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Earth Sciences
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Geological Survey of Canada
601 Booth Street
Ottawa, Ontario
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Commission géologique du Canada
601, rue Booth
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675933
Midway
1040/16

Your file Votre référence

Our file Notre référence

June 20, 1983

Dr. K. M. Dawson
Geological Survey of Canada
100 West Pender Street
Vancouver, B.C.
V6B 1R8

Dear Ken:

In addition to analyses for your 6 Cordilleran specimens, the current batch of analyses by the G.S.C. lab included 30 analyses of 26 samples from 15 other Cordilleran deposits. These are listed on the enclosed table. The data I gave you via telephone are listed in a separate table. The error limits for all these data are the same as I quoted you, namely 0.11, 0.16 and 0.22% for the 6/4, 7/4 and 8/4 ratios, respectively.

I hope you have a very successful field season.

Sincerely,

Ralph Thorpe

Ralph Thorpe

Encl: table

RT/ra

Canada

ANALYSES FOR K. M. DAWSON BY
THE GEOCHRONOLOGY LABORATORY, G.S.C.
JUNE 3, 1983

SAMPLE NO.	DEPOSIT (occurrence)	206/204	207/204	208/204
DY 2341	PC showing (Ace cls.)	18.669	15.646	38.704
DY 2314	Lady Di	19.042	15.720	39.135
DY 2314	Lady Di	19.014	15.686	39.021
DY 2543	Bad Bear	19.348	15.742	39.833
DY 2551	Erickson Creek Gold	19.133	15.694	38.950
DY 2551	Erickson Creek Gold	19.143	15.707	38.995
DY 2554	ROMAN Gp., Watson L.area	19.535	15.726	39.652
* DY 2544	Cusac cls., 2 mi. S of Erickson Gold Mines	19.171	15.649	39.042

* This is considered an unsatisfactory analysis and is annotated as follows: Analytical uncertainity unknown. Not for publication.

file MIDWAY

Error limits ±0.11, 0.16, 0.22% for 206/204, 207/204, 208/204 respect.

G.S.C. ANALYSES RECEIVED JUNE 3, 1983

SAMPLE NO.	DEPOSIT (Occurrence)	206/204	207/204	208/204
KQ 72-34	Britannia	18.489	15.540	38.040
KQ 72-84	Granduc	18.634	15.579	38.267
KQ 73-247	Tom MacKay L.	18.823	15.617	38.434
KQ 78-172	Rexspar	19.590	15.706	39.395
TQ 72-36	Rexspar	19.258	15.757	39.216
KQ 82-58	Sterling property	19.940	15.702	39.646
KQ 82-59	Sterling property	19.328	15.690	39.333
KQ 82-85	Big Missouri (Calcite Cuts)	18.813	15.599	38.436
KQ 82-86A	Big Missouri (Creek Zone)	18.840	15.628	38.532
KQ 82-145	Silver Butte	18.813	15.618	38.494
KQ 82-146	Silver Butte	18.798	15.577	38.362
KQ 82-146	Silver Butte	18.831	15.616	38.488
KQ 82-107A	Brucejack Lake	18.840	15.640	38.557
KQ 82-107A	Brucejack Lake	18.808	15.601	38.428
KQ 82-110	Brucejack Lake	19.052	15.607	38.567
KQ 82-136	Scottie Gold	18.824	15.636	38.538
KQ 82-151	Bronson Creek	18.837	15.593	38.413
KQ 82-147A	Tulsequah Chief	18.621	15.608	38.251
KQ 82-147A	Tulsequah Chief	18.624	15.612	38.270
KQ 82-147B	Tulsequah Chief	18.634	15.623	38.302
KQ 82-147	Tulsequah Chief	18.641	15.628	38.325
SP - 3535	Goldstream	18.815	15.703	38.547
SP - 3542	Goldstream	18.791	15.673	38.447
MDWY 81-3-114.4	Midway Discovery zone	19.348	15.696	39.782
MDWY 81-3-114.4	Midway Discovery Zone in DDH core 81-3, 114.4 m.	19.341	15.687	39.747
MDWY 82-8-LZ	Midway Lower Zone DDH #8	19.348	15.683	39.719

Midway specimens collected by I A Jonasson in 1982.

GSC ANALYSES (cont'd)

SAMPLE NO.	DEPOSIT (Occurrence)	206/204	207/204	208/204
MDWY 82-DZ-3	Midway Discovery Zone trench	19.309	15.683	39.746
MDWY 82-LV/DZ	Midway Late veins cutting Discovery Zone	19.384	15.727	39.871
TQ 82-167	Elf Ck.,Gataga Dist.	18.826	15.714	39.499
TQ 82-169	Burnt Rose L., Gataga Dist.	19.120	15.767	38.355

Midway file

MEMO TO: Dr. R.I. Thorpe 30 August, 1983

FROM: Dr. K.M. Dawson

SUBJECT: Cordilleran specimens for Pb isotope analyses collected in the 1983 field season

Spec. No., Name	NTS Latitude Longitude	Remarks
DY 2596 Roman	105A/2 60°00'N 128°36'W	30 cm quartz-siderite-galena vein in folded phyllitic siltstone, on E side Liard R at BC-Yukon border.
DY 2617 Silvertip (Midway)	1040/16 59°55'N 130°20'W	Weathered galena 'veins' in McDame limestone at top of hill.
DY 2618 Silvertip (Midway)	"	Weathered galena outcrop on west side of hill above upper adit portal. In McDame limestone.
DY 2623 (DM-1) Midway	"	DDH MW 81-03: 44.7 m. 'Shale-hosted' upper zone mineralization: quartz-pyrite-galena-sericite. Make separate specimen for X-Ray identification.
DY 2624 (DM-2) Midway	1040/16 59°55'N 130°20'W	DDH MW 82-08: 207.1 m Lower zone, 'carbonate-hosted' mineralization: Massive, coarse grained pyrite-galena-sphalerite.
DY 2625 (DM-3) Midway	"	DDH MW 82-10: 256.5 m Lower zone, 'carbonate-hosted' mineralization: Coarse grained galena + pyrite-sphalerite composite grains, quartz gangue.
DY 2626 (DM-4) Midway	"	DDH MW 83-24: 60.2m Sulphide rich vein in vicinity of 'O' zone. Vein cuts grey, finely laminated shale turbidite and small quartz veinlets: Disseminated galena in core grades outward to coarse grained pyrite-sphalerite, and to alternating laminae of pyrite and sphalerite at vein wall.
DY 2627 YP	105B/1 60°03'N 130°23'W	Small (.5 m) calcite-galena-sphalerite vein parallel to bedding in recrystallized Cambrian limestone 050/15 SE, about 1 km east of Cassiar batholith contact. Oxidized; Fe and Mn oxides. E hill.
DY 2628 YP	"	Hand trench on middle hill; vein 0.5 m wide: calcite, Mn-siderite, galena, sphalerite: 130/90. Up to 30 oz/t Ag.

Spec. No., Name	NTS Latitude Longitude	Remarks
DY 2630 Lola	105B/1 60°00'N 130°28'W	6" to 2' wide vein of galena, dark brown sphalerite, minor chalcopyrite and pyrite with quartz-chlorite-minor sericite. Reported 30 oz/+ Ag. Host: granodiorite of Cassiar Batholith.
DY 2666 Mt. Hundere	105A/10 60°31'N 128°52'W	DDH S-71: 139' Pale green actinolite skarn with vuggy quartz veins, disseminated quartz and galena. Assay for Ag, Pb, Zn.
DY 2669 Mt. Hundere	"	DDH S-73: 131' Very similar to DY 2666. Possibly late quartz-Pb-Ag system superimposed on skarn. Assay for Ag, Pb, Zn.
DY 2723 Bar (80652)	105C/8 60°30'N 132°14'W	Intensely silicified conglomerate or breccia with galena, sphalerite, pyrite ± barite, Mn oxides. May be feeder zone to stratiform barite-pyrite-Pb-Zn.
DY 2818 Lang Ck (Cassiar dist.)	104P/4 59°14'N 129°47'W	2-3 m thick pyrrhotite-chalcopyrite-sphalerite massive sulphide near base of Sylvester Group, hosted by cherty argillite, overlain by basalt (greenstone). No visible galena - try mineral separation.
DY 2850 Cyclops	82E/2 49°07'N 118°33'W	Green sphalerite-galena-actinolite(?) skarn. Old shaft, dump 600 m S of Oro Denoro pit, Phoenix camp. First lead reported from skarn in district.
DY 2834 BC mine	82E/1,2 49°08'N 118°23'W	New Kettle River Resources trenches 3000' E of BC mine; Phoenix camp. Black sphalerite-magnetite-pyrite-pyrrhotite-chalcopyrite skarn, in Brooklyn limestone. No visible PbS, try mineral separation for galena.
DY 2851 Erickson Au	104P/4 59°13'N 129°40'W	Table Mtn-Vollaug vein: galena in massive quartz, from underground workings.
DY 2852 Erickson Au	"	Plaza Resources pit on Vollaug vein. Galena in massive white quartz.
DY 2853 Erickson Au	104P/4 59°12'N 129°39'W	Cusac mine: trench 50 m S of portal. Galena in quartz-carbonate altered listwanite.

Ian Dawson

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Your file Votre référence

Our file Notre référence

October 20, 1983

Dr. Ken Dawson
Geological Survey of Canada
100 West Pender Street,
Vancouver, B.C.
V6B 1R8

Dear Ken:

I have received your specimens as per your list of August 30th, a specimen supplied by Jim Fyles and forwarded by you, and 6 specimens supplied by Neil Church and forwarded by you. The following are a few comments with regard to these.

1. You have provided 6 specimens from the Midway area. In view of the 4 analyses already done for Jonasson, I am not submitting your specimens DY 2624 and DY 2625 at the present time.

Lower 3 are carb-hosted PbZnAg in McDame

2. With regard to your specimen DY 2623 from Midway you had a note (to yourself?) to prepare a separate specimen for X-ray identification. In any case, I had Kim run an X-ray diffraction chart of the specimen and he got quartz + pyrite + sericite + galena as you suspected. This chart is included.

3. No galena was obtained from your Lang Creek specimen (DY 2818), so two specimens for trace lead analyses have been submitted.

4. Seven galena specimens from the Greenwood area are being held for possible analysis here at the G.S.C. These are specimens DY 2854 to DY 2860 inclusive. These should meet the criterion of a coherent suite that could be written up in a short note for publication. Your specimen DY 2834 (BC Mine, Phoenix Camp) was not found to contain galena, so a sphalerite concentrate has been submitted for a trace lead analysis.

.....2

Canada

I hope you have had a very educational, enjoyable and rewarding trip to China. Should any of my actions or assumptions as outlined above present problems please let me know. In total 15 galenas and 3 trace leads have been submitted to Geospec Consultants on your behalf.

Welcome home,
Sincerely,

Ralph Thorpe

Ralph I. Thorpe

Encl:chart

P.S. Let me know if I should ship all your remaining sample material back to you.

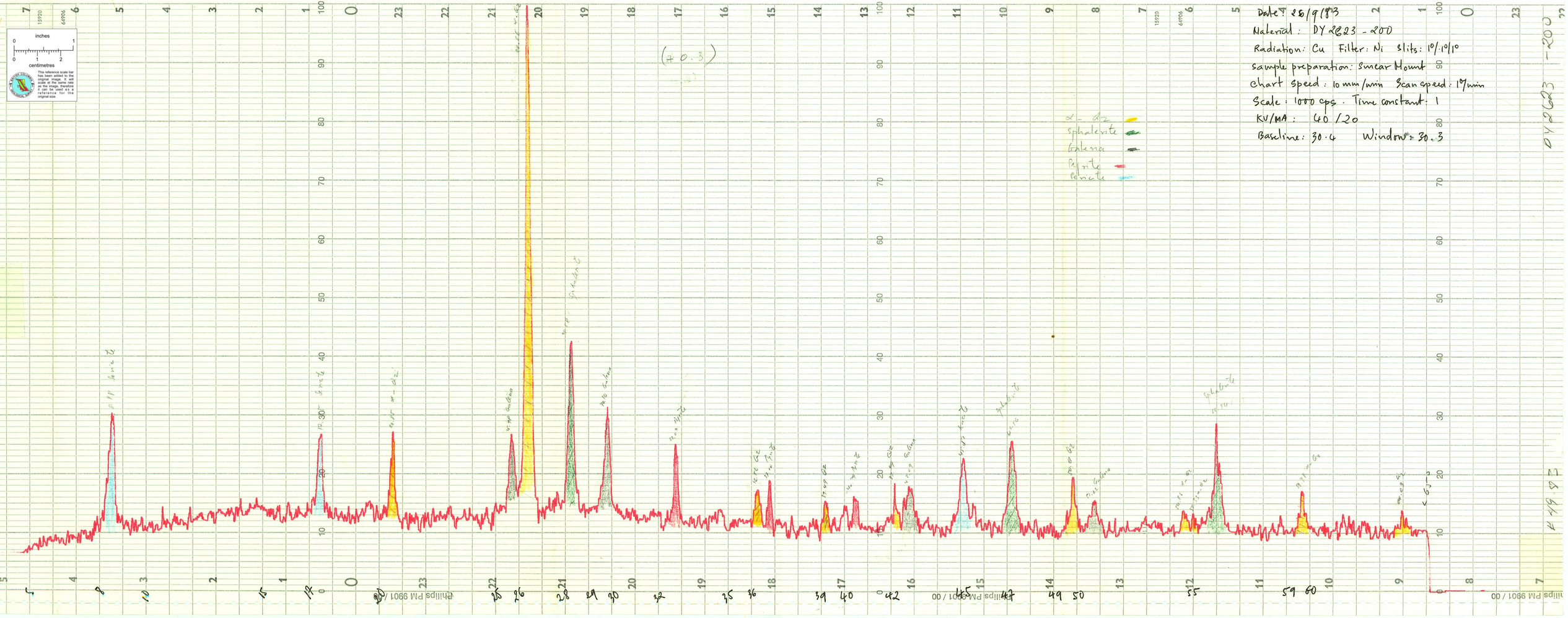
RIT/ra

Date: 26/9/83
Material: DY2823 - 200
Radiation: Cu Filter: Ni Slits: 1°/1°/1°
Sample preparation: Smear Mount
Chart speed: 10 mm/min Scan speed: 1°/min
Scale: 1000 cps. Time constant: 1
KV/MA: 40/20
Baseline: 30.4 Window: 30.3

α-Qz
Sphalerite
Galena
Pyrite
Pyrrhotite

(# 0.3)

DY2823 - 200



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Midway.

Your file Votre référence

Our file Notre référence

March 12, 1984

Dr. K.M. Dawson
Geological Survey of Canada
100 West Pender Street
VANCOUVER, B.C.
V6B 1R8

Dear Ken:

I received some of your lead isotope analyses on February 20. Please excuse the delay, largely due to preparations for the P & D. meeting where I had to replace Jim Franklin on the program. I am still waiting for analyses on your specimens DY 2624 and DY 2625. There could be another of your specimens outstanding as well. In any case the results for the 6 analyses received recently are as follows:

Spec No.	Property	206/204	207/204	208/204
DY 2596	Roman	19.657	15.757	39.742
DY 2617	Silvertip (Midway)	19.340	15.700	39.795
DY 2618	Silvertip (Midway)	19.334	15.697	39.806
DY 2623	Midway	19.305	15.683	39.749
DY 2626	Midway	19.318	15.691	39.782
DY 2853	Erickson Gold	19.183	15.677	39.162

Cases

It appears from a footnote by Geospec Consultants Ltd. that the DY 2853 specimen we supplied contained relatively little galena. From the analyses now on hand for Midway it seems to me that any differences are very small. I suspect that any true differences that you hoped to detect in timing of mineralization are too small to be defined by this method. The results have documented the similar isotopic characteristic of galena in all the zones.

.....2

I will send you the last analyses and information on error limits for the analyses at a later date. The final report by Geospec Consultants should be received before the end of the month.

Sincerely,

Ralph Thorpe

Ralph Thorpe

RT/ra

Energy, Mines and Resources Canada
Geological Survey of Canada
100 West Pender, Vancouver
V6B 1R8

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Your file Votre référence

Our file Notre référence

May 15/84.

Gian Paolo Lozej,
Cordilleran Engineering,
1418-355 Burrard St.,
Vancouver BC V6C 2G8

Dear G.P.

Further to our conversation today, I have enclosed some Midway Pb-isotope data, including a recent re-plotting of the data at a different scale. The data plot in the vicinity of several dated Ag Pb Zn deposits - see Godwin & Sinclair, Econ Geol V. 77 1982 p 675-690 - ~~[illegible]~~ Godwin Sinclair & Ryan Ec Geol v 77, 1982, p 82-84. Similar ages are found for Keno Hill (~ 87 Ma) as estimated for Midway, however the age of Midway could be younger. More work is required.

I've included Cathy's address.

I'll keep in touch. Best regards

Ken.

Canada

Georgie Jan 20/85

Report # 3

	No.	206Pb/204Pb	207Pb/204Pb	208Pb/204Pb	SAMPLE I.D.
	1	18.446	15.638	38.353	SP4503(pol. thin sec.) Yana
	2	18.326	15.615	38.191	SP4530(pol. thin sec.) Yana
	3	18.189	15.611	38.115	LS-SI-I-464 Cape Breton
		18.187	15.611	38.136	repeat * " "
	4	18.740	15.652	38.641	DY1161 (comm. 1) CIN-BAR
	5	19.331	15.708	39.780	DY2914 Rancheria
	6	19.582	15.739	39.805	DY2918 CMC deposit, Swift R.
	7	19.635	15.746	39.833	DY2919 YP deposit, Midway Dist.
	8	19.643	15.763	39.865	DY2920 " " " "
	9	19.667	15.765	39.871	DY2921 " " " "
	10	18.334	15.638	38.376	DY2935 Cottonwood, Dakota zone
	11	18.831	15.661	38.672	DY2950B Lakeview Vein, Atlin
		18.834	15.668	38.705	repeat " " "
	12	18.879	15.635	38.607	DY2960 Golden View, Cabin zone, Atlin
	13	18.834	15.647	38.661	DY2987 Surprise vein, Atlin
	14	18.835	15.660	38.686	DY2987A Surprise vein, Atlin
		18.828	15.658	38.698	repeat * " " "
	15	18.886	15.654	38.706	DY2990 Discovery vein, Atlin
	16	18.085	15.616	38.127	LS-S#2-693 Cape Breton
Ore Hill, New Hamp.	17	18.073	15.557	37.785	TQ84-11
" " " "	18	18.070	15.551	37.770	TQ84-12
St. Pierre, Lab Trough	19	15.001	15.203	35.296	TQ84-76
Billy Bay, Man.	20	15.404	15.139	35.001	TQ84-152
Wright Mine, Cobalt	21	14.692	15.090	34.300	TQ84-153
Agassiz, Man	22	15.474	15.186	35.063	TQ84-154 (comm. 2)
" "	23	15.493	15.198	35.100	TQ84-155
Walters Twp., Ont	24	14.698	15.054	34.431	TQ84-156 Jellicoe Area
Athona mine, Sask.	25	16.120	15.433	35.372	TQ84-158
Box Mine, Sask.	26	23.092	16.313	38.400	TQ84-159 (comm. 3)
South Bay mine	27	13.272	14.427	33.100	TQ83-102 (fraction A)
	28	13.271	14.425	33.098	" (fraction B)
Lac Brisson	29	15.315	15.140	35.552	PYR81-0128 } Strange Lake, Lab.
" "	30	15.680	15.176	37.014	PYR81-0214
	31	18.576	15.669	38.625	PCHR-7553
	32	18.640	15.676	38.705	XYHP JB 83* for Jonasson Howards Pass area, Yukon
		18.632	15.669	38.695	repeat
	33	18.553	15.662	38.578	XY29-317
	34	18.640	15.670	38.688	XY29-562
	35	18.618	15.673	38.682	ANNIV 3A3*
		18.626	15.679	38.697	repeat
Trout Bay, Ont.	36	13.311	14.517	33.132	TQ83-117(fraction A)(comm. 4)
	37	13.343	14.525	33.170	" (" B)
	38	13.287	14.515	33.108	" (" C)
	39	13.507	14.563	33.370	" (" D)
		Trace lead			
Cochenour Mine	40	13.472	14.613	33.233	TQ83-101 Jamesonite(pol. sec.

* - prefered value

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Your file Votre référence

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February 24, 1987

Dr. K.M. Dawson
Geological Survey of Canada
100 West Pender Street
Vancouver, B.C.
V6B 1R8

Dear Ken:

During my early February visit to Denver I had some discussions with Stan Church regarding release of Cordilleran Pb isotope data, and his efforts to put together an Alaska compilation.

He reminded me that 2 years ago he had sent me an analysis for the Midway deposit. This was analyzed by Anne P. LeHuray and the specimen was provided by Tom Schroeter. I guess I did not value the analysis highly because we had many other good values available. However, the results should be incorporated in a Cordilleran listing of analyses. The results were 6/4 = 19.351, 7/4 = 15.691 and 8/4 = 39.757.

I have been extremely busy since my trip. However, by early to mid March I may be able to get busy on updating our file of Cordilleran data.

Sincerely,

Ralph Thorpe

Ralph Thorpe

Canada