60001643

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Rosebud Drill Hole File - Hole No. RL-265C
AUTHOR	C. Walde; T. Kuhl; V. Peterson; K. Kenner
DATE OF DOC(S)	1992
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Coutes Drilling; Lac Minerals (USA) Inc Barringer Laboratories
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 913' handwritten notes ~~38~~p. 40

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)

SS: DD 6/3/08 (Initials / Date)
DB: MAG (Initials / Date)
SCANNED: NV Blue (Initials / Date)

Revised: 1/22/08

ROSEBUD
DRILL LOG

RL-265

60001643 4010

60001643

LAC MINERALS (U.S.A.) INC.

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RL-265C TOTAL DEPTH 913' LOGGED BY CMW

Date started 4-22-92

Date completed 5-3-92

Initial bearing S73W

Initial inclination -62°

Elevation

Collar coordinates:

N

E

Contractor: COATES

Drill Type: UDR

Hole Size: HQ → NH

Drilling Conditions:

Footage: Wet / Dry

Comments:

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)

LAC MINERALS (U.S.A.) INC.
ROSEBUD PROJECT

DRILL HOLE RL-265

Page 1 of 2

FINE-GRAINED TUFF
BEDDED BUD LLT
VOLCANICLASTIC
PORPHYRITIC TUFF
FLOW BANDED TUFF

VEIN TYPES

DRUZY QUARTZ
Xc CHALCEDONIC
XK STOCKWORK
Ca CALCITE
HYDROTHERMAL BRECCIA VNS
Ba BARITE

LOGGED BY KLK

FT.	LITHO	FRACTS FAULTS	VEIN TYPES	BLEACH W	BLEACH M	BLEACH S	CLAY W	CLAY M	CLAY S	SILIC W	SILIC M	SILIC S	COLOR	% FeOx W	% FeOx M	% FeOx S	% SULF.	COMMENTS	ROD CONN.	Ag	Au	✓
																		0-42 overburden		.01	.001	<
05																				<	.001	
10																		Entire RC zone		<	<	
15																		may be fault related.		<	<	
20																				.01	<	
25																				.01	.001	
30																				.01	.001	
35																				.01	.001	
40																						
45			XK + Xc + local limonitic ++++										buff				poss tr limon replac Py	42-60 Predominantly a fine gr. tuffy local intervals of relict looking epiclastic w/ weak green (celad?) alt.		.02	.001	
50													limonit + grn							.03	.001	
55													"					pervasively oxidized with w/m perv. silicif. weak-mod intermittent stkwk qtz vns		.06	<	
60													red org + tan + buff					; weak chalcedony vns fractures are stained w/ limonite to coat of lim clay 55-60 str. red orange clays		.04	.003	
65	LBT?												buff white					60-130 FINE GRAINED		.06	.001	
70													buff white + hint grn					TUFF: perv. silicified ; oxidized to 125', weak		.13	.001	
75													"					to mod argillized w/ local strong limonitic clays.;		.08	.001	
80													burg buff white + gray					limonitic fractures. Intermittent qtz stockwk		.04	.002	.002
85													buff + grn + org					; local amber + brown to milky white chalcedony		.04	.001	
90													" + gray					veins. Limonitic druzy qtz is weak @ top o'hole		.04	.001	.001
95													tan + buff					; increases w/ depth to w-m.		.06	.002	
100													" + hint grn					Overall m-s alt thru-out — may be fault related		.05	.002	

NOTE SULFIDES IN COMMENTS: Py Mc Cp Pr Sb

LAC MINERALS (U.S.A.) INC.
ROSEBUD PROJECT

DRILL HOLE RL-265

Page 2 of 2

VEIN TYPES

- FINE-GRAINED TUFF
- BEDDED BUD LLT
- VOLCANICLASTIC
- PORPHYRITIC TUFF
- FLOW BANDED TUFF

- DRUZY QUARTZ
- Xc CHALCEDONIC
- XK STOCKWORK
- Ca CALCITE
- HYDROTHERMAL BRECCIA VNS
- Ba BARITE

LOGGED BY KLK

FT.	LITHO	FRACTS FAULTS	VEIN TYPES	BLEACH W	BLEACH M	BLEACH S	CLAY W	CLAY M	CLAY S	SILIC W	SILIC M	SILIC S	COLOR	% FeOx W	% FeOx M	% FeOx S	% SULF.	COMMENTS	RQD CONN.	Ag	Au	✓
	LBT ?		XK wk wht ⊂SOX. XC										org + buff + grn				tr limon replac py	100 – 115 strong limonitic clays; wk white clays.		.05	.003	
105													" + gray							.05	.002	
110													creamy white + limonit					110 – 115 ↑ white sticky clays		.06	.002	
115													" + hint grn					115 – 125 ↑ perv. silicification		.13	.005	
120													"				≤ 1% diss py + poss Ag sulfs	Ox		.40	.003	
125		FAULT RELATED ?	XK										gray white + peach tan				2-3% diss + vn py + poss Ag sulf	strong white to lt. gray clays RED diss/vn sulfides begun		.11	.011	.010
130																		T.D.				
35																						
40																						
45																						
50																						
55																						
60																						
65																						
70																						
75																						
80																						
85																						
90																						
95																						
00																						

NOTE SULFIDES IN COMMENTS: Py Mc Cp Pr Sb

ROSEBUD PROJECT

HOLE NO. RL 265 C LOGGED BY CM WALCK DATE 5/1992 PAGE 1 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
1	130	100	clay + py 70	FAULT ZONE	2%		M-S-Str Arg	lt-md grey & blue-green	Clay+ sulf 1/4"	1-3	0
		41									24
	140			gouge 50				lt-md blue-green	Kaol 1/8"-1/4"	1-3	
		62		FAULT ZONE							25
2	150	88	crude bedding 55								56
3		67			3% (py)			md flesh & grey	duckb Kaol, 1/16", Golden Kaol 1/4"-1/8", Py 1/8"-1/4"	6-12	24
	160	60									8
4		82			1%			lt-md blue-green & flesh	Py, ≤ 1/16"	2-6	8
	170	83									30
5	180	89									9
6	185										

DESCRIPTION

0-130: R.C.

130 – 198 FAULT ZONE

are there FGT or what frag types?

130 – ~ 144 Clay gouge & clay-cemented breccia; lt-md grey, tan & blue-grey, most fragments < 1/16" - 1/2", sub rounded to subangular, gen. frags m-s silic'd. Matrix w clay. Rubbly after handling. Dk grey clay+sulf stringers/vnlts 1/4" wide @ 134' @ 70° to c.a.

144 – 153.9 Green 'epi' caught in fault; md blue-green lt, m-s clay alt'd, locally crude bedding @ 55° to c.a. Md white Kaol vnlts.

148 – 153.9 rubbly, clay cemented Δ

153.9 – ~ 165 Flesh & grey matrix supp. breccia; 40-50% clasts, < 1/16" - 1/3" lt grey angular in md brick-flesh fg matrix. All m-s arg. Md vnlts green duckb. Kaol., golden yellow Kaol, py. Often rubbly.

is it FGT Δ or what?

165 – 192.5: lt-med blue-green & flesh crackle breccia w/ matrix supp Δ veins.

lt-Md blue green f.gr. LBT?? CHOC?? clasts < 1/4" - > 4" cut by abt purple flesh fine fracts & < 1/4" - > 1/2" breccia veins. 165-180: often rubbly.

W-M py vnlts & buckshot py

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
130-133.6	.003	.004	.07		
133.6-142	.007		.08		
142-148	.041	.047	.22		
148-153	.014		.08		
153-157.5	.007		.09		
157.5-162	.002		.04		
162-167	.001		.04		
167-172	.002		.02		
172-175.5	.003		.02		
175.5-179	<		.02		
179-183.5	.001		.02		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CM WALCK DATE 5/1992 PAGE 2 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
6		78		Fault zone	1% py		m-s-str arg	lt green ⊥ lt md flesh	py ⊥ Kaol 1/8" t py	4-8	48
	190										
7		83									25
8	200	75	(local) fb. 60°		Tr-1% py		w-m arg/ bleach	md flesh & pale green	1/8"-1/4" calc t py	4-8	70
		98									89
9	210									1-3	
		95									95
10		91							Hairline fracts calc ⊥ Kaol 1/16"-1/8"	2-10	91
	220									4-8	
11		98	10	Flt			m-s arg ⊥ w-m arg	md flesh ⊥ md green	Calc; 1/8-1/4", Kaol, 1/16-1/4" NONE	6-12	88
	230		bedding 57°								
12		99						md green & grey			99
	240										
13		98						md green & white	1/4"-1/2 calc	1-2	92
	250										

DESCRIPTION

130-198 FAULT ZONE continued

192.5-198: md purple flesh breccia & rubble; m-s arg; lt grey-flesh subang clasts <1/8"->1" in purple-flesh clayey matrix. md white kaol vnlts. Mostly rubbly.

198-223 Flesh & green flow banded & volcanic breccia; LBT (think LBT, but possibly could be CHOC) Matrix is f.gr. md purple-flesh w/ 1-2% diss py, w/ discontinuos flow bands or clasts (1/4"-2") which are pale green-white. [Much more competent than above flt] md fine fracture & vnlts w/ calcite t py, minor white kaol, kaol ↑ 220-223

223-226.5 FAULT

223-224: clayey md flesh Δ w/ abt calc + kaol vnlts

224-225.5: md flesh clayey gouge & gouge Δ, rubbly

225.5-226.5 str arg md flesh Δ w/ abt stringers white kaol

226.5-369 'EPI' (OR BUD?) BUD-LIKE lt/volc bxa (in LBT)

226.5-233 md blue green lt, waxy green glauc matrix w/ some dk clasts. md arg?

233-243 md green matrix volc bxa w/ mix of clasts; lt green & grey fg & fb & black fg (basement?)

243-272.7 md green matrix lt w/ lt-grey-white sub ang-sub round clasts, <1/8"-1/2" & minor black clasts graded; more rubbly / broken 257-263

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
183.5-187.5	<		.001		
187.5-191.5	<	<	.001		
191.5-196.5	.004		.03		
196.5-199	.001		.03		
199-203	.001		.01		
203-208	.001		.03		
208-213	<	<	.02		
213-218	<		.01		
218-223	<		.01		
223-228	.003	.003	.02		
228-233	<		<		
NO SAMPLE					

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CM WALCK DATE 5/92 PAGE 3 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN & + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
14		95	Crudely bedded @ SS-65° to C.a.		None		W-M arg	md green & white			67
							md arg		Calc 1/16"-1/4", minor kaol, 1/8"	1-2	
15	260	101					W-M arg				98
16	270	97					M-S arg		Kaol 1/8"	3-4	57
							wk bleach	md green & brick flesh	Calc 1/8"	1-2	
17	280	86									83
		93									90
18	290	98	contact 58					md brick flesh & green			96
		103									103
19	300	100									100
20	310										
	315										

DESCRIPTION

226.5 - 369 'EPI' cont. (OR BUD?)

272.7 - 275.6 Broken-up to rubbly, M-S arg, minor kaol lit.

276 - 290.5 md green angular clasts in dk red-brown-brick matrix volcanic breccia. Clasts comprise ~ 75 - 85%, 1/8" - 1 1/2" f.gr., often flow banded. Wk bleach, wk calcite vnlts.

290.5 - 324 (LBT/epi) md flesh-brick volcanic bxa; Clasts comprise 80 - 90%, 1/8" - 3", f.gr., often flow-banded, md blue-green & lt-md flesh-brick, ang to subang.; Matrix is md flesh fg. Wk bleach. Wk calc vnlts (This is more like volc bxa of LBT, but is within epi)

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
257.2-263	<		<		
263-268			<		
268-272.7			.01		
272.7-275.6			.02		
275.6-279.5			.02		
279.5-284			.01		
284-289			<		
289-293.5			.01		
293.5-298			<		
298-303			<		
303-308			.01		
308-313			.01		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CM WALCK DATE 5/92 PAGE 4 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN & + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD	DESCRIPTION	ASSAYS: SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
21		100			None		Wk bleach	Md brick flesh & green	Calc 1/16"	1-2	100	226.5-369 'EPI' cont (OR BOD?)	313-318	<	<	<		
	320		Contact 45										318-327	<		<		
22		100						Md green & white			87		323-328	<		<		
	330		bedding 67° & vnlts 35/65						Kaol 1/8"	2-3 4-8		324-342 Md green & white lit; green glauconitic matrix w/ lt green & white clasts <1/8"- >1/2". Crudely bedded @ 65-70° to c.a. Clast rich, ~ 80-90% w/ wk vnlts white kaol 328'-340', gen. @ 20-30° & 60-70° to c.a.	328-333	.001		.01		
23		97								2-3	80		333-338	<		.02		
	340											342-357 Md green & white volc bxa - coarser frag than above 75-85% clasts, 1/4"-3", subang. Matrix locally replaced by calcite	338-343	<		.01		
24		100									100		343-348	<		.01		
	350												348-353	.001		.02		
25		98		Vnlt Calc 23	1-2% py				Calc 1/4"	2-6	88	357-367 lt green fine epi, sandstone size grains. Calc & Kaol vnlts 1/8" calc vnlt w/ minor offset @ 23° to c.a. @ 360'	353-358	<		.01		
26	360	98							Calc 1/4" & Kaol 1/4"	Calc 2-4 Kaol 2-4	73		358-363	<		.02		
			Contact 48				W-M arg	Green & grey				367-369 Green & grey lit, clast-rich ~ 90%	363-369	<		.02		
27	370			FAULT py 30	2-4% py		M-S arg	Blue-green & flesh	Kaol 1/16"-1/4"	8-20		369-387.5 FAULT ZONE in EPI / LBT	369-373	.001		.02		
		92						lt-md flesh		4-10	67	369-375 M-S arg epi lit & tuff bxa, lt-md flesh & blue green w/ M-S white kaol vnlts often rubbly, easily crumbled	373-378	.001		.03		
	380																	

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CM WALCK DATE 5/92 PAGE 5 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN ∢ + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
28				FAULT 20°	1-3% py		m-s arg	lt-md flesh	Kaol 1/32"-1/4"	4-10	
		93									80
29	390				2-3% py		md bleach, wk arg	lt grey-green	Kaol ± calc ± py 1/16"-1/4"	3-5	
		102									97
30	400									2-3	
		103	Kaol ± calc vnlts 5-20° to c.a.								100
31	410		5-20°								
32		103									96
	420							lt grey-green & flesh	Kaol ± calc ± py 1/8"-1/4"	4-6	
33		102									84
34	430									2-3	
		118									81
35	440										
		97									78
	445										

DESCRIPTION

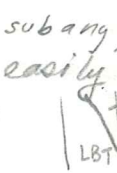
369-387.5 FAULT zone EPI/LBT cont.

375-376 Clay gouge cemented breccia, finely ground - clasts 1mm - 1/2". 1/2" wide vein of fg py @ 30° to c.a. Abt rubble

376-381 Δ: lt-med flesh & pale green fg LBT clast-supported breccia to crackle breccia. m-s argillized. md Kaol vnlts

381-385 Rubble of above

385-387.5 Clay-cemented breccia: pale flesh fg clasts 1/32"-1/2", subround to subang, in lt grey clay matrix. Crumbles easily. Minor py Contact w/ LBT below is sharp @ 20° to c.a.



387.5-653 LBT: lt green, lt flesh & lt grey, f.gr., dense, generally fairly solid core, generally ϕ: 2-3% 1/16"-2mm dk phenos. Often crackle Δ'd, ± Kaol ± calc ± py vnlts

387.5-418 Light green f.gr. w/ 1% dk phenos & w/ md. very thin fractures w/ dk green - v. fine crackle Δ'd. W-M Kaol ± calc ± py vnlts, gen. @ 5-20° to c.a.

418-462 light grey-green & flesh fg. w/ 1-2% 1-2 mm dk phenos, more strongly crackle Δ'd than above; local 1/4"-1/2" wide vein Δ'n w/ rock ± calc matrix,

Somewhat rubbly / broken up 421-425

Gen. mod Kaol ± calc ± py vnlts, 5-25° to c.a. (Dominant vein material is white Kaol)

Abt white Kaol: 450-462

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
378-383	.001		.02		
383-387.5	.001		.02		
387.5-393	.001		.02		
393-398	.001		.02		
398-403	.001	.001	.02		
403-408	<		.01		
408-413	<		.02		
413-418	.001		.02		
418-423	.001		.02		
423-428	.003	.003	.03		
428-432	.001		.02		
432-437	.001		.02		
437-440.5	.003		.02		
440.5-445.5	.001		.02		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CM WALCK DATE 5/92 PAGE 6 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
36	450	102			2-3% py		md bleach & wk arg	lt-green-grey & flesh	Kaol ± calc ± py ⊥ Kaol, Kaol ± calc ± py 1/16"-1"	1-3	102
37	460	103	5-20° Kaol ± calc		1-2% py		md bleach	lt grey green	Kaol + calc ± py 1/32"-1/4"	2-4	103
38	470	100									100
39	480	100									95
40	490	99	No dom of fracts	20-30° Δ ± vein Δ'n	2-4% py			lt grey-green & flesh brown	1/16"-1/4" Kaol + calc + py	5-12	92
41	500	100									85
42	510				1-2% py			lt grey green	Kaol ± calc 1/32"-1/16"	1-2	
43											

Core flat to collar for X-ray

387.5 - 653 LBT cont.

462 - 653 lt to lt-med grey-green f.gr. ϕ ~2-3% ~2mm black (Hb?) phenos - locally → py, ⅓ Gen. w-m to md bleached, gen. dense. Often w/ network 'spider web' of fine fract's - dry crackle Δ Locally w/ Kaol, Kaol + calc ± py vnlts.

462 - 487: w/ thin fine fracts/crackle Δ w/ dk green ⊗ red brown stain on fracts. W-M kaol + calc vnlts ± py, minor diss py. Dom veining @ 5-20° to c.a.

487 - 506: increased veining. V. fine fracture crackle Δ'd w/ flesh-brown stain on fracts. Md to M-S veining: white Kaol, Kaol + calc + py. No dominant direction

6" Δ @ 493 - 493.5; dk grey matrix - py + Si w/ 1/2" clasts of fg ~ 80%, Δ apparently @ 20-30° to ca. - hard to tell since already cut

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
445.5-450.5	.001		.01		
450.5-455.5	.001		.02		
455.5-460.5	.001		.01		
460.5-465	.001		.02		
465-470	.001		.02		
470-475	.001		.04		
475-480	.001		.02		
480-485	.001	.001	.02		
485-490	.001		.02		
490-495	.003		.03		
495-500	.002		.04		
500-505	.002		.02		
505-510	.002		.02		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CMW DATE 5/92 PAGE 7 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
44		83			1-2% py		md bleach	lt grey-green	1/32"-1/16" Kaol + calc ± py	1-2	68
	520										
45		103									88
46	530	100	Random		2-4% py				1/32"-1/4" calc + Kaol ± py	7-12	84
47					1-2% py				<1/32"-1/8" calc + Kaol ± py	1-2	
	540	100									90
48			Random		2-4% py				1/32"-1/4" Kaol, Calc, Kaol + Calc ± py	10-20	
	550	97									87
49					2-3% py				<1/32"-1/16" Kaol + py, Kaol + calc + py	4-8	
	560	94									94
50											
		95									91
	570		12 py + Kaol ∆ vn		3-5% py		md bleach + wk arg	lt gr green & flesh	1/8"-1/3" Kaol + py ± calc	2-5	
	575										

DESCRIPTION

387.5-653 LBT cont

462-653 cont: lt-lt md grey green fg ϕ (dk Hb phenos often repl. by py) ± crackle fract ± vnlts

506-529: lt grey-green fg ϕ w/ wk v. fine crackle fracts w/ green & flesh stain. Wk vnlts Kaol + calc + py.

529-536: lt-grey-green fg ϕ w/ v. fine fracts & Md to M-S veining calc ± Kaol ± py, no preferred direction /\ Hb phenos mostly replaced by py.

536-547: wk vnlts, ± v. wk thin crackle fracts

547-552: increased veining. M-S Kaol, calc & Kaol + calc + py vnlts, Locally rubbly; 549-550

552-572: lt grey green fg ± ϕ + most Hb phenos replaced by py. Md v. thin fracts w/ dk green or flesh stain, locally fine drg crackle ∆. W-M vnlts Kaol ± py, Kaol + calc + py.

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
510-515	.001		.02		
515-520	.001		.02		
520-525	.002		.03		
525-530	.002		.04		
530-535	.002		.03		
535-540	.001		.02		
540-545	.001		.03		
545-549	.002		.03		
549-552	.002		.05		
552-556	.001		.02		
556-561	.001		.03		
561-566	.001		.02		
566-571	.001		.02		
571-576	.002		.04		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CMW DATE 5/92 PAGE 8 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN ∡ + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES / WIDTHS	VEINS PER FOOT	RQD
51	580	100	10 Calc vn		1-3% py		Md bleach, wk arg	lt grn-grey & flesh	1/16"-1/8" calc ± Kaol ± py	2-4	94
52					3-5% py				1/8"-1" Calc ± py, Kaol	3-8	
53	590	97	5 Calc py Δ vn								88
54	600	104			1-3% py		Md bleach ± wk arg	lt grey ± flesh	Kaol ± Calc ± py, 1/16"-1/8"	2-4	83
55	610	98								4-8	94
56	620	105		23 flt	3-6%		Md bleach, wk arg		1/16"-1/4" Q+Kt+py	10-15	73
57			30 vnlts Kaol					lt grey-green & flesh	1/32"-1/3" calc ± py, Kaol ± py	10-30 of fine vnlts 1-2 of wide calc	
58	630	95			2-3% py		Md bleach	lt green-grey & grey	<1/32"-1/16" Q+Kt+py, calc, Kaol,	10-15 fine vnlts	77
	640										

DESCRIPTION

387.5 - 653 LBT cont.

462 - 653 cont: lt grey-green fg ϕ

572-594: lt grey green fg w/ 1-3% diss py, (Hb ↘ phano shape not seen here) flesh stained along thin fractures - Locally crackle brecciated w/ abt flesh stain @ 572-574, 577.5, 588-594.
Md veining: Kaol + calc + py
1/3"-1/2" wide Δ vein Py + Kaol @ 12° ca. 573-574
1/2"-1" wide calc vn @ 10° ca 587-589.5
1/4"-1/3" wide calc + py Δ vn @ 5° ca 589.5-593

594-618.5: lt grey fg w/ v. thin fract's to local vein crackle Δ w/ md flesh stain. Locally flow-banded. 1-3% tiny diss py (Hb ↘ not seen) Wk vnlts Kaol, Calc ± kaol + py.

618.5-620.5: Strong crackle to locally matrix supp. rotated clast breccia. Str veining / crackle fill / matrix of lt grey qtz + py + Kaol. Some (2%) 1/4" clots @ fg py / Mc. Clasts lt grey green fg. Bottom contact @ 23° ca.

620.5-630.5: Strong crackle to locally matrix supp. (vein Δ matrix) Δ. lt grey-green fg, slightly less veining than above. Very cracked-up, locally rubbly

630.5-638: lt grey fg w/ 1-2% tiny diss py, very fine fractures + thin vnlts Q+py, calc, Kaol. Rubbly 636-

637.5 Dom vnlts @ 30° to c.a.

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
576-581	.001		.01		
581-586	.001		.02		
586-591	.001		.02		
591-596	.001		.02		
596-601	.001		.02		
601-606	.001		.02		
606-611	<		.01		
611-616	<		.02		
616-621	.001		.01		
621-626	.001		.02		
626-631	.002		.04		
631-636	.002		.02		
636-639	.002		.02		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CMW DATE 5/92 PAGE 9 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
59		103		Fault Influence	2-3% py, 3-4% py		md bleach, md bleach ± wk arg	lt grey green, lt grey-green & flesh	<1/32" Q+py, Kaol, calc; <1/32"-1/4" Calc, Qtz, Kaol	10-20, 20-50	102
LBT 60	650	89		28 flt	~5% py 1% py		md silic & arg	lt green & md grey	<1/32", Kaol, calc	15-30	66
SRF 61	660	96					W-M bleach	lt-md sage green			55
62									<1/32"-1/8" calc+ py, Kaol	2-5	
63	670	100									51
64	680	103					wk bleach	md sage green			72
65	690	100					W-M bleach	lt-md sage green			67
66	700	97									58
	705										

DESCRIPTION

387.5 – 653 LBT cont

462 – 653 f.gr. LBT cont

638 – 644.5: lt grey-green fg w/ m-s crackle/vein Δ
- 2 stages - clasts cut by thin vnlts
Abt <1/32" vnlts md grey qtz ± py, Kaol, minor calc
Few 1/8"-1/4" vnlts qtz Δ - very fine frags wallrock.

644.5 – 653: strong crackle & vein Δ'd, locally matrix supp Δ, Fault influence
Lt green f.g. w/ strong fine fracts/ crackle w/ dk red-flesh stain, locally vein Δ up to 1" w/ finely ground rock frags x-cuts.
Vein/matrix of calc, Kaol, & lt grey qtz
Local 1/4" clots f.g. py (2-5/ft)

653 – 654.5 Fault, probably SRF. Rubbly.
Matrix supported breccia. Pale green & flesh sub ang clasts <1/32" - 1/2" comprise ~ 65%, Matrix md grey silica + clay + fg py
Lower contact @ 25-30° to c.a.

654.5 – 723.5 DOZER fg lt sage green

654.5 – 665 lt green f.gr., No phenos, very fine 'stretch marks', wk fine dry crackle Δ'n, W-M ~ discontinous vnlts white Kaol, calc, Last 7' rubbly. (658-665)

665 – 723.5 lt-med sage green f.gr. Core gen. broken into 1" - 5" pieces. Wk vnlts calc ± py, Kaol, Often mottled w/ clotty med green in lt green background
More rubbly @ 686-689, 703-712

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
639-644	.002		.02		
644-649	.002	.001	.03		
649-653	.002		.02		
653-654.5	.002		.03		
654.5-659.5	.001		.01		
659.5-664	.001		.01		
664-669	.001		.01		
669-674	.008	.009	.01		
674-679	.001		.01		
679-684	.002		.01		
684-689	.003		.01		
689-694	.003		.05		
694-699	.001		<		
699-704	<		<		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CMW DATE 5/92 PAGE 10 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
69	70				1% py		W-m bleach	lt-md sage green	Kaol, calc <1/32" - 1/8"	2-4	
	710	69									18
		100									69
68								md sage green		1-3	
	720			40 / 25 Flt							
69		94	Bedded 52		1-2% Trace-1%		md bl ± ang WK bleach	lt-md green / md grey-green	calc + clay + py matrix / calc 1/32"-1/16"	1-2	76
	730										
70		99			1%		W-m bleach	lt-md grey-green	Calc 1/16"-1/8" / Calc 1/32"-1/8"	3-6 / 2-5	99
	740										
71		97									97
72	750					calc					
		100							Calc 1/8"-1/3"	4-10	98
73	760	95			Trace py		WK bleach	md blue-green-grey	Calc Kaol <1/32"-1/16"	4-8	86
	770										

DESCRIPTION

654.5 - 723.5 DOZER Sage green fgt

723.5 - 725.1 FAULT Clast-rich ~85% breccia; ang to sub ang clasts lt green Dozer (no phenos) <1/8" - >1/2". Clast to barely matrix supported. Matrix 723.5 - 724.3 is calc + clay. Matrix 724.3 - 725.1 is md-dk grey, prob. sulfide rich (no fizz, med hardness) Upper contact 40° to c.a. Lower contact 25° c.a.

725.1 - 810 Volcaniclastic / Epiclastic sediments interbedded w/ fine-grained tuffs and flows - look like LBT (?)

725.1 - 731 volcanic sandstone; lt-md green-grey, Clasts range from fine to coarse sand. (< 1/32" - 1/8") & contain ~ 2% black clasts of basement shale. Crudely bedded @ 52° to c.a. Wellsorted

731 - 735 lit / volcanic bxa, coarse frags than above. Md grey-green, Clasts < 1/8" - 2/3" sub ang. to subround. Matrix supp. Wk calc vnlts. 1% basement clasts

735 - 762.5 Med grey-green f.gr. w/ faint banding, 1-2% diss py, possibly replacing mafics? w/ local lit / volc bxa interbeds (as above) at 740-743', 756.5 - 762.5. Interbeds of sediments have sharp but irregular contacts w/ tuff
1" calc vn @ 753'

762.5 - 801.5 Volcanic sandstone; md blue-green-grey. Well-sorted < 1/32" - 1/8"; fine to coarse sand. Crudely bedded @ 60-80° to c.a.

2" calc vein @ 771'

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
704 - 707.5	.001		<		
707.5 - 712	.001		.01		
712 - 717	<		<		
717 - 721	<		<		
721 - 723.5	<		<		
723.5 - 725.1	.001		.02		
725.1 - 730	<		.01		
730 - 735			.03		
735 - 740			.01		
740 - 745			<		
745 - 750			.01		
750 - 755			<		
755 - 760			<		
760 - 765			.01		
765 - 770			.03		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CMW DATE 5/92 PAGE 11 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
74	770	82	Bedded 70		None		Wk bleach	Md blue-green grey	1/2"-2" calc; 1/64"-1/8" calc	3; 2-4	82
75	780	74	Bedded 75°							1-3	74
		101					Fresh	Md-dk purple brown			96
76	790	95	Bedded 68				Wk bleach	Md grey green			91
77	800	105	Bedded 68						1/16"-1/4" Calc	3-6	100
78	810	100			1% py		W-M Bleach	lt-md blue-green-grey	1/16"-1/4" calc; py	2-5	98
79	820	94									94
80	830			Flt	1-2% py/Mc; 1% py	Calc	calc; Wk bleach	White; md-dk	Calc; 1/16"-1/4" calc	Calc; 2-3	
81	835										

DESCRIPTION

725.1 - 810 cont; interbedded volcanic seds & fgt

801.5 - 810 Coarse volc sandstone to lt (lithic lappilli tuff) < 1/16" - 1/3" clasts, clast supp., Md grey-green, 2-4% black (basement shale?) frags Bedded @ 65-70° to c.a.

810 - 913 Probably LBT?, fg tuff/flow

810 - 830 Md blue-green-grey f.g amygdular - 6-8% 1/16" - 1/4" irregular shaped lt-med green-blue filling, softer than wallrock - possible Kaol component.

830 - 832 FAULT; 85% milky white calcite w/ minor clasts green fgt. Also lesser white Kaol mixed w/ calcite, minor (1-2%) py/Mc

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
NO SAMPLE					
830-832	<		<		

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CMW DATE 5/92 PAGE 12 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD
		89			Trace to 1% py		wk bleach	md-dk grey-green	1/32"-1/4"	2-6	86
	840										
		105									101
	850				2-4% py		w-m bleach	md green-grey	1/32"-1/8" kaol & 1/16"-1/4" calc	5-15 kaol & 3-5 calc	
		100			1% diss py		v wk bleach	md-dk grey-green	1/16"-1/8" calc	2-3	95
	860										
		100							1/32"-1/8" calc	1-2	98
	870										
		101									101
	880										
		98									98
		100									100
	890										
									1/16"-1/4" calc	3-4	
		91									91
	900										

DESCRIPTION

810-913 cont; Probably LBT

832 - 848.5 md-dk grey green f. gr. ϕ; 2-4% tiny (<1mm) dk green or black specks. Very competent.

848.5 - 855.5 Md green-grey f. gr. ϕ as above, but increased veining!

855.5 - 904 md-dk grey-green f. gr. ϕ; 2-3% tiny (<< 1mm) dk green or black specks. Very competent. Wk calc vnlts.

ASSAYS

SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
835.5-839.1	<		<		
NO SAMPLE					
848.5-852.5	<		.01		
852.5-857.1	<		.01		
NO SAMPLE					

ROSEBUD PROJECT

HOLE NO. RL 265C LOGGED BY CMW DATE 5/90 PAGE 13 OF 13

BOX #	DEPTH (FT)	RECOVERY	STRUCTURE: FLOW + VEIN + BEDDING	STRUCTURE: FAULTS	% METALLICS	GRAPHIC LOG	ALTERATION	COLOR	VEIN TYPES /WIDTHS	VEINS PER FOOT	RQD	DESCRIPTION	ASSAYS: SAMPLE NO.	oz/t Au	✓ Au	oz/t Ag	✓ Ag	% Cu
		99			1% py		v wk bleach – Fresh	md-dk grey green – dk green-grey	1/32"-1/8" Calc	4-6 – 1-3	99	810-913 cont, prob. LBT 904-913 T.D.: Dark grey to green grey f.gr. ϕ; 2-3% tiny dk phenos. Fresh. wk calc vnlts.						
	910																	
	913 T.D.																	

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S. DIP CAT LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: HQ DATE: 5-4-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
130	133	3'	3'	—	—	100	0	0		pure clay goo - mod. soft
133	142	9'	3.7	2.2	—	41	24	0		all clay cemented rubble
142	148	6'	3.7	1.5		62	25	1.89		all strongly clay altered Bedeled Bud
					7				30°-45°	alteration - not much diff from strongly argillized
										host - weak clay fill - planar rough tight
148	153	5'	4.4	2.8	—	88	56	—		predom clay cemented rubble - host probable
										bud - strongly clay altered
										151.5-153 predom rubble all s ~ alt
153	162	9'	6.0	2.2		67	24	.83		153-155 clay cemented rubble in whole core
										153-162 predom broken rubble - hosted
										in mod bleached - peach LLT w/ m-s argillic clay alt
					5				0-15°	planar rough weak clay fill similar to perv. alt
162	167	5'	3'	0.4'		60	8%	.33		predom all broken rubble
					1				75°	planar rough w/ golden clay slicks - tight
167	172	5'	4.1	0.4'		82	8%	1.95		predom. all broken rubble
					8				50°-60°	planar rough weak clay lining - hosted w/in
										ms bl FGT w/ m-s perv argillic clay alt
172	179	7'	5.8'	2.1		83	30	1.72		predom broken rubble - hosted w/in
										FGT to LLT ms perv. bl } argillic clay alt
					10				20°-50°	planar rough tight weak clay lining
										few zones of clay cemented rubble
179	183.5	4.5'	4.0'	0.4'		89	9%	2.0		predom rubble - host ms bl w/ m to ms argillic alt
					5				60-80°	planar-rough to curved rough random fractures
					3				±20°	w/ tight - weak clay lining
183.5	193	9.5'	7.4'	4.6'	4	78	48	.54	5-30°	planar to curved rough tight unalt to weak clay coat
										178.1-193 predom rubble host is perv.
										strongly bl + clay alt
193	199	6'	5'	1.5'		83	25	.80		193-196.4 clay gouge } clay cemented rubble
										196.4-199 rubble w/ ↓ clay alt
					4				60°-65°	planar rough tight partings along (w/in) clay gouge
199	203	4'	3'	2.8	3	75	70	1.7	±60°	planar smooth tight unalt partings along flow foliation
					2				±30°	fracts planar rough tight weak clay coating
203	213	10	9.8'	8.9	8	98	89	.82	40-50°	planar rough tight unalt to fe. clay 204.3-204.9 rubble brittle
213	217	4	3.8'	3.8'	2	95	95	.53	15°+30°	" " " " " " "

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: South Dip LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60 CORE SIZE: HQ DATE: 5-2-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
217	223	6'	5.45	5.45'	2	91	91	.37	20-25°	planar, rough tight weak clay + $CaCO_3$ lining
223	233	10'	9.8'	8.8'		98	88	.41	*	226.5' lithologic Δ: from a peach/flesh
										colored FGT - local volc bxa to a Bud like LLT
										223-226.5 fracture sets are:
					1				10°	planar rough tight w/ weak clay + $CaCO_3$ lining
										224.1-225.6 peach flesh clay cemented rubble
										Fractures into the Bud like unit - EPI
					2				40-45°	Curved to Planar, rough unaltered tight w/ tr. to weak clay lining
					1				85-90°	planar, rough, ±3 mm w/ lite green clay fill
233	243	10'	9.9'	9.9	1	99	99	.30	45°	planar, semi rough tight trace clay lining
					1				60°	planar w/ slicks of SiO_2 composition
					1				20°	planar rough tight weak clay lining
243	253	10'	9.8'	9.2'	3	98	92	.31	±30°	planar rough tight weak clay lining
253	263	10'	9.5'	6.7'		95	67	.42		257.4-263 m-s argillically alt Bud w/ clay
										rich matrix, intermittent rubble w/ m-clay w/
										12 blocks of .2'-.5' solid Bud w/ rubble fill between
										breaks are along partings of clay matrix
					4				5-25°	w/in rubble zone rough ±planar w/ clay lining - w/in
										zone of ≤ clay alt rock - fracture lining not an ↑ in
										alt relative to rock itself
263	273	10'	10.1	9.8'	1	101	98	.59	40°	planar, rough, tight weak clay lining
					4				60-70°	same @ above - occuring along bedding plans of clay matrix
										272.8-273 intense green clay matrix rubble
										end of run
273	279.5	6.5'	6.3'	3.7'		97	57	1.1		275.6' contact of Bud into LBT - volc bxa
										273-275.6 pure green clay gouge
										contact @ 275.6 is 40° to CA
										275.6- is LBT volc bxa ↓ these are w/in LBT
					2				20-30°	curved semi rough tight weak clay coat
					5				30-45°	planar rough ∠1 to 3mm tight to weakly open
										w/ weak clay lining
279.5	283	3.5'	3.0'	2.9'	1	86	83	.33		45° tight rough planar weak clay lining

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S Dip Cat LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: HQ DATE: 5-2-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
283	289	6'	5.6'	5.4'	2	93	90	.54	30°	planar, rough, tight unaltered to tr. clay coating
					1				45°	curved, rough tight " " " " " "
289	293.5	4.5'	4.4'	4.3'	1	98	96	.45	60°	planar smooth tight, weak clay coat
					1				20°	" rough " unaltered to tr clay lining
293.5	303	9.5'	9.8	9.8'	2	103	103	.31	40°; 20°	planar rough tight unalt to tr clay lining
					1				60°	" " " " " " " "
303	313	10'	10'	10'	4	100	100	.40	40-50°	planar " " " " " " "
313	323	10'	10'	10'	2	100	100	.30	30°-40°	" " " " " " " "
					1				60°	" " " " " " " "
323	333	10'	10'	8.7'		100	87	1.5		323.9 Lithologic break LBT INTO Bud
										contact @ 43° no fract. present in LBT
										324.8 - 325.3 strong breakage along bedding
										planes due to strong clay composition of matrix
										@ 65°-70° to CA
										324.8 - 331.5 clay rich matrix Bud all breakings
					9				65-70°	are along beading planes of clay rich matrix
					3				±40°	planar rough unalt relative to host rock - tight
					3				25°; 50°	w/in coarse tuffaceous matrix Bud, ie more competent
										planar rough 1-3mm w/ weak white clay fill
333	343	10'	9.7'	8'		97	80	1.03		333.8 - 334.5 rubbly due to prominent vein set
					3				10°-20°	planar smooth tight w/ 1-3 mm white talc like clay fill
					7				20-35°	planar rough tight weak clay (talc like) coating
343	353	10'	10'	10'	1	100	100	0.1	60°	planar rough tight unaltered
353	363	10'	9.8'	8.8'		98	88	.61	Lith Δ LBT->Bud	355.5 - 355.9 clay gouge seam @ 35°-40° to CA
					4				80-90°	±1" green clay seam
					2				20°	tight, smooth, planar w/ ≤1mm talc like clay lining
363	373	10'	9.8'	7.3'		98	73	.41		363-366 FGT mblt
					3				5-10°	planar rough tight weak clay coating
										366-366.7 strongly clay alt EPI-BUD approaching
										a clay cemented rubble zone
					1				45°	planar tight semi rough trace clay coating

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S. DIP CAT LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: HQ DATE: 5-2-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
										clay cement gouge w/o exact contact may be related to bedding or may be ~90°-80° & @ ±60° → 20°
373	383	10'	9.2'	6.7'		92	67	0		369 - 387.5 FAULT mod-s perv. clay alt. Intermittently clay cemented rubble
383	393	10'	9.3'	8'		93	80	.75	predom incompetent clay cemented rubble	host rock is perv. ~ + bl any partings are mod clay rich - clay is white talc like. most breakage is random
										no prominent fracture alt. up to 378'
										Within interval of 383-393
					5				±40°	planar rough tight w/ white clay fill up to ±15 mm w/ local mixed rubble
										380.6 - 387.6 predom clay cemented rubble - remains in core form
										387.5' Lithologic change into FGT - perv. bl w/ mod perv. clay alt @ 20°
					2				5-10°	rough planar tight unalt to weak clay coat
393'	403'	10'	10.2	9.7'		102	97	.39		393-393.3 broken rubble w fracture surfaces
										coated ≤1mm white talc like clay
					3				10-30°	smooth planar tight unalt to weak clay coat
					1				50°	rough planar unalt to tr. clay coat
403	413	10'	10.3	10	9	103	100	1.07	10-30°	planar smooth ± local rough unalt local clay coat
					1				90°	planar rough w/ 25 mm gray clay fill
					1				60°	" " tr clay coat - relativ unalt
413	423	10'	10.3	9.6	1	103	96	.39	20°	undulating smooth unalt to tr. clay
					2				20°	planar smooth tight weak clay fill
					1				20°	planar rough " " " "
									Note ★ predom sub vertical cracks	419-428 brittle tight crackle fractured w/ ≤1mm white clay fill w/ 0-20° fracture breakage
										core is riddled w/ breakage possibilities but maintains it's cohesiveness
										421-428 zones of brittle rubble (weak to mod %)
423	432	9'	9.2'	7.6'	10	102	84	1.11	0-40°	brittle tight fractures planar smooth & locally rough (semi) w/ ±1mm talc like clay fill - there
										are more fracts. than what is broken along

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S. Dip CAT LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: HQ DATE: 5-4-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
432	440.5	8.5'	~10'	6.9'	9	118	81	.9	20-40°	planar semi rough tight ≤1mm talc like clay
										Note: there are more fractures than these
										that are not broke BUT potential failures sub ∥ to CA
										435-435.5 } brittle rubble zones w/ talc like
										439 - 440.5 } clay fill
440.5	450	9.5'	9.2'	7.4'	17	97	78	1.85	5-35°	planar, semi rough, tight w/ ≤1-4mm talc like clay fill
										perv. sub ∥ to CA. clay fill fracts
450	460	10'	10.2'	10.2'	8	102	102	.78	5-35°	planar, rough, tight w/ ≤1-10mm talc like clay fill
460	470	10'	10.3'	10.3'	6	103	103	.58	5-35°	" " " w/ predom 1-3mm " " "
470	480	10'	10'	10'	2	100	100	1.0	5-10°	undulating rough tight ≤1mm talc like clay
					6				30°	curved smooth, unalt, tr clay, tight
					2				60-70°	smooth planar tight, unalt poss tr clay
480	490	10'	10'	9.5'	2	100	95	.8	15°	undulating rough w/ 1-3mm talc like clay fill
					6				25-30°	planar, rough, tight w/ ≤1-2mm " " " "
490	500.5	10.5'	10.4'	9.7'	3	99	92	.48	10-20°	planar smooth tight " " " " " " " " " "
					2				10-20°	undulating rough tight w ≤1mm " " " " "
500.5	510.5	10'	10'	8.5'	9	100	85	2.4	0-20°	undulating or planar smooth tight w/ 1-2mm talc like clay fill
					15				35-50°	planar smooth tight w/ ≤1-2mm talc like clay
510.5	520	10.5	8.7	7.1	18	83	68	2.64	30°-35°	all are planar smooth tight
					2				10-20°	w/ ≤1mm talc like clays - the clays give
					2				50°-60°	it a smooth surface however beneath it is rough usually
					1				80-90°	few zones brittle broken rubble w/ clay lined fracts
520	530	10'	10.3	8.8		103	88	1.84		525.6 - 526.4 } brittle broken rubble - mechan. derived
										527.4 - 528 } to fit in box however breaks along prom. fractures
					9				30-40°	planar or undulating tight w/ <1-3mm talc like clay coat
					10				15-20°	clay lining smooth surface w/ clay, rough surface under clay
530	540	10'	10'	8.4'	2	100	84	1.4	30°	planar rough tight ≤1-2mm w/ talc like clay fill
					9				45-50°	" smooth " " " " " " "
					3				±15°	undulating, planar & curved - 1 each w/ clay fill @ above
540	550	10'	10'	9'	6	100	90	.8	50°-70°	planar smooth unalt, local tr. clay
					2				10°-25°	planar rough weak clay lining tight ≤1mm clay

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S. Dip Cat LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: HQ DATE: 5-5-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
									☆ NOTE:	549-552 zone of strong brittle fracturing
										all sub ll to CA ranging from 0-50° relatively
										tight <1-4 mm at most clay fill Intermittently
										rubbly (not much) far more potential fracture
										breaks than those that do exist. Prominent
										breaks are 15°, 35°, 70° w/ green; or white
										clay fill, surfaces are planar smooth, curved
										smooth; planar rough
550	560	10'	9.7	8.7	2	97	87	.82	5-15°	planar, smooth w/ clay, rough w/o <1-2mm clay fill
					2				±30°	all @ above similar fracture set; characteristics
					4				50; 70-90°	planar smooth unalt, tr. $CaCO_3$ + xtaline pyrite
560	567	7'	6.6'	6.6'	1	94	94	.30	40°	planar smooth unalt, tr clay ± $CaCO_3$
					1				65°	" rough " " " "
567	577.5	10.5'	10.0'	9.6'	3	95	91	.70	35°	curved smooth tight tr. talclike clay lining
					2				20°	planar smooth unaltered tr clay ± py
					2				60°-75°	" " "
577.5	587.5	10'	10.0'	9.4'		100	94	1.0		580.5 - 580.9 rubble - brittle w/ clay lined fractures
										prob. due to pounding to get into the box - along a
										zone of weakness - dry open spaced Δ w/ weak clay fill
					4				10-20°	planar smooth unalt; planar rough weak talclike clay coat
					6				30-35°	" " " " " " " " " "
587.5	598	10.5	10.2	9.2'		97	88	.69		587.5 - 587.8 rubble - end of rod pickup
					5				30-40°	planar, rough tight predom unalt, local tr clay
					2				20°	" smooth tight unalt local tr clay
598	608	10'	10.4	8.3'	2	104	83	.96	20°	planar smooth unalt w/ tr clay <1mm - tight
					4				60-80°	planar smooth tight weak stain } local py ± tr clay
					4				30-50°	" " " " " }
608	618.5	10.5	10.3'	9.9'	4	98	94	.58	20-40°	planar rough unalt weak stain, local tr clay
					2				50-60°	" " " " " " " "
618.5	628.5	10'	10.5'	7.3		105	73	1.14		Intermittent rubble zones w/ .3'-1.2' due to riddling of fractures
Note: end of run is rubbly										→ 618.5 - 619.7' beginning of run - 1.2' of rubble
					5				±60°	planar rough w/ weak clay coating
					7				±30°	Note: local tectonic Δ - fairly dry w/ weak clay interstitial fill

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S Dip Cat LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: HQ DATE: 5-5-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
628.5	639	10.5'	10.0'	8.1	9	95	77	1.2	±30°	planar rough; curved rough craggy tight to open to
										≤3 mm only weak local surficial clay coating ≤1 mm
					3				±10°	planar rough tight unalt to tr. clay
639	649	10'	10.3	10.2	4	103	102	.58	20°	planar rough tight weakly alt clay coating
										635 - 652.8 Rock is crumbly yet
										competent - has been tectonically brecciated -
										clast support weak clay filling interstices
										m s bl m alt
					2				45-50°	planar rough unalt tight no filling or coating
649	659.5	10.5'	9.3	6.9	4	89	66	.86	20-30°	planar rough crumbly tight weak clay coating
					3				45-50°	" " " " " " "
					1				75° planar smooth tight weak clay coating	652.8 - 654.4 clayey rubble; claygouge cemented rubble
										@ 654.4 is ±35° to CA
										654.4 - 664.5 m-s perv argillic alt Intermittent
										crumbly rubble Local tectonic bxa in tact w/
										weak clay filling interstices @ fracture coating
659.5	670	10.5	10.1	5.8'		96	55	1.39		frags are brittle in rubble zones w/ weak clay coating
										on fracture surfaces: 663.3 - 664 ↑ clay alt; fract fill
					9				20-30°	planar rough tight weak clay coating
										659.3 - 659.7 crumbly rubble
										662-664.5 rubble brittle w/ .7' of which has
					3				45-55°	planar smooth tight unalt to weak clay coat
					2				45-55°	planar rough " " " " " "
670	677.5	7.5	7.5	3.8		100	51	2.0		671 - 671.8 weakly clay cemented to crumbly rubble
										676.3 - 677.5 brittle competent frag. rubble →
										fracture surfaces w/ weak clay coating - may be more so due to handling
					8				5-25°	planar smooth to rough weak clay coating tight
					7				50-55°	planar smooth tight weak clay coating
677.5	687.5	10'	10.3'	7.2	9	103	72	1.65	±50°	planar smooth tight unalt to weak clay + Py coating
					5				20-30°	planar rough tight weak clay coating
					3					686.5 - 687.5 rubble - frags are m. strong -
										competent w/ weak clay coating on fracture surfaces

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S Dip Cat LOGGED BY: KLK

HOLE NO.: RL-265C DIP: ~60° CORE SIZE: HQ DATE: 5-6-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
687.5	698	10.5	10.5'	7'		100	67	1.9		688.2 – 690 broken rubble of competent frags
										somewhat strong; brittle w/ weak clay fracture coating
					8				30-40°	all are planar smooth predom ~ 80%
					6				±20°	others are planar rough – all are tight w/
					6				50-60°	weak m hard clay coatings
698	707.5	9.5	9.2'	5.5'	7	97	58	1.3	±20°	all same @ above however 2 of the
					3				70-80°	70-80° fracts are planar rough crumbly –
					2				±50°	surface w/ weak clay alt
										703.6 – 711.5 intermittent rubble – w/ angular
										somewhat brittle frags – no significant alt
										diff from host, fracture surfaces w/ weak
										m. hard clay coating. mostly probably a
										mod % of it a result of handling
707.5	712	6.5	4.5'	1.2'		69	18	2.7		← predom rubble run
					3				50-60°	all same @ above – w/ in rubble there
					5				±30°-40°	are more fractures than what are counted
					4				±15°-20°	– exact # not countable prob 5-10% more
712	722	10'	10'	6.9	11	100	69	2.3	60-70°	all same @ above
					3				15-20°	all unalt to weak <1mm clay coating
					9				30-45°	clay is semi hard
722	731	9'	8.5	8.1		94	76	1.3		723.5 – 724.1 Δ tuff w/in tuffaceous matrix w/ $CaCO_3$ matrix
										↳ 45° to CA ↳ @ 25° to CA w/ 15-20 mm bounding clay seam
										724.1 – 730.8 fine volcanic sediment – competent
										w/ weak clay component
					2				30°	planar rough tight unalt weak clay coat
					8				50-60°	planar smooth to weakly rough unalt to weak soft clay coat
					1				25°	curved smooth ~ 15-20 mm clay fill
731	741	10'	9.9	9.9	4	99	99	.61	50°-60°	all are planar rough tight relatively unalt
					2				30°	w/ weak local clay coat
741	751.5	10.5	10.2	10.2	2	97	97	.39	50°	planar rough tight weak stain tr. $CaCO_3$ ± clay
					1				70°	planar smooth " " " " " "
					1				35°	planar rough " " " " " "

GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S Dip Cat LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: HQ REDUCED to N @ 778' DATE: 5-6-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
751.5	761.5	10'	10'	9.8'	6	100	98	.60	35°-55°	planar, smooth, tight relatively unalt (wkly stained trace clay or py or $CaCO_3$)
761.5	772	10.5	10.'	9.0'	1	95	86	.50	15-20°	planar semi smooth to wkly rough tight unalt to tr clay coat
					2				40°	Same @ ↑
					1				55-60°	
										765.5 - 782 prominent interbeds of volcanic seds - ~80%+ upper contact @ 20°
					1				±20°	curved rough tight relatively unalt
772	778	6'	4.9'	4.9'	1	82	82	.82	70°	planar smooth w/ 3-4 mm of clay fill
					1				20°	wavy rough tight weak clay coating
					2				70°	planar smooth tight unalt touch o' clay
778	783	5'	3.7	3.7	1	74	74	.27	40°	wkly wavy planar tight unalt
783	793	10'	10.1	9.6'	1	101	96	1.29	15°	wavy rough 2-4 mm $CaCO_3$ filling
					9				35°-40°	planar smooth unaltered - no coating
					3				90°	" " " " "
793	803	10'	9.5'	9.1'	9	95	91	1.79	35-40°	all mostly are planar smooth unalt - prob. related to bedding (probable compaction foliation)
					6				65-75°	
					2				90°	at 65-75° 2 have curvy surfaces
									55°	
803	812.5	9.5'	10'	9.5'	12	105	100	1.2	45°-65°	planar, semi rough to smooth tight unalt.
812.5	822.5	10'	10'	9.8'	12	100	98	1.2	50-65°	Same @ above
822.5	833	10.5'	9.9'	9.9'	2	94	94	.40	10°	planar smooth to semi rough unalt
					2				45°-55°	weak stain tr $CaCO_3$
833	843	10'	8.9'	8.6'	1	89	86	.79	70°	planar smooth
					1				20°	curved "
					4				40-50°	planar rough
					1				40-50°	curved smooth
										all are relatively unalt weak gum stain ± tr $CaCO_3$ tight
843	852.5	9.5	10'	9.6'	5	105	101	.60	40-55°	planar smooth to local semi rough wk stain relatively
					1				22°	unalt, local tr $CaCO_3$ tight
852.5	862.5	10'	10'	9.5'	4	100	95	.60	35-50°	planar smooth tight unalt wk stain, tr $CaCO_3$ locally
					2				"	planar rough w/ ~ <1-4mm clay fill semi soft,
862.5	872.5	10'	10'	9.8'	1	100	98	.10	35°	curved smooth unalt, weak stain tr $CaCO_3$ tight

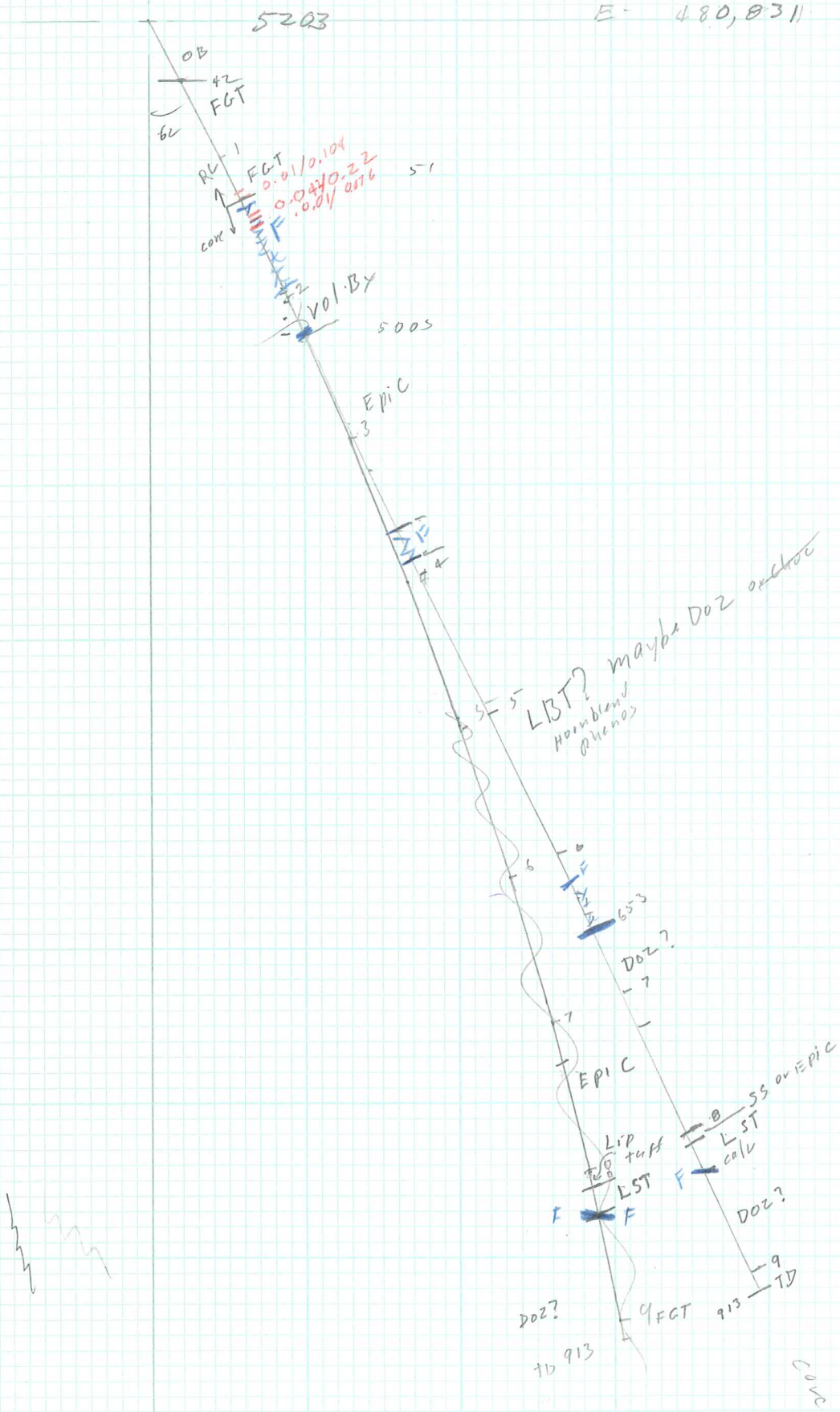
GEOTECHNICAL LOG

PROJECT: ROSEBUD LOCATION: S Dip Cat LOGGED BY: KLK

HOLE NO.: RL-265C DIP: -60° CORE SIZE: N DATE: 5-7-92

1	2	3	4	5	6	7	8	9	10	11
FROM	TO	CORE RUN	RECOVERED CORE	TOTAL LENGTH OF CORE>4"	NO. OF FRACTURES	CORE RECOVERY (%) (4/3 X 100)	R.Q.D. (%) (5/3 X 100)	FRACTURES PER FT. (6/4)	RANGE OR AVERAGE ANGLE OF FRACTURE W.R.T. CORE AXIS	REMARKS
872.5	882.5	10'	10.1	10.1	2	101	101	.30	25°-30°	planar rough, tight w/ <1-6mm $CaCO_3$ fill
					1				40°	curved smooth unalt weak green stain
882.5	887.5	5'	4.9	4.9	1	98	98	.82	35°	planar rough ±1mm $CaCO_3$ fill tight
887.5	897.5	10'	10'	10'	1	100	100	.10	30°	curved smooth unalt w/ tr $CaCO_3$
897.5	903	5.5'	5'	5'	0	91	91	0		
903	913	10'	9.9'	9.9'	3	99	99	.40	30°	all are planar, semi rough w/ ± $CaCO_3$ fill
					1				35°	

N- 2,203,590
E- 480,831



ROSEBUD
RL-265-C
1"=100'
In plane of hole

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (702) 828-1158

14-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Attn: Tim Kuhl
Project:

Received: 8-May-92 19:53

PO #:

Job: 92756R

Status: Final

Drill Core

Sample Id	Au FA oz/ton	Au FA oz/ton	Ag AA oz/ton
RL-265C 423 428	0.0025	0.0034	0.026
RL-265C 428 432	0.0009	NA	0.018
RL-265C 432 437	0.0007	NA	0.020
RL-265C 437 440.5	0.0027	NA	0.018
RL-265C 440.5 445.5	0.0010	NA	0.015
RL-265C 445.5 450.5	0.0010	NA	0.012
RL-265C 450.5 455.5	0.0013	NA	0.015
RL-265C 460.5 465	0.0010	NA	0.012
RL-265C 465 470	0.0009	NA	0.018
RL-265C 470 475	0.0007	NA	0.020
RL-265C 475 480	0.0009	NA	0.038
RL-265C 480 485	0.0006	NA	0.023
RL-265C 485 490	0.0012	0.0011	0.015
BL-018	~~0.0540~~	~~NA~~	~~NA~~
RL-265C 485 490	0.0014	NA	0.015
RL-265C 490 495	0.0026	NA	0.032
RL-265C 495 500	0.0022	NA	0.038
RL-265C 500 505	0.0017	NA	0.018
RL-265C 505 510	0.0023	NA	0.020
RL-265C 510 515	0.0009	NA	0.018
RL-265C 515 520	0.0009	NA	0.015
RL-265C 520 525	0.0016	NA	0.026
RL-265C 525 530	0.0022	NA	0.035
RL-265C 530 535	0.0019	NA	0.026
RL-265C 535 540	0.0014	NA	0.023
RL-265C 540 545	0.0013	NA	0.029
RL-265C 545 550	0.0015	NA	0.029
RL-265C 549 552	0.0019	NA	0.047
RL-265C 552 556	0.0010	NA	0.023
RL-265C 556 561	0.0011	NA	0.026

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14-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Attn: Tim Kuhl
Project:

Received: 8-May-92 19:53

PO #:

Job: 92756R

Status: Final

Drill Core

Sample Id	Au FA oz/ton	Au FA oz/ton	Ag AA oz/ton
RL-265C 561 566	0.0010	0.0012	0.023
BL-019	~~0.0156~~	~~NA~~	~~NA~~
RL-265C 566 571	0.0008	NA	0.020
RL-265C 571 576	0.0022	NA	0.044
RL-265C 576 581	0.0012	NA	0.012
RL-265C 581 586	0.0012	NA	0.020
RL-265C 586 591	0.0011	NA	0.023
RL-265C 591 596	0.0008	NA	0.018
RL-265C 596 601	0.0009	NA	0.020
RL-265C 601 606	0.0006	NA	0.020
RL-265C 606 611	0.0003	NA	0.012
RL-265C 611 616	0.0004	NA	0.018
RL-265C 616 621	0.0010	NA	0.009
RL-265C 621 626	0.0012	NA	0.018
RL-265C 626 631	0.0018	NA	0.038
RL-265C 631 636	0.0018	NA	0.020
RL-265C 636 639	0.0017	NA	0.015
RL-265C 639 644	0.0015	NA	0.015
RL-265C 644 649	0.0016	0.0013	0.029
BL-020	~~0.0227~~	~~NA~~	~~NA~~
RL-265C 649 653	0.0018	NA	0.023
RL-265C 653 654.5	0.0019	NA	0.032
RL-265C 654.5 659.5	0.0010	NA	0.009
RL-265C 659.5 664	0.0008	NA	0.006
RL-265C 664 669	0.0006	NA	0.009
RL-265C 669 674	0.0081	0.0091	0.009
RL-265C 674 679	0.0014	NA	0.009
RL-265C 679 684	0.0015	NA	0.006
RL-265C 684 689	0.0029	NA	0.009
RL-265C 689 694	0.0028	NA	0.053

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (702) 828-1158

14-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Attn: Tim Kuhl
Project:

PO #:

Received: 8-May-92 19:53

Job: 92756R

Status: Final

Drill Core

Sample Id	Au FA oz/ton	Au FA oz/ton	Ag AA oz/ton
RL-265C 694 699	0.0008	NA	0.003
RL-265C 699 704	0.0002	NA	0.003
RL-265C 704 707.5	0.0007	NA	0.003
RL-265C 707.5 712	0.0008	NA	0.006
RL-265C 712 717	0.0002	NA	<0.003
RL-265C 717 721	<0.0001	NA	<0.003
RL-265C 721 723.5	0.0001	NA	0.003
BL-021	~~0.0452~~	NA	NA
RL-265C 723.5 725.1	0.0008	NA	0.015
RL-265C 725.1 730	0.0001	NA	0.009
RL-265C 730 735	0.0001	NA	0.026
RL-265C 735 740	0.0001	NA	0.006
RL-265C 740 745	0.0002	NA	0.003
RL-265C 745 750	0.0002	NA	0.009
RL-265C 750 755	0.0004	NA	0.003
RL-265C 755 760	0.0001	NA	<0.000
RL-265C 760 765	0.0002	NA	0.006
RL-265C 765 770	0.0003	NA	0.026
RL-265C 830 832	0.0001	NA	<0.003
RL-265C 835.5 839.1	0.0003	NA	0.003
RL-265C 848.5 852.5	0.0003	NA	0.012
RL-265C 852.5 857.1	0.0001	NA	0.012

BARRINGER LABORATORIES INC.

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14-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Page: 6
Copy: 1 of 3
Set : 2

Attn: Tim Kuhl
Project:

Received: 8-May-92 19:53

PO #:

Job: 92756R

Status: Final

Abbreviations:

Parameters:

Au	: Gold
Ag	: Silver

Methods:

FA	: Fire Assay
AA	: Atomic Absorption

Units:

oz/ton	: ounces per ton

Quality codes:

<	: less than
NA	: Not Analyzed

Job approved by:

Signed: .....

Vernon K. Peterson
Laboratory Manager

cc: KRISTEN KENNER, LAC MINERALS

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
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BUILDING E. SUITE 176
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PHONE: (702) 828-1158

18-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Attn: Tim Kuhl
Project:

Received: 13-May-92 21:40

PO #:

Job: 92788R

Status: Final

Abbreviations:

Parameters:

Au	: Gold
Ag	: Silver

Methods:

FA/AA/AAS	: Fire Assay/AA Finish
FA/AA	: Fire Assay with AA finish
AA	: Atomic Absorption

Units:

oz/ton	: ounces per ton

Quality codes:

NA	: Not Analyzed

Job approved by:

Signed:

.....
Vernon K. Peterson
Laboratory Manager

cc: KRISTEN KENNER, LAC MINERALS

File

MAY 18 1992

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BARRINGER LABORATORIES INC.

14-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Page: 1
Copy: 1 of 3
Set : 1

Attn: Tim Kuhl
Received: 8-May-92 19:53
Project:
PO #:

Job: 92756R
Status: Final

Drill Core

Sample Id	Au FA oz/ton	Au FA oz/ton	Ag AA oz/ton
RL-265C 130-133.6	0.0031	0.0035	0.073
BL-014	~~0.0486~~	~~NA~~	~~NA~~
RL-265C-133.6 142	0.0071	NA	0.082
RL-265C-142 148	0.0407	0.0420	0.216
RL-265C-148 153	0.0135	NA	0.076
RL-265C-153 157.5	0.0065	NA	0.085
RL-265C-157.5 162	0.0020	NA	0.044
RL-265C-162 167	0.0009	NA	0.044
RL-265C-167 172	0.0016	NA	0.023
RL-265C-172 175.5	0.0028	NA	0.020
RL-265C-175.5 179	0.0003	NA	0.015
RL-265C-179 183.5	0.0009	NA	0.015
RL-265C-183.5 187.5	0.0001	NA	0.006
RL-265C-187.5 191.5	<0.0001	<0.0001	0.009
RL-265C-191.5 196.5	0.0038	NA	0.029
RL-265C-196.5 199	0.0011	NA	0.032
RL-265C-199 203	0.0014	NA	0.006
RL-265C-203 208	0.0006	NA	0.029
RL-265C-208 213	0.0002	0.0003	0.018
BL-015	~~0.0221~~	~~NA~~	~~NA~~
RL-265C 213 218	<0.0001	NA	0.006
RL-265C 218 223	0.0001	NA	0.009
RL-265C 223 228	0.0029	0.0032	0.015
RL-265C 228 233	<0.0001	NA	0.003
RL-265C 257.2 263	0.0003	NA	0.003
RL-265C 263 268	0.0001	NA	0.003
RL-265C 268 272.7	0.0001	NA	0.006
RL-265C 272.7 275.6	<0.0001	NA	0.020
RL-265C 275.6 279.5	<0.0001	NA	0.020
RL-265C 279.5 284	<0.0001	NA	0.006

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14-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Attn: Tim Kuhl
Project:

Received: 8-May-92 19:53

PO #:

Job: 92756R

Status: Final

Drill Core

Sample Id	Au FA oz/ton	Au FA oz/ton	Ag AA oz/ton
RL-265C 284 289	<0.0001	NA	0.003
RL-265C 289 293.5	<0.0001	NA	0.006
RL-265C 293.5 298	<0.0001	NA	0.003
RL-265C 298 303	<0.0001	NA	0.003
RL-265C 303 308	<0.0001	NA	0.006
RL-265C 308 313	<0.0001	NA	0.006
RL-265C 313 318	<0.0001	<0.0001	0.003
BL-016	0.0220	NA	NA
RL-265C 318 323	0.0004	NA	0.003
RL-265C 323 328	<0.0001	NA	0.003
RL-265C 328 333	0.0008	NA	0.009
RL-265C 333 338	0.0002	NA	0.015
RL-265C 338 343	<0.0001	NA	0.006
RL-265C 343 348	0.0003	NA	0.009
RL-265C 348 353	0.0008	NA	0.015
RL-265C 353 358	0.0001	NA	0.012
RL-265C 358 363	0.0003	NA	0.015
RL-265C 363 369	0.0001	NA	0.015
RL-265C 369 373	0.0006	NA	0.023
RL-265C 373 378	0.0011	NA	0.029
RL-265C 378 383	0.0010	NA	0.018
RL-265C 383 387.5	0.0010	NA	0.020
RL-265C 387.5 393	0.0009	NA	0.018
RL-265C 393 398	0.0007	NA	0.018
RL-265C 398 403	0.0005	0.0006	0.015
BL-017	0.0227	NA	NA
RL-265C 403 408	0.0003	NA	0.009
RL-265C 408 413	0.0003	NA	0.015
RL-265C 413 418	0.0005	NA	0.023
RL-265C 418 423	0.0011	NA	0.020

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BARRINGER LABORATORIES INC.

18-May-92

LAC MINERALS
P O BOX 21390
RENO NV 89515

Page: 1
Copy: 1 of 3
Set : 1

Attn: Tim Kuhl
Project:

PO #:

Received: 13-May-92 21:40

Job: 92788R

Status: Final

Cutting

Sample Id	Au FA/AA/AAS oz/ton	Au FA/AA oz/ton	Ag AA oz/ton
RL-265C 0 5	0.0005	0.0004	0.006
BL-047	0.0499	NA	NA
RL-265C 5 10	0.0007	NA	0.003
RL-265C 10 15	0.0004	NA	0.003
RL-265C 15 20	0.0004	NA	0.003
RL-265C 20 25	0.0004	NA	0.006
RL-265C 25 30	0.0009	NA	0.006
RL-265C 30 35	0.0005	NA	0.006
RL-265C 35 40	0.0005	NA	0.009
RL-265C 40 45	0.001	NA	0.018
RL-265C 45 50	0.0013	NA	0.029
RL-265C 50 55	0.002	NA	0.058
RL-265C 55 60	0.0026	NA	0.038
RL-265C 60 65	0.0006	NA	0.058
RL-265C 65 70	0.0013	NA	0.128
RL-265C 70 75	0.001	NA	0.079
RL-265C 75 80	0.0016	0.0015	0.035
RL-265C 80 85	0.0011	NA	0.038
RL-265C 85 90	0.0012	0.0013	0.035
BL-048	0.0487	NA	NA
RL-265C 90 95	0.0022	NA	0.058
RL-265C 95 100	0.0016	NA	0.047
RL-265C 100 105	0.0026	NA	0.047
RL-265C 105 110	0.0018	NA	0.053
RL-265C 110 115	0.0022	NA	0.061
RL-265C 115 120	0.0047	NA	0.128
RL-265C 120 125	0.0033	NA	0.402
RL-265C 125 130	0.0105	0.0097	0.108

05.18.92 04:48 PM *Barringer Labs, Inc. P01

LAC minerals — REJECTS TO KEEP

work order #	Rejects to Keep
92809	RL-269
	25-30 → 45-50
	200-205 → 545-550
92788	RL-265
	40-45
	[illegible] → 125-130
92787	RL-261
	125-130 → 155-160
	455-460 → 465-470
92786	RL-264
	20-25 → 40-45
92785	RL-266
	those to Keep are on page 1 : 540-545 → 610-615
	660-665 → 680-685
92784	RL-268
	60-65 → 75-80
	225-230 → 305-310
92783	RL-267
	25-30 → 45-50
	185-190 → 235-240

LAC minerals

WORK ORDER #	REJECTS TO KEEP
92782	RL-263
	377-382 → 515-520
92757	RL-264
	818-823 → 868-873
	943.2-947 → 963-968
92756	RL-265
	130-133.6 → 196.5-199
	223-228
	373-378 → 387.5-393
	653-654.5 → 669-674
	723.5-725.1 → 725.1-730
	830-832 → 852.5-857.1