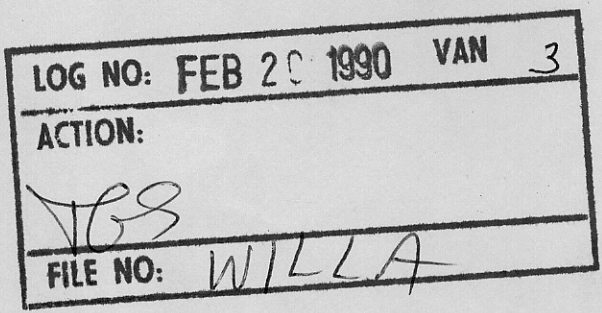
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

To: Tom Schroeter Date: Feb 15/90

From: Bill McMillan

- ☐ For your approval.
- ☐ For your information.
- ☐ For necessary action.
- ☐ Send me copy of reply.
- ☐ For your comments.
- ☐ Prepare reply for my signature.
- ☐ Prepare draft of reply.
- ☐ Return to me.
- ☐ File.
- ☐ For signature.
- ☐ Wish to discuss.



M28-1737

889515

(NTS _____)

U-Pb

☐ Mineral analysis
☑ Concordia interpretation
☐ Mineral or rock isochron

Sample Number(s) and Reference(s)
Lab No:

Ref:

Record No:
Suite No:
Sample Name:

AYLWIN CREEK MAFIC PLAGIOCLASE PORPHYRY

decay constant
☐ old: 0.1537/0.9722/0.0499/137.8
☑ new: 0.155125/0.98485/0.049475/137.88
☐ other:
☐ not reported

Upper Intercept
Computed ☑ 2213·5 ~~2330~~ 2σ error +276 ±-256 Ma
Assumed ☐

Lower Intercept
Computed ☑ 1184·7 ~~194~~ 2σ error +17 ± -18 Ma
Assumed ☐

^{238}U-^{206}Pb date ± Ma

^{235}U-^{207}Pb date ± Ma

$^{207}Pb/^{206}Pb$ date ± Ma

^{232}Th-^{208}Pb date ± Ma

Number of Points: n= ~~3~~ 5

Latitude: (49 ° 53 ' " N, Longitude: 117 ° 22 ' " W (±); Elevation: (X° Y' Z" or X° Y.Y')

UMT Zone 11 474000 E 5525500 N; Province: B.C.

Sec. , T. , R. ; Co., State

(NTS 82 F/8) Map Area (1:250,000)

Location: EXPLORATION ADIT NORTH OF AYLWIN CREEK
Source Type:
Rock Types: ALTERED 'QUARTZ LATITE' PORPHYRY
Geologic Unit:
Geologic Setting: INTRUDES ROSSLAND (?) VOLCANICS + SEDIMENTS IN A ROOF PENDANT
Material Analysed: ZIRCON w. COMMON XENOCRYSTIC CORES

Comment on Analyses: 3 POINT DISCORDIA DOES'NT GIVE MEANINGFUL RANGE OF INTERCEPT ERRORS. NEED ANALYSIS OF 1 MORE FRACTION FOR BETTER ERROR CONTROL. ANALYSES RECALCULATED FEB/90 TO CONSISTENT COMMON PBAGE. Abraded coarse fraction gives another point on the same line, improves errors.

Interpretation: EARLY JURASSIC INTRUSION. ZIRCONS CONTAIN LARGE AMOUNT OF INHERITED (XENOCRYSTIC) Pb OF EARLY PROTEROZOIC AGE

Collected by: W.J. McMILLAN Date of listing:
Dated by: P. VAN DER HEYDEN
D. Murphy

Sample Name or Number:

Sheet ☐

Split-Mineral	ppm U	ppm Pb	206	207	208	204	Meas. 206/204	Mole % Blank Pb	Rad. Pb Rad+ComPb	Common Pb Age
70-100 m NM 2/10	440.8	22.6	100	9.3794	9.8839	0.0314	2577	0.44	0.976	185

2.4 mg	206 Pb/238 U ratio ±	207 Pb/235 U ratio ±	207 Pb/206 Pb ratio ±	206 Pb/238 U date ±	207 Pb/235 U date ±	207 Pb/206 Pb date ±	R
	0.04970 ±0.00020	0.61267 ±0.0025	0.08941 ±0.00006	312.7 ± 1.2	485.2 ± 1.6	1412.9 ± 1.2	.99

Split-Mineral	ppm U	ppm Pb	206	207	208	204	Meas. 206/204	Mole % Blank Pb	Rad. Pb Rad+ComPb	Common Pb Age
-100+200 m NM 2/10	408.0	18.3	100	9.2834	11.5007	0.0713	1150	0.9	0.948	180

1.0 mg	206 Pb/238 U ratio ±	207 Pb/235 U ratio ±	207 Pb/206 Pb ratio ±	206 Pb/238 U date ±	207 Pb/235 U date ±	207 Pb/206 Pb date ±	R
	0.04252 ±0.00008	0.48533 ±0.00096	0.08278 ±0.00007	268.4 ± 0.5	401.7 ± 0.7	1264.1 ± 1.5	.97

fine mag	Split-Mineral	ppm U	ppm Pb	206	207	208	204	Meas. 206/204	Mole % Blank Pb	Rad. Pb Rad+ComPb	Common Pb Age
	-200 m M 1.8/20	474.2	22.15	100	9.5703	12.8828	0.1205	716	1.11	0.918	185/20

0.6 mg	206 Pb/238 U ratio ±	207 Pb/235 U ratio ±	207 Pb/206 Pb ratio ±	206 Pb/238 U date ±	207 Pb/235 U date ±	207 Pb/206 Pb date ±	R
	0.04331 ±0.00007	0.46960 ±0.00089	0.07864 ±0.00007	273.3 ± 0.4	390.9 ± 0.6	1163.5 ± 1.8	.96

coarse mag	Split-Mineral	ppm U	ppm Pb	206	207	208	204	Meas. 206/204	Mole % Blank Pb	Rad. Pb Rad+ComPb	Common Pb Age
	1149+1141 (-100+200 m) M 1.8A/2	319.4	11.1	100	7.2003	11.3658	0.0535	786	4.29	0.925	185±20

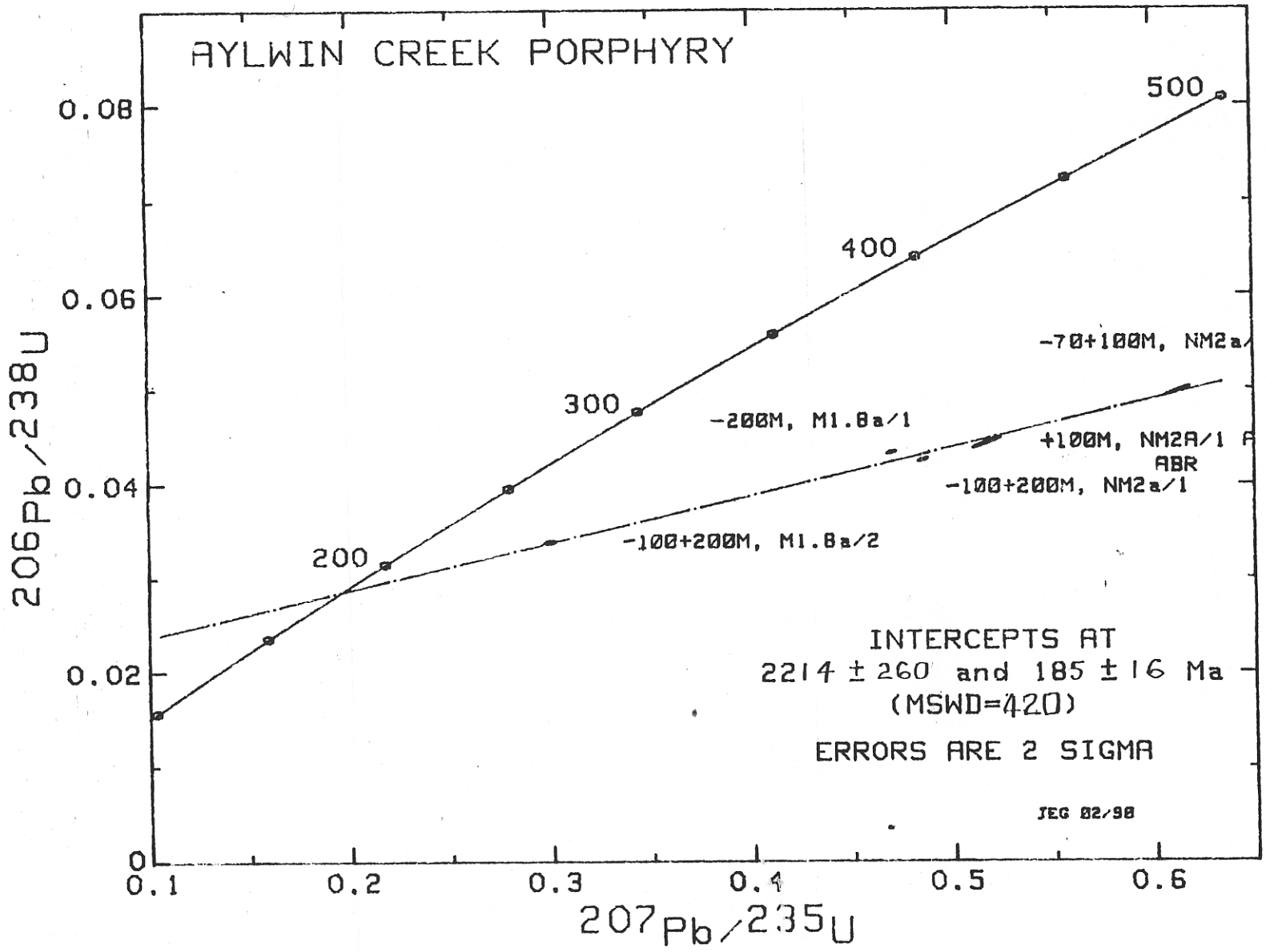
0.2 mg	206 Pb/238 U ratio ±	207 Pb/235 U ratio ±	207 Pb/206 Pb ratio ±	206 Pb/238 U date ±	207 Pb/235 U date ±	207 Pb/206 Pb date ±	R
	0.03384 ±0.00008	0.29996 ±0.0014	0.06428 ±0.00022	214.5 ± 0.5	266.4 ± 1.1	751 ± 7.2	.92

02/01/90	Split-Mineral	ppm U	ppm Pb	206	207	208	204	Meas. 206/204	Mole % Blank Pb	Rad. Pb Rad+ComPb	Common Pb Age
	+100 m abraded Nm 2A/10	161.6	7.41	100	8.804	11.0184	0.0238	3102	0.50%	0.981	185/20

0.8 mg	206 Pb/238 U ratio ±	207 Pb/235 U ratio ±	207 Pb/206 Pb ratio ±	206 Pb/238 U date ±	207 Pb/235 U date ±	207 Pb/206 Pb date ±	R
	0.04430 ±0.00024	0.51740 ±0.00284	0.08470 ±0.00007	279.5 ± 1.5	423.4 ± 1.9	1308.7 ± 1.7	0.99

Statement of Uncertainties: ERRORS ARE 1σ

Isotopic composition of blank: ☐ S-K Modern Pb (6/4:18.7, 7/4:15.63, 8/4:38.63) or ☑ Other (6/4:17.757/4:15.50 8/4:37
Isotopic composition of common Pb based on S-K growth curve /4=11.152, 7/4=12.998, 8/4=31.23 at 3.7Ga with
238U/204Pb=9.74, 232Th/204Pb=37.19; decay constants 0.155125, 0.98485, 137.88; or ☐ Other (6/4: 7/4: 8/4


AYLWIN CREEK PORPHYRY
500
400
300
200
-70+100M, NM2a/
-200M, M1.8a/1
+100M, NM2A/1 A
ABR
-100+200M, NM2a/1
-100+200M, M1.8a/2
INTERCEPTS AT
2214 ± 260 and 185 ± 16 Ma
(MSWD=420)
ERRORS ARE 2 SIGMA
JEG 02/98
0.08
0.06
0.04
0.02
0
0.1
0.2
0.3
0.4
0.5
0.6
206Pb/238U
207Pb/235U