek above Culvert
Sampling Date 1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Chloride (mg/l)	< 1		1.0
Cyanide Weak Acid Diss (mg/l)	< 0.005		0.005
Dissolved Oxygen (mg/l)	8.7		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	< 0.01		0.01
Total Dissolved Solids (mg/l)	82.		1.0
Total Suspended Solids (mg/l)	1.0		1.0
Sulfate (mg/l)	3.1		1.0
Turbidity (NTU)	0.23		0.01
Total Metals			
Antimony (mg/l)	< 0.02		0.02
Arsenic (mg/l)	< 0.001		0.001
Calcium (mg/l)	24.		0.10
Cadmium (mg/l)	0.00014		0.00002
Iron (mg/l)	0.03		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	3.5		0.10
Manganese (mg/l)	< 0.002		0.002
Sodium (mg/l)	1.4		0.1
Nickel (mg/l)	< 0.01		0.01
Lead (mg/l)	0.002		0.001
Silicon (mg/l)	5.2		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.013		0.002

ANALYSIS REPORT AMTEST

Pan American Minerals
Randy Miller

Date Received: 1/25/95
Date Reported: 2/10/95

WATER SAMPLES

AM TEST Identification Number 95-A001333
Client Identification SW 4 Creek at Bunkhouse
Sampling Date 1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Chloride (mg/l)	< 1		1.0
Cyanide Weak Acid Diss (mg/l)	< 0.005		0.005
Dissolved Oxygen (mg/l)	9.8		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	0.14		0.01
Total Dissolved Solids (mg/l)	150		1.0
Total Suspended Solids (mg/l)	3.0		1.0
Sulfate (mg/l)	34.		10
Turbidity (NTU)	0.29		0.01
Total Metals			
Antimony (mg/l)	< 0.02		0.02
Arsenic (mg/l)	0.001		0.001
Calcium (mg/l)	38.		0.10
Cadmium (mg/l)	0.00012		0.00002
Iron (mg/l)	0.04		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	8.1		0.10
Manganese (mg/l)	0.003		0.002
Sodium (mg/l)	2.4		0.1
Nickel (mg/l)	< 0.01		0.01
Lead (mg/l)	0.002		0.001
Silicon (mg/l)	6.3		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.041		0.002

ANALYSIS REPORT AMTEST

Pan American Minerals
Randy Miller

Date Received: 1/25/95
Date Reported: 2/16/95

WATER SAMPLES

AM TEST Identification Number 95-A001334
Client Identification SW 3 Creek Above Tailings
Sampling Date 1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Chloride (mg/l)	< 1		1.0
Cyanide Weak Acid Diss (mg/l)	< 0.005		0.005
Dissolved Oxygen (mg/l)	9.3		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	0.14		0.01
Total Dissolved Solids (mg/l)	150		1.0
Total Suspended Solids (mg/l)	5.0		1.0
Sulfate (mg/l)	16.		1.0
Turbidity (NTU)	2.3		0.01
Total Metals			
Antimony (mg/l)	< 0.02		0.02
Arsenic (mg/l)	0.001		0.001
Calcium (mg/l)	25.		0.10
Cadmium (mg/l)	0.00111		0.00002
Iron (mg/l)	0.42		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	5.1		0.10
Manganese (mg/l)	0.048		0.002
Sodium (mg/l)	9.6		0.1
Nickel (mg/l)	< 0.01		0.01
Lead (mg/l)	0.018		0.001
Silicon (mg/l)	15.		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.027		0.002

AMTEST

Am Test Inc.

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14603 N.E. 87th St.
Redmond, WA
98052

Fax: 206 883 3495

Tel: 206 885 1664

METHODOLOGY REPORT

AM TEST ID 95-A001330
CLIENT ID SW 8 Creek By Houses

MATRIX : Water
SAMPLED: 1/24/95

ANALYTE	UNITS	METHOD NUMBER	METHOD REFERENCE	DETECTION LIMIT *	DATE OF ANALYSIS
Chloride	mg/l	325.2	EPA	1.0	1/31/95
Cyanide(Weak&Dissociable)	mg/l	412H	SM	0.005	1/27/95
Dissolved Oxygen	mg/l	360.1	EPA	1.0	1/25/95
Ammonia Nitrogen	mg/l	350.1	EPA	0.005	2/ 1/95
Nitrate + Nitrite	mg/l	353.2	EPA	0.010	1/26/95
Total Dissolved Solids	mg/l	160.1	EPA	1.0	2/ 2/95
Total Suspended Solids	mg/l	160.2	EPA	1.0	2/ 1/95
Sulfate	mg/l	375.4	EPA	1.0	2/ 7/95
Turbidity	NTU	180.1	EPA	0.01	1/26/95
Silver	mg/l	200.7	EPA	0.01	2/ 2/95
Arsenic	mg/l	206.2	EPA	0.001	2/ 3/95
Calcium	mg/l	200.7	EPA	0.10	2/ 2/95
Cadmium	mg/l	213.2	EPA	0.00002	2/ 8/95
Iron	mg/l	200.7	EPA	0.01	2/ 2/95
Mercury	mg/l	245.1	EPA	0.0002	2/ 3/95
Magnesium	mg/l	200.7	EPA	0.10	2/ 2/95
Manganese	mg/l	200.7	EPA	0.002	2/ 2/95
Sodium	mg/l	200.7	EPA	0.5	2/ 2/95
Nickel	mg/l	200.7	EPA	0.01	2/ 2/95
Lead	mg/l	239.2	EPA	0.001	2/ 3/95
Antimony	mg/l	200.7	EPA	0.02	2/ 2/95
Silicon	mg/l	200.7	EPA	0.1	2/ 2/95
Zinc	mg/l	200.7	EPA	0.002	2/ 2/95
Acid Dig.(Tot Metals)		3010	EPA		1/31/95

SM = Standard Methods for the Examination of Water and Wastewater 18th ed.
SW-846 = Test Methods for Evaluating Solid Waste Physical/Chemical Methods
EPA = Methods for Chemical Analysis of Water and Wastes 1983
* Instrument Detection Limit

AMTEST

Client: Pan American Minerals

Date Received: 1/25/95

Associated
Sample Numbers: 95-A001330 to A001334
& 95-A001346 to A001348

Date Analyzed: 2/02/95

QUALITY CONTROL - METHOD BLANK
PLASMA SPECTROGRAPHIC ANALYSIS BY EPA METHOD 200.7

ELEMENTS		METHOD BLANK #1 (mg/l)	METHOD BLANK #2 (mg/l)	DETECTION LIMITS (mg/l)
Silver	Ag	ND	ND	0.010
Calcium	Ca	ND	ND	0.10
Iron	Fe	0.03	0.03	0.01
Magnesium	Mg	ND	ND	0.10
Manganese	Mn	ND	ND	0.002
Sodium	Na	ND	ND	0.50
Nickel	Ni	ND	ND	0.01
Antimony	Sb	ND	ND	0.02
Silica	Si	0.11	0.72	0.10
Zinc	Zn	ND	0.02	0.002

ND= not detected; All results reported in (mg/l).

AMTEST

Client: Pan American Minerals

Date Received: 1/25/95

Associated
Sample Numbers: 95-A001330 to A001334
& 95-A001346 to A001348

Date Analyzed: 2/02/95

PLASMA SPECTROGRAPHIC ANALYSIS BY EPA METHOD 200.7

ELEMENTS		TRUE VALUE (ppm)	RESULTS (mg/l)	RECOVERY (%)	DETECTION LIMITS (mg/l)
Silver	Ag	0.2	0.18	90	0.010
Cadmium	Cd	2	1.90	95	0.002
Iron	Fe	2	2.00	100	0.01
Magnesium	Mg	10	10.00	100	0.10
Manganese	Mn	2	2.00	100	0.002
Sodium	Na	20	19.00	95	0.50
Nickel	Ni	2	2.00	100	0.01
Antimony	Sb	2	1.90	95	0.02
Zinc	Zn	2	1.90	95	0.002

ND = not detected; All results reported in (mg/l).

AMTEST

Client: Pan American Minerals

Date Received: 1/25/95

Associated
Sample Numbers: 95-A001330 to A001334
& 95-A001346 to A001348

Date Analyzed: 2/02/95

INDUCTIVELY COUPLED PLASMA – EPA METHOD 200.7
DUPLICATE ANALYSIS Sample #: 95-A001330

ELEMENT		REPLICATE #1 (mg/l)	REPLICATE #2 (mg/l)	RELATIVE PERCENT DIFFERENCE (%)	DETECTION LIMITS (mg/l)
Silver	Ag	< 0.010	< 0.010	-	0.010
Calcium	Ca	39	36	8.00	0.10
Iron	Fe	0.18	0.14	25.00	0.01
Magnesium	Mg	9.1	8.5	6.82	0.10
Manganese	Mn	0.014	0.01	33.33	0.002
Sodium	Na	3.8	3.5	8.22	0.50
Nickel	Ni	< 0.01	< 0.01	-	0.01
Antimony	Sb	< 0.02	< 0.02	-	0.02
Silicon	Si	8.3	7.8	6.21	0.10
Zinc	Zn	0.019	0.022	14.63	0.002

All results reported in (mg/l).

AMTEST

Client: Pan American Minerals

Date Received: 1/25/95

Associated
Sample Numbers: 95-A001330 to A001334
& 95-A001346 to A001348

Date Analyzed: 2/02/95

INDUCTIVELY COUPLED PLASMA – EPA METHOD 200.7

SPIKE RECOVERY DATA

Sample #: 95-A001331

ELEMENT		SAMPLE CONC. (mg/l)	SAMPLE + SPIKE (mg/l)	SPIKE ADDED (mg/l)	RECOVERY (%)	DETECTION LIMITS (mg/l)
Calcium	Ca	49	63	10	140.0	0.10
Iron	Fe	0.09	0.51	0.5	84.0	0.01
Magnesium	Mg	14	24	10	100.0	0.10
Manganese	Mn	0.003	0.88	1.0	87.7	0.002
Sodium	Na	3.3	13	10	97.0	0.50
Nickel	Ni	< 0.01	0.93	1.0	93.0	0.01
Antimony	Sb	< 0.02	0.56	0.5	112.0	0.02
Zinc	Zn	0.083	0.989	1.0	90.6	0.002

All results reported in (mg/l).

AVTEST
AVTEST Inc.
Professional Analytical Services
14603 N.E. 87th St.
Redmond, WA
98052
Fax: 206 883 3495
Tel: 206 885 1664

CHAIN OF CUSTODY RECORD

PROJ. NO.: 235

PROJECT NAME: Van Stone Mine

SAMPLERS: (Signature) Randy H. Miller

Client Name: Pan American Minerals

Client Address: PO Box 32 Colville 99114

Client Phone: (509) 684-7954

Contact Person: Randy Miller

P.O. No.:

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS						
30 W8	4-24	8:30 AM			Creek by houses	5						
6 W7					" above Pit	5						Not available no sample
1 W6		9:00			creek at culvert	5						
2 W5		9:15 AM			creek above culvert	5						
3 W4		9:40			creek at bunkhouse	5						
4 W5					" above tailings	5						
2	See other sheet				" below "	5						

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature) Cleat Moses	Date/Time 1/25/25 1330	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

2/10/95

AMTEST

AmTest Inc.

Professional
Analytical
Services

14603 N.E. 87th St.
Redmond, WA
98052

Fax: 206 883 3495

Tel: 206 885 1664

Pan American Minerals
P.O. Box 32
Colville, WA 99114
Attention: Randy Miller

Dear Randy Miller:

Enclosed you will find the analytical data for the Van Stone Mine project.

The following is a cross correlation of client and laboratory identification for your convenience.

CLIENT ID	MATRIX	AM TEST ID	TEST
SW2 → 2 Creek Below Tailings	Water	95-A001346	CONV, MET,
SW1 Creek By School	Water	95-A001347	CONV, MET,
WW2 Water Well 2	Water	95-A001348	CONV, MET,

Your three (3) samples were received at AM TEST on 1/25/95. At the time of receipt, the samples were logged in and properly maintained prior to their subsequent analyses.

The analytical procedures used in the laboratory are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers. Following the analytical data you will find the "Methodology Report". This table includes information relative to detection limits, analysis dates and method references.

Please note that the detection limits that are listed in the body of the report refer to Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
Director of Inorganic Laboratory

Project #: 235

BACT = Bacteriological CONV = Conventional MET = Metal ORG = Organic

ANALYSIS REPORT AMTEST

Pan American Minerals
Randy Miller

Date Received: 1/25/95
Date Reported: 2/10/95

WATER SAMPLES

AM TEST Identification Number 95-A001347
Client Identification SW1 Creek By School
Sampling Date 1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Chloride (mg/l)	1.0		1.0
Cyanide Weak Acid Diss (mg/l)	< 0.005		0.005
Dissolved Oxygen (mg/l)	13.		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	0.14		0.01
Total Dissolved Solids (mg/l)	150		1.0
Total Suspended Solids (mg/l)	2.0		1.0
Sulfate (mg/l)	41.		10
Turbidity (NTU)	0.40		0.01
Total Metals			
Antimony (mg/l)	< 0.02		0.02
Arsenic (mg/l)	0.001		0.001
Calcium (mg/l)	42.		0.10
Cadmium (mg/l)	0.00016		0.00002
Iron (mg/l)	0.06		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	9.1		0.10
Manganese (mg/l)	0.003		0.002
Sodium (mg/l)	3.2		0.1
Nickel (mg/l)	< 0.01		0.01
Lead (mg/l)	0.008		0.001
Silicon (mg/l)	7.3		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.048		0.002

ANALYSIS REPORT AMTEST

AmTest Inc.
Professional Analytical Services
14603 N.E. 87th St.
Redmond, WA 98052
Fax: 206 883 3495
Tel: 206 885 1664

Pan American Minerals
P.O. Box 32
Colville, WA 99114
Attention: Randy Miller

Date Received: 1/25/95
Date Reported: 2/10/95

Project Name: Van Stone Mine
Project #: 235

WATER SAMPLES

AM TEST Identification Number 95-A001346
Client Identification 2 Creek Below Tailings (SW2)
Sampling Date 1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Chloride (mg/l)	1.8		1.0
Cyanide Weak Acid Diss (mg/l)	< 0.005		0.005
Dissolved Oxygen (mg/l)	7.1		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	0.13		0.01
Total Dissolved Solids (mg/l)	200		1.0
Total Suspended Solids (mg/l)	2.0		1.0
Sulfate (mg/l)	71.		10
Turbidity (NTU)	1.2		0.01
Total Metals			
Antimony (mg/l)	< 0.02		0.02
Arsenic (mg/l)	0.002		0.001
Calcium (mg/l)	43.		0.10
Cadmium (mg/l)	0.00018		0.00002
Iron (mg/l)	0.23		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	16.		0.10
Manganese (mg/l)	0.046		0.002
Sodium (mg/l)	12.		0.1
Nickel (mg/l)	< 0.01		0.01
Lead (mg/l)	0.002		0.001
Silicon (mg/l)	16.		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.016		0.002

ANALYSIS REPORT AMTEST

Pan American Minerals
Randy Miller

Date Received: 1/25/95
Date Reported: 2/10/95

WATER SAMPLES

AM TEST Identification Number 95-A001348
Client Identification WW2 Water Well 2
Sampling Date 1/24/95

PARAMETER	RESULT	Q	D.L.
Conventionals			
Total Organic Carbon (mg/l)	12.		1.0
Chloride (mg/l)	1.4		1.0
Ammonia Nitrogen (mg/l)	< 0.005		0.005
Nitrate + Nitrite Nitrogen (mg/l)	2.0		0.01
Total Dissolved Solids (mg/l)	520		1.0
Total Suspended Solids (mg/l)	980		1.0
Sulfate (mg/l)	370		10
Turbidity (NTU)	1200		0.01
Total Metals			
Antimony (mg/l)	0.09		0.02
Arsenic (mg/l)	0.016		0.001
Calcium (mg/l)	200		0.10
Cadmium (mg/l)	0.00425		0.00002
Iron (mg/l)	64.		0.01
Mercury (mg/l)	< 0.0002		0.0002
Magnesium (mg/l)	64.		0.10
Manganese (mg/l)	1.5		0.002
Sodium (mg/l)	21.		0.1
Nickel (mg/l)	0.06		0.01
Lead (mg/l)	0.39		0.001
Silicon (mg/l)	96.		0.10
Silver (mg/l)	< 0.01		0.01
Zinc (mg/l)	0.45		0.002

AMTEST

AmTest Inc.

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Redmond, WA
98052

Fax: 206 883 3495

Tel: 206 885 1664

METHODOLOGY REPORT

AM TEST ID 95-A001346
CLIENT ID 2 Creek Below Tailings

MATRIX : Water
SAMPLED: 1/24/95

ANALYTE	UNITS	METHOD NUMBER	METHOD REFERENCE	DETECTION LIMIT *	DATE OF ANALYSIS
Chloride	mg/l	325.2	EPA	1.0	1/31/95
Cyanide(Weak&Dissociable)	mg/l	412H	SM	0.005	1/27/95
Dissolved Oxygen	mg/l	360.1	EPA	1.0	1/25/95
Ammonia Nitrogen	mg/l	350.1	EPA	0.005	2/ 1/95
Nitrate + Nitrite	mg/l	353.2	EPA	0.010	1/26/95
Total Dissolved Solids	mg/l	160.1	EPA	1.0	2/ 2/95
Total Suspended Solids	mg/l	160.2	EPA	1.0	2/ 1/95
Sulfate	mg/l	375.4	EPA	1.0	2/ 7/95
Turbidity	NTU	180.1	EPA	0.01	1/26/95
Silver	mg/l	200.7	EPA	0.01	2/ 2/95
Arsenic	mg/l	206.2	EPA	0.001	2/ 3/95
Calcium	mg/l	200.7	EPA	0.10	2/ 2/95
Cadmium	mg/l	213.2	EPA	0.00002	2/ 8/95
Iron	mg/l	200.7	EPA	0.01	2/ 2/95
Mercury	mg/l	245.1	EPA	0.0002	2/ 3/95
Magnesium	mg/l	200.7	EPA	0.10	2/ 2/95
Manganese	mg/l	200.7	EPA	0.002	2/ 2/95
Sodium	mg/l	200.7	EPA	0.5	2/ 2/95
Nickel	mg/l	200.7	EPA	0.01	2/ 2/95
Lead	mg/l	239.2	EPA	0.001	2/ 3/95
Antimony	mg/l	200.7	EPA	0.02	2/ 2/95
Silicon	mg/l	200.7	EPA	0.1	2/ 2/95
Zinc	mg/l	200.7	EPA	0.002	2/ 2/95
Acid Dig.(Tot Metals)		3010	EPA		1/31/95

SM = Standard Methods for the Examination of Water and Wastewater 18th ed.
SW-846 = Test Methods for Evaluating Solid Waste Physical/Chemical Methods
EPA = Methods for Chemical Analysis of Water and Wastes 1983
* Instrument Detection Limit

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - BLANK

AM TEST Sample Number	BLANK
Client Identification	-----

ANALYTES	UNITS	RESULTS
Dissolved Oxygen	mg/l	7.5
Nitrate + Nitrite Nitrogen	mg/l	ND
Cyanide (Weak & Dissociable)	mg/l	ND
Chloride	mg/l	ND
Ammonia Nitrogen	mg/l	ND
Total Dissolved Solids	mg/l	1.0
Total Suspended Solids	mg/l	ND
Arsenic	mg/l	ND
Lead	mg/l	ND
Mercury	mg/l	ND
Cadmium	mg/l	ND
Sulfate	mg/l	ND

ND = Not Detected

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001330 through 95-A001334.

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - DUPLICATES

ANALYTES/SAMPLE NOS.		SAMPLE VALUE (mg/l)	DUPLICATE VALUE (mg/l)	RELATIVE PERCENT DIFFERENCE (%)
Dissolved Oxygen	95-A001333	9.8	9.2	6.3
Nitrate + Nitrite Nitrogen	95-A001330	0.42	0.42	0.
Cyanide (Weak & Dissociable)	95-A001330	<0.005	<0.005	-
Chloride	95-A001330	<1.	<1.	-
Ammonia Nitrogen	95-A001330	<0.005	<0.005	-
Total Dissolved Solids	95-A001139	150.	170.	12.5
Total Suspended Solids	95-A001330	5.0	8.0	46.2
Arsenic	95-A001324	0.052	0.053	1.9
Lead	95-A001330	0.003	0.003	0.
Mercury	95-A001324	<0.0002	<0.0002	-
Cadmium	95-A001330	<0.00002	<0.00002	-
Sulfate	95-A001330	3.7	3.2	14.5

< = less than

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001330 through 95-A001334.

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - MATRIX SPIKES

ANALYTES/SAMPLE NOS.	SAMPLE VALUE (mg/l)	SAMPLE + SPIKE (mg/l)	SPIKE CONCENTRATION (mg/l)	RECOVERY (%)
Nitrate + Nitrite Nitrogen 95-A001331	0.27	0.52	0.25	100.
Cyanide (Weak & Dissociable) 95-A001331	<0.005	0.22	0.20	110.
Chloride 95-A001331	<1.	49.	50.	98.
Ammonia Nitrogen 95-A001331	<0.005	0.47	0.50	94.
Arsenic 95-A001325	0.053	0.082	0.025	116.
Lead 95-A001331	0.002	0.025	0.025	92.
Mercury 95-A001325	<0.0002	0.0057	0.0050	114.
Cadmium 95-A001331	0.00020	0.00221	0.00200	100.
Sulfate 95-A001331	63.	290.	250.	90.

< = less than

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001330 through 95-A001334.

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - STANDARD REFERENCE MATERIALS

ANALYTES/SRM NOS.		SRM VALUE (mg/l)	TRUE VALUE (mg/l)	RECOVERY (%)
Nitrate + Nitrite Nitrogen	WS 33	11.8	11.2	105.
Cyanide (Weak & Dissociable)	WS 31	0.253	0.270	94.
Chloride	WP 31	203.	199.	102.
Ammonia Nitrogen	WP 30	5.64	5.50	103.
Total Dissolved Solids	TDS CK STD	326.	350.	93.
Total Suspended Solids	TSS CK STD	100.	100.	100.
Arsenic	WP 30-1	0.011	0.011	100.
Lead	WP 31-2	0.0152	0.0150	101.
Mercury	CK STD	0.005	0.005	100.
Cadmium	WP 30-1	0.0016	0.0016	100.
Sulfate	WS 33-1b	179.	170.	105.

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001330 through 95-A001334.

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - BLANK

AM TEST Sample Number: BLANK
Client Identification: -----

ANALYTES	UNITS	RESULTS
Dissolved Oxygen	mg/l	7.5
Nitrate + Nitrite Nitrogen	mg/l	ND
Cyanide (Weak & Dissociable)	mg/l	ND
Chloride	mg/l	ND
Ammonia Nitrogen	mg/l	ND
Total Dissolved Solids	mg/l	4.0
Total Suspended Solids	mg/l	ND
Arsenic	mg/l	ND
Lead	mg/l	ND
Mercury	mg/l	ND
Cadmium	mg/l	ND
Sulfate	mg/l	ND

ND = Not Detected

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001346 through 95-A001348.

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - DUPLICATES

ANALYTES/SAMPLE NOS.		SAMPLE VALUE (mg/l)	DUPLICATE VALUE (mg/l)	RELATIVE PERCENT DIFFERENCE (%)
Dissolved Oxygen	95-A001333	9.8	9.2	6.3
Nitrate + Nitrite Nitrogen	95-A001330	0.42	0.42	0.
Cyanide (Weak & Dissociable)	95-A001330	<0.005	<0.005	-
Chloride	95-A001330	<1.	<1.	-
Ammonia Nitrogen	95-A001342	<0.005	<0.005	-
Total Dissolved Solids	95-A001600	630.	590.	6.6
Total Suspended Solids	95-A001358	7.0	6.0	15.4
Arsenic	95-A001350	0.001	0.001	0.
Lead	95-A001330	0.003	0.003	0.
Cadmium	95-A001330	<0.00002	<0.00002	-
Sulfate	95-A001330	3.7	3.2	14.5

< = less than

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001346 through 95-A001348.

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - MATRIX SPIKES

ANALYTES/SAMPLE NOS.		SAMPLE VALUE (mg/l)	SAMPLE + SPIKE (mg/l)	SPIKE CONCENTRATION (mg/l)	RECOVERY (%)
Nitrate + Nitrite Nitrogen	95-A001331	0.27	0.52	0.25	100.
Cyanide (Weak & Dissociable)	95-A001331	<0.005	0.22	0.20	110.
Chloride	95-A001331	<1.	49.	50.	98.
Ammonia Nitrogen	95-A001433	0.15	0.60	0.50	90.
Arsenic	95-A001351	0.001	0.026	0.025	100.
Lead	95-A001331	0.002	0.025	0.025	92.
Mercury	95-A001331	<0.0002	0.0055	0.0050	110.
Cadmium	95-A001331	0.00020	0.00221	0.00200	100.
Sulfate	95-A001331	63.	290.	250.	90.

< = less than

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001346 through 95-A001348.

ANALYSIS REPORT

AMTEST

Pan American Minerals
Randy Miller

Date Received: 01/25/95
Date Reported: 02/10/95
Project: Van Stone Mine
Project No.: 235

QUALITY CONTROL - STANDARD REFERENCE MATERIALS

ANALYTES/SRM NOS.		SRM VALUE (mg/l)	TRUE VALUE (mg/l)	RECOVERY (%)
Nitrate + Nitrite Nitrogen	WS 33	11.8	11.2	105.
Cyanide (Weak & Dissociable)	WS 31	0.253	0.270	94.
Chloride	WP 31	203.	199.	102.
Ammonia Nitrogen	WP 30	5.76	5.50	105.
Total Dissolved Solids	TDS CK STD	350.	350.	100.
Total Suspended Solids	TSS CK STD	102.	100.	102.
Arsenic	WP 30-1	0.012	0.011	109.
Lead	WP 31-2	0.0152	0.0150	101.
Mercury	CK STD	0.0052	0.0050	104.
Cadmium	WP 30-1	0.0016	0.0016	100.
Sulfate	WS 33-1b	179.	170.	105.

NOTE: This Quality Control Data pertains to Am Test Sample Nos. 95-A001346 through 95-A001348.

REPORTED BY _____
Kathy Fugiel

KF/pb

AMTEST
AMTEST INC.
Professional Analytical Services
14603 N.E. 87th St.
Redmond, WA
98052
Fax: 206 883 3495
Tel: 206 885 1664

CHAIN OF CUSTODY RECORD

PROJ. NO.: 235

PROJECT NAME: Van Stone Mine

SAMPLERS: (Signature) Randy W. Miller

Client Name: Pan American Mining Co.

Client Address: PO Box 32 Colville 99114

Client Phone: (509) 684-7954

Contact Person: Randy Miller

P.O. No.:

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS						
2	1-24-95	10:30 am			Creek below tailings							
WW1												No Sample taken - No water
WW2		11:30			Water well 2							
SW1		12:00			Creek by school							

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	
		[illegible signature]	1/25/95 1330		

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files