

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Rosebud - Log for drill hole RS-459
AUTHOR	Muerhoff C
DATE OF DOC(S)	1999
MULTI_DIST Y / N?	<input checked="" type="radio"/>
Additional Dist_Nos:	
QUAD_NAME	Sulphur 7½'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine
COMMODITY If not obvious	gold, silver
NOTES	Handwritten log for drill hole RS-459; stereogram; geology; correspondence 6 p.

Keep docs at about 250 pages if no oversized maps attached
(for every 1 oversized page (>11x17) with text reduce
the amount of pages by ~25)

Revised: 1/22/08

SS: DD 9/11/08
Initials _____ Date _____
DB: Initials _____ Date _____
SCANNED: Initials _____ Date _____

CHARLIE MUEHRHOFF

RS - 459

60001964

4010

- RS-459 0-265 massive (w/ subtle foliation) weak-mod porphyritic w/ clay-alit plbg (some glomeroporphyritic) + rounded → fragmented gtz + green (chlorite-replaced?) vitreous feldspar phenos (relic sanidine?) + lesser hematized relic biotite. Overall 'grainy' textured. — RQL.
 0-15 oxidized — hematitic/limonitic w/ residual silicification.
- 15-35 strongly bleached w/ residual silicification. has a 'bleached' appearance that strongly resembles an ash flow.
- 35-70 s.a.a. except only lesser, spotty silicification. Limonitic on frag surfaces.
- 70-85 same as 15-35, only no silicification; increasingly argillitic.
- 85-100 mottled (hem>arg) 'grainy' textured. Lesser plbg + sanidine
- 100-170 bleached/arg frags >> hem-arg mottled frags. A few scattered silicified frags. weakly limonitic.
- 170-185 hem > bleaching
- 185-250 bleaching > hem (why silicified?). becomes more massive & finer grained w/ lesser phenos & increasing fg biotite. grades to 1/2 bleached, 1/2 hem downhole. Minor goethite on frag surfaces. Don't see many gtz phenos, but still looks like the same unit. clayey @ 245-250.
- 250-265 oxidized, clay-rich (incl. white clays), limonitic. Could be fault; more likely, an altered contact?
- 265-320 Bud-like volcanic bza
- 265-285 white zergillized amorphous clsts in green vitreous-looking devitrified matrix. abundant whitish-clear → clear/grey gtz frags (some coated w/ med-gr. subhedral py + gtz-py streaked bza frags + diss py. clay-rich, especially 275-285.
- 285-290 s.a.a., except << clay & brown vitreous-looking matrix. abund gtz+py
- 290-295 mixed bleached & limonitic bza frags. Abund grey gtz+py frags & streaks.
- 295-320 same as 285-290. minor→mod white clay. Lesser gtz+py frags downhole, but bza is often silicified / silica-flooded. but still fairly abundant.

- RS-459
- 320-340 continuation of unit above? Qtz-py stknk/vein zone w/ mod silicified relic bxs frags.
 - 340-415 grey gtz-py stknk porphyry w/ relic clay-altered pltg., mod-str silicification w/ abund fg diss py. silicification overprinting bleaching. silicification waning 360'-385', but vn frags persist.
 - 385-405 porphyry is brown & vitreous looking. mod-locally str silicified w/ gtz frags + gtz stknk & abund fg → med gr pyrite. Though rare, relic pltg persist
 - 395-405 mod white clay & greenish clay (gouge?)
 - 405-415 spotty silicification w/ gtz-py stknk
- Tc?
- 415-505 vfg massive, weakly porphyritic w/ clay-altered pltg + sanidine (clay-altered biotite?)
weakly silicified → overprinting bleaching / hem
 - 445 grades into monolithic vlc bxs w/ clear gtz+py stknk
 - 450-460 bleached, w/ clay " " " "
 - 460-470 silicification overprinting hem. some str prop → arg frags. minor white clay
 - 470-495 " " prop → arg. gtz-py stknk.
 - 495-505 str argillitic; no sil.
 - 505-590 vlc-mod hem massive porphyritic (weak) flow w/ intermittent bxs @ top of interval. hem hornblende + biotite. did not see any pltg. occasional frags zone prop → bleached.
 - c 575 becomes massive, w/ some frags pervasively silicified. some frags have abund mafics, but no pltg phenocr.
 - 590-605 epidioritic (?) bxs white clasts in strongly hem matrix. silicified. due to alteration
 - 600-670 hematized, massive, weakly porphyritic. hornblende + biotite, no pltg. occasional frags of bxs from above. → a few vitreous feldspars
grades into bxs (autobxs?) c 650±.
 - gtz-py frags + sil c 665-670
 - 670-700 flow bxs w/ arg clasts in hematized porphyritic (pltg + vitreous feld) fragmental matrix. minor gtz-py stknk - Clasts often contain fg hem (replacing hornblende & biotite?)

RS-459

700-710 heterolithic epiclastic bxa. hematized matrix

710-740 volcanic (?) bxa. argillized massive clasts & devitrified white clasts (w/ hem brokite) in strongly hematized 'grainy' porphyritic (?) fragmental matrix. Abundant clasts w/ no matrix material. Could be epiclastic, but I don't think so.

740-750 bleached → arg & prop volcanic (?) bxa w/ white massive clasts & prop porphyritic clasts. minor grey gtz + py frags.

750-755 a single lump of white → greenish white clay w/ few rock frags. - fault.

755-895 heterolithic bxa. prop @ upper contact, then hem. → few frags show crude foliation. sporadic silicification.

@ 860 begin to pick up greenish-white clay.

* Can't tell if this is epiclastic or volcanic. Possibly starts out as an epiclastic bxa & grades into vol bxa ~ 860? (start to see phenocrysts in matrix)

by 885 clearly volcanic

895-910 prop → bleached devitrified flow / flow bxa w/ sporadic sil

910-920 gtz-py vein zone w/ frags of silica-replaced porphyry (reliz plgs) bxa

920-985 volc flow bxa w/ white massive zaphytic → n. weakly porphyritic clasts in bleached → hem matrix. silica-flooded or silica-replaced.

gtz-py vein frags continue. Silicification waning past 935, but still persists intermittently. nil by end of interval.

985-1030 TC bxa w/ gray mafic-rich clasts (horn + bio → hem) in a 'grainy' h fragmental hem matrix. * This looks like the bxa marker unit I've been coring at White Alps. → @ the top of holes 405 & 450.

1030-1040 TC bxa w/ white massive zaphytic clasts in bleached → hem matrix. diss py.

1040-1055 same as 985-1030, except clasts contain relic (?) vitreous feldspars & sanidine?

1055-1065 same as 1030-1040

Is this
White Alps.
?

RS-459

1065-1080 same as 1040-1055, except matrix more "grainy" textured

1080-1085 same as 1030-1040

1085-1200 clasts of both interbedded units described starting c 985
so far

a few grt frags. Matrix becomes increasingly "grainy" & hematized
w/ depth. I think the entire sequence from 985 on down is
volcanic & not epiclastic, but I'm open to suggestions.

Kurt,

Here's a copy of my log for RS-459. It looks to me like we're still in Tc. As a matter of fact, the bxs's I see in this hole @ 1000-1200' appear to be the same bxs's that I saw at the top of 97-405 1/2 RS-450 (i.e., 1000 vertical feet difference)!

bottom
the th



A couple of great looking vein/stkltk zones; no marcasite, just pyrite. But this is without a doubt the best looking hole NW of the deposit that I've seen.

I didn't get time to plot this on section. Sorry. I talked to Randy this evening & the hole is ~100ft away from where we thought it was. He has the coordinates so you can plot it on the proper section.

Randy has a copy of my quick log.

I still think we should tag the top of Dozer, depending on the alteration.

Call me @ the office if you have any questions.

Charlie

