

John Carter

Nov 30/84

Dresser Minerals

#300-407 - 2nd St S.W.

Calgary Alta. T2P 2Y3

Dear John

I have listed below the results of S-isotope analyses on the barite specimens you forwarded to me in 1983 and 1984.

No	Name	Description	$\delta^{34}\text{S} \text{ ‰} \pm 0.5 \text{ ‰}$
DY 2885	MOOSE	S end of deposit ^{127°15' W} 59°45'30" N	+ 30.43
DY 2887	MOOSE	S area, outcrop. PbS in sample	+ 35.99 + 36.52 rerun.
DY 2891	MOOSE	^{Pale grey} Massive coarse crystalline barite	+ 31.57
DY 2888	BEAR	DDH 72-4: 106' (?) coarse xline barite	+ 35.69
DY 2889	BEAVER	lat + long not known. Near Moose (?)	+ 37.94
DY 2890	BILL CARLICK	Atank. 104P/3 Replacement in LE Atank. 129°13'30" W; 59°12'30" N Pale buff coarse xline barite	+ 34.41
DY 2892	Larrabee Falcon	^{Horseshoe Ck, Invermere BC} 129° 50°27'15" 116°06'00"	+ 30.01
DY 2893	South Ewen	DDH EB-82-1 1040/16 130°13' W; 59°59' N	+ 23.96

You may be interested in comparing your data to

the following

DY 2578 Hard Fluorospargite ~~35.~~ + 31.09

DY 2562 110 CK barite-fluorite + 29.98

DY 2563 110 CK + 34.09
 DY 2564 110 CK + 36.72
 DY 2565 110 CK + 32.72 / avg 33.37

DY 2567 MUN barite, Muncho L. + 26.97
 DY 2569 " + 25.06 rerun + 24.68
 DY 2570 + 25.34
 DY 2571 " + ~~25~~ 27.26 / avg 26.15

LEA 380 MEL (Other CK) 95 D/6 + 39.34
 LEA 378 (PbZnBa) + 38.9 } avg 38.2
 LEA 382 + 36.37

94F. CRQU. 7902 Cirque PbZnAgBa 94F/11 + 43.2
 94F. CRQU. 7901 " " + 39.2

~~DY 2894~~

DY 2555 ROMAN - NAZO 105A/2 (Watson L) + 36.09 } looks
 barite veins in black shale, age unknown. } Frohman
 DY 2605 " upper barite + 34.08
 DY 2606 " lower barite + 35.26
 DY 2894 ATAN L. ~~mine~~ ^{x1 fine white barite} + PbZnCu + 32.64
 compare to BILL-CARLICK.

A few observations on the above data:

I have plotted most of these data on the accompanying figure sulphur isotope age curve from Claypool et. al. (1980) You will note that most barite deposits plot well to the right of the curve, notably your BEAR/MOOSE/BEAVER suite. A new ^{sulphur isotope} ~~age~~ curve,