60001247

Mining District File Summary Sheet

| | |
|---|---|
| DISTRICT | Rosebud |
| DIST_NO | 4010 |
| COUNTY<br>If different from written on document | Pershing |
| TITLE<br>If not obvious | Rosebud Drill Hole File - Hole No RE-8 |
| AUTHOR | K. Kenner; R. Grondin |
| DATE OF DOC(S) | 1989-1990 |
| MULTI_DIST Y / N?<br>Additional Dist_Nos: | |
| QUAD_NAME | Sulphur 7.5' |
| P_M_C_NAME<br>(mine, claim & company names) | Rosebud Mine; Rosebud Project;<br>Lac Minerals (USA) Inc<br>Environmental West Exploration |
| COMMODITY<br>If not obvious | gold silver |
| NOTES | Drill log; geology; assay; total depth 680'<br>handwritten notes<br>26p. |

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 5/19/08
Initials Date
DB: mah
Initials Date
SCANNED:
Initials Date

Revised: 1/22/08

DRILL LOGS RE-8
Rosebud

60001247 4010

6000 1247

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

## DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RE-8 TOTAL DEPTH 680.25 LOGGED BY KLK

Date started 5-9-89

Date completed 5-10-89 / 505' 5-14-89 through 5-15-89 to 680.25

Initial bearing S 8° E

Initial inclination -58°

Elevation 5290.7

Collar coordinates:

N 2203624

E 482212.3

Contractor: ENVIORNMENTAL WEST EXPLOR.

Drill Type: REVERSE CIRCULATION

Hole Size: 5 1/2" hammer 5 1/2" tricone

Drilling Conditions: good

Footage: Wet / Dry Dry: 0-216'

wet: 216' → T.D.

Comments: hit bedrock ~ 29'
216' HIT FAULT 225' - went to H2O
went back in w/ tricone @ 505'
went TILL TRICONE gave out at 680.25'

DOWN HOLE SURVEY INFORMATION

| FROM | TO | SURVEY POINT | INCLI-NATION | BEARING | X (Northing) | Y (Easting) | Z (Elevation) |
|---|---|---|---|---|---|---|---|
| 0 | 50 | | -58 | S 8E | | | |
| 50 | 150 | | -60 | " | | | |
| 150 | 250 | | -62 | " | | | |
| 250 | 350 | | -64 | " | | | |
| 350 | 450 | | -66 | " | | | |
| 450 | 550 | | -68 | " | | | |
| 550 | 650 | | -70 | " | | | |
| 650 | 680 | | -70.5 | " | | | |
| | | | | | | | |
| | | | | | | | |

LAC MINERALS U.S.A. INC.

PROJECT: ROSEBUD LOGGED BY: KLK HOLE NO. RE-8 PAGE 1 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ALTERATION: ARGILLIC (W M S) | ALTERATION: SILICIFICATION (W M S) | ALTERATION: PROPYLLITIC (W M S) | COLOR FINES | MINERALIZATION: LIMONITE (W M S) | MINERALIZATION: HEMATITE (W M S) | MINERALIZATION: JAROSITE (W M S) | % SULFIDES | OTHER COMMENTS | ANALYSES: Au | Au ✓ | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 100 | OVERBURDEN - Burgundy brown chocolate tuff weak pervasive Feldspar wk white clay pervasive SiO2 wk stwns | | XX X v | | | | + brn | | | | — | | <.001 | | <.1 | | | | |
| 5 | " | same | | XX X v | | | | " | | | | — | | <.001 | | <.1 | | | | |
| 10 | " | same | | XX X v | | | | " | | | | — | | .001 | | <.1 | | | | |
| 15 | " | same strong clay component | | XX X v | | | | " | | | | — | | .001 | | <.1 | | | | |
| 20 | 60 G | same + strong clay | | XX X v | | | | " | | | | — | | .001 | | <.1 | | | | |
| 25 | | same @ 30-35' w/ ~ 30-40% chocolate tuff strong lt green buff clay balls bedrock @ 29' | | X X X | | | | + greenish buff + brn | | | | — | | .002 | | <.1 | | | | |
| 30 | " | tuffaceous to lith green fine gr to medium tuff strong clay alt bevel limonite frags w/ calcedonic stkwk wk ↑ temp qtz stkwk pen gray gray seams subtle | | Xck X k | | | | + greenish buff | | | | <1% by seams | | .014 | | <.1 | | | | |
| 35 | " | same w/ very strong clay CLOUSE lt green buff | | Xck | | | | " | | | | — | | .003 | | <.1 | | | | |
| 40 | " | same w/ to hem/limon ↓ clay but still prominent | | | | | | + greenish buff | | | | — | | .001 | | <.1 | | | | |
| 45 | " | same ↓ clay ~ 20% limon frags pervasive white clay | | X k | | | | " | | | | — | | .002 | | <.1 | | | | |
| 50 | | | | | | | | | | | | | | | | | | | | |

LAC MINERALS U.S.A. INC.

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 2 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ALTERATION: ARGILLIC W M S | SILICIFICATION W M S | PROPYLLITIC W M S | COLOR FINES | MINERALIZATION: LIMONITE W M S | HEMATITE W M S | JAROSITE W M S | % SULFIDES | OTHER COMMENTS | ANALYSES: Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50-55 | GOOD | lt leekgreen fine grained tuffs, mod pervasive white to buff clay, tr stringer drusy limonitic qtz vns w/ epiclastic component | | X K | | | | lt leek green | | | | – | | .004 | | <.1 | | | | |
| 55-60 | " | same w/ epiclastic component | | X K | | | | " | | | | – | | .001 | | <.1 | | | | |
| 60-65 | " | same w/ ~ 10% white drusy qtz vns w/ local assoc Fe-ox clay, pervasively silicified | | X K | | | | " | | | | | | .003 | | <.1 | | | | |
| 65-70 | " | same – predom epiclastic | | X K | | | | " | | | | – | | .004 | | <.1 | | | | |
| 70-75 | " | same – " " | | X K | | | | " | | | | – | | .005 | | <.1 | | | | |
| 75-80 | " | same " " " | | X K | | | | " | | | | – | | .002 | | <.1 | | | | |
| 80-85 | " | same | | X K | | | | " | | | | – | | .002 | | <.1 | | | | |
| 85-90 | " | pred epiclastic same w/ strong white clay cover | | X K | | | | " | | | | – | | .002 | | <.1 | | | | |
| 90-95 | " | same w/ mod drusy qtz vns w/ mod limonitic clay epiclastic | | X K | | | | lt ovg buff | | | | – | | .002 | | <.1 | | | | |
| 95-100 | " | same epiclastic | | X K | | | | lt leek green | | | | – | | .002 | | <.1 | | | | |

LAC MINERALS U.S.A. INC.

PROJECT: ROSEBUD LOGGED BY: KLK HOLE NO. RE-8 PAGE 3 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ARGILLIC W M S | SILICIFICATION W M S | PROPYLLITIC W M S | COLOR FINES | LIMONITE W M S | HEMATITE W M S | JAROSITE W M S | % SULFIDES | OTHER COMMENTS | Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100 | GOOD | lt leek to medium lime green tuff lapiclastic weak pervasive SiO2 drizzy qtz stwk, weak pervasive clay alt - white to limonite local pink drizzies | | X | | | | lt leek green | | | | tr diss py | | .004 | | <.1 | | | | |
| 105 | " | same weak epidote coloration | | X | | | | " | | | | " | | .006 | | <.1 | | | | |
| 110 | " | same " " " weak bleach pervs white-buff clay locally ukly gray | | X | | | | " | | | | " | | .079 | .078 | .12 | | | | |
| 115 | " | same weak bleach, weak epidote green | | X | | | | " | | | | " | | .007 | | <.1 | | | | |
| 120 | " | same w/ deep blue green facies few gray frag ± pyrite weak epidote brown few SiO2 encap sulfide veins | | X | | | | " | | | | 2% diss py + vn py | | .003 | | <.1 | | | | |
| 125 | " | same medium facies pervasive gray clay few SiO2 encap py vns | | X | | | | lt green buff | | | | 2-3% diss py + vn py | few bloded sulf | .002 | | <.1 | | | | |
| 130 | " | medium to deep facies green fine grained weak pervasive white clay weak SiO2 flush, wk drizzy qtz fine stwk | | X | | | | " | | | | 2% diss bloded sulf ± py | | .003 | | <.1 | | | | |
| 135 | " | same wk drizzy qtz encap sulf vns | | X | | | | " | | | | " | | .002 | | <.1 | | | | |
| 140 | " | same " " " " " | | X | | | | " | | | | " | | .003 | | <.1 | | | | |
| 145 | " | same " " " " " | | X | | | | " | | | | " | | .002 | | <.1 | | | | |
| 150 | | | | | | | | | | | | | | | | | | | | |

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 4 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ALTERATION ARGILLIC W M S | ALTERATION SILICIFICATION W M S | ALTERATION PROPYLLITIC W M S | COLOR FINES | MINERALIZATION LIMONITE W M S | MINERALIZATION HEMATITE W M S | MINERALIZATION JAROSITE W M S | % SULFIDES | OTHER COMMENTS | ANALYSES Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 150 | G | Lt green to deep jade green pervasive argillic alt + clay ft green strong drusy qtz vns + limonite | | Xc | | | | lt green w/ wk org | | | | 3% blade mod calcite @ 7 diss + vn | | .013 | | <.1 | | | | |
| 155 | " | Same w/ ↓ argillic alt weak lt green clay | | Xc | | | | green | | | | " | | .011 | | <.1 | | | | |
| 160 | " | Same predom tuff wk to mod drusy qtz sulfide veins pervasive SiO2 | | Xc | | | | " | | | | " | | .004 | | <.1 | | | | |
| 165 | " | 166' fault ~ 1' Same jade tuff w/ ~ 10% + lighter gray coloration ↑ pervasive SiO2 | | X | | | | " | | | | " | | .003 | | <.1 | | | | |
| 170 | " | Same — w/ strong clay gouge zone lt green w/ sulfide vn + local SiO2 encapsulation | | | | | | " | | | | " @ 3-4% | | .002 | | <.1 | | | | |
| 175 | " | Same lt army green mod str SiO2 encap sulfide weak pervasive bleaching | | Xc | | | | " | | | | vn: diss mar + py 3-4% | | .002 | | <.1 | | | | |
| 180 | " | Same medium jade green wk lt green clay mod encap SiO2 + py vns | | Xc | | | | " | | | | " @ ~3% | | .002 | | <.1 | | | | |
| 185 | " | Same deep jade tuff = epiclastic | | Xc | | | | " | | | | " @ ~3% | | .002 | | <.1 | | | | |
| 190 | " | Same " " " " | | Xc | | | | " | | | | " @ ~2% | | .001 | | <.1 | | | | |
| 195 | " | Same deep jade tuff | | Xc | | | | " | | | | " | | .005 | | <.1 | | | | |
| 200 | | | | | | | | | | | | | | | | | | | | |

11:20
225'

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 5 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION (propyllitic to bleached zone) | GRAPHIC LOG | GRAPHIC ALT | ARGILLIC W | ARGILLIC M | ARGILLIC S | SILICIFICATION W | SILICIFICATION M | SILICIFICATION S | PROPYLLITIC W | PROPYLLITIC M | PROPYLLITIC S | COLOR FINES | LIMONITE W | LIMONITE M | LIMONITE S | HEMATITE W | HEMATITE M | HEMATITE S | JAROSITE W | JAROSITE M | JAROSITE S | % SULFIDES | OTHER COMMENTS | Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 200 | SCOG | lt buff-yellow salt to deep jade epiclastic mod. white to green clay pervasive argillic alt drusy qtz VN ± py center | | Xc | | | | | | | | | | green | | | | | | | | | | 2-3% py ± mar VN ± diss py | | .005 | | <.1 | | | | |
| 205 GOOD * CHANGE | " | same w/ ~70% lt gray lithic tuff w/ wk pervasive SiO2 | | X | | | | | | | | | | " | | | | | | | | | | " 3-4% | | .003 | | .12 | | | | |
| 210 | " | same - predom green tuffs w/ gray clay | | X Xc | | | | | | | | | | " | | | | | | | | | | " " | | .002 | | <.1 | | | | |
| 215 | " | ~216' hit fault + H2O same - predom green tuffs ↑ pervasive SiO2 good drusy qtz - marcasite VNS lt white clay | | X X | | | | | | | | | | " | | | | | | | | | | " | Stv marcasite | .001 | | .16 | | | | |
| 220 | " | same " " " w/ drusy qtz encap sulf | | X | | | | | | | | | | " | | | | | | | | | | " @ ~3% | | .003 | | <.1 | | | | |
| 225 | " | same green tuff ± epiclastic | | X | | | | | | | | | | " | | | | | | | | | | " @ 3-4% | TRANSITION | .003 | | <.1 | | | | |
| 230 * | SCOG | transition green tuff + flesh tuffs - weak to epiclastic component ~60% flesh tuffs good stockwork | | X XK | | | | | | | | | | lt green + buff | | | | | | | | | | 4% diss ? | | .004 | | <.1 | | | | |
| 235 * * | SCOG | flesh to buff epiclastic strong drusy qtz encap sulfide VNS mod. silicified tuff component pervasive argillic alt good stwk qtz | | XK XCV | | | | | | | | | | gray | | | | | | | | | | 5-6% diss + VN py ± mar | | .004 | | <.1 | | | | |
| 240 * | " | same w/ ↓ SiO2 encap sulf & stwk gray film on top of H2O | | XCV XK | | | | | | | | | | " | | | | | | | | | | " @ ~3% | | .003 | | <.1 | | | | |
| 245 | " | same - prominent epiclastic good SiO2 encap sulfide VNS wh dk gray to black film | | XK | | | | | | | | | | " | | | | | | | | | | " @ 5-6% | | .006 | | <.1 | | | | |
| 250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

LAC MINERALS U.S.A. INC.

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 6 OF 14

| | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ALTERATION: ARGILLIC (W M S) | ALTERATION: SILICIFICATION (W M S) | ALTERATION: PROPYLLITIC (W M S) | COLOR FINES | MINERALIZATION: LIMONITE (W M S) | MINERALIZATION: HEMATITE (W M S) | MINERALIZATION: JAROSITE (W M S) | % SULFIDES | OTHER COMMENTS | ANALYSES: Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250 | GOOD | Brnish to bleach epiclastic weak very lt green calcedony veins + white clay drusy qtz encap sulfide veins, with pervasive silicification, wk stkwk hairline qtz. poss wh bleach | | Xc X K | | | | GRAY | | | | 2-3% VN + diss py | poss marcasite | .003 | | <.1 | | | | |
| 255 | " | Same w/ drop in calcedonic veins | | Xc X c | | | | " | | | | " @ 3-4% | " | .004 | | <.1 | | | | |
| 260 | " | Same w/ weak tuffaceous component good drusy sulfide veins + stkwk | | X K X c | | | | " | | | | " @ ~6% | str marcasite | .051 | .082 | <.1 | | | | |
| 265 | " | Same lt gray epiclastic buff tuff ↑argill. alt mod drusy encap sulfide veins | | X K X | | | | " | | | | " | " (mod) | .003 | | <.1 | | | | |
| 270 | " | Same pervasive lt grayish buff tuff + epiclastic good hairline stkwk bleached | | X K X | | | | " | | | | @ " 4-5% | " | .006 | | <.1 | | | | |
| 275 | " | Same w predom epiclastic component | | X K X | | | | " | | | | " @ 3% | " (wk) | .003 | | <.1 | | | | |
| 280 | " | Same w predominant epiclastic | | X K X | | | | " | | | | " @ ~5% | " | .005 | | .33 | | | | |
| 285 | " | Same w excellent drusy qtz sulfide vns lt green calcedony | | X K X c X | | | | " | | | | " @ 5-6% | str marcasite | .011 | | .10 | | | | |
| 290 | " | Same excellent drusy qtz sulfide vns tr white " " vns hit fault @ 294' + more H2O | | X K X c X | | | | " | | | | " | " | .004 | | <.1 | | | | |
| 295 | " | Same w local layered drusy qtz vns 2) pure sulf 3) very dk gray sulfide 4) yellow iron sulfate clay (wc) 5) pissolitic granular qtz vn | | X K X X c | | | | " | | | | " @ ~7% | " | .009 | | 1.2 | | | | |
| 300 | | | | | | | | | | | | | | | | | | | | |

↑ interesting!

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 7 OF 14

2:30-2:50 strong lightening stop temporarily

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC LOG | ALTERATION ARGILLIC W M S | ALTERATION SILICIFICATION W M S | ALTERATION PROPYLLITIC W M S | COLOR FINES | MINERALIZATION LIMONITE W M S | MINERALIZATION HEMATITE W M S | MINERALIZATION JAROSITE W M S | % SULFIDES | OTHER COMMENTS | ANALYSES Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 300 | 100% | Tr ssay Buff (pirlaotic) w/ strong drusy qtz, thin sulfide veinlets pervasive argillic alt, some hairline stwk break pervasive slic, poss leaching | | | | | | GRAY | | | | 6-7% VN + diss py + max casite | | .007 | | .90 | | | | |
| * | " | same w/ + white clay + same layering veins (2) in 295'-300' w/ ↑ drusy qtz ± sulf vns | | | | | | " | | | | " | | .008 | | .77 | | | | |
| 310 | | | | | | | | | | | | | | | | | | | | |
| * | " | same w/ wht drusy vns w/ wh pissolitic layered vns | | | | | | " | | | | " | | .004 | | .30 | | | | |
| 315 | | | | | | | | | | | | | | | | | | | | |
| * | " | same w/ slight ↓ drusy vns | | | | | | " | | | | " | | .006 | | .31 | | | | |
| 320 | | | | | | | | | | | | | | | | | | | | |
| * | " | same " " " " | | | | | | " | | | | " @ ~5% | | .006 | | .12 | | | | |
| 325 | | | | | | | | | | | | | | | | | | | | |
| * | " | same " " " " ↑ argillic alt - pervasive clay | | | | | | " | | | | " @ ~5% | | .005 | | <.1 | | | | |
| 330 | | | | | | | | | | | | | | | | | | | | |
| * | " | same gray buff w/ hint pink ↑ argillic alt | | | | | | " | | | | " | | .005 | | <.1 | | | | |
| 335 | | | | | | | | | | | | | | | | | | | | |
| * | " | same w/ wk faint green w/ ↓ drusy qtz vns | | | | | | " | | | | " @ ~3-4% | | .003 | | <.1 | | | | |
| 340 | | | | | | | | | | | | | | | | | | | | |
| * | " | same w/ ↑ argillic alt pervasive w/ hint green w/ calcedony - green qtz vns | | | | | | " | | | | " | | .004 | | <.1 | | | | |
| 345 | | | | | | | | | | | | | | | | | | | | |
| | " | same ↑ alt ↓ drusy sulfide vns w/ pervasive - purplish alt | | | | | | " | | | | " | | .006 | | <.1 | | | | |
| 350 | | | | | | | | | | | | | | | | | | | | |

RUNNING

L MINERALS U.S.A. INC.

LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 8 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC LOG | ALTERATION ARGILLIC W M S | ALTERATION SILICIFICATION W M S | ALTERATION PROPYLLITIC W M S | COLOR FINES | MINERALIZATION LIMONITE W M S | MINERALIZATION HEMATITE W M S | MINERALIZATION JAROSITE W M S | % SULFIDES | OTHER COMMENTS | ANALYSES Au | Au ✓ | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 350 | GOOD | medium-dark green epiclastic tuff with subangular lith clasts encap sulfide veins w/ chlorite ↑ weak pervasive arg + sil alt | | | | | | green | | | | ~3% VN tdsp py | wk tobby marcas ? | .004 | | <.1 | | | | |
| 355 | " | ↑ qtz vns ↑ on relatively hard white clay some dose w/ alunite | | | | | | " | | | | " | " | .002 | | .13 | | | | |
| 360 | " | same ↑ qtz vns | | | | | | " | | | | " | " | .004 | | .12 | | | | |
| 365 | " | same w/ lev grn - predom tuff ↑ pervasive argillic alt | | | | | | " | | | | " | " | .004 | | <.1 | | | | |
| 370 | " | same w/ becoming a fragmental ~10% lt green epiclastic ↑ argillic | | | | | | " | | | | " | " | .002 | | .15 | | | | |
| 375 | " | same - (cont to ~55 be predom (epiclastic) fine fragmental w/ ~15% orange lithic frag tuff still good brown color | | | | | | " | | | | " | " | .004 | | .10 | | | | |
| 380 | " | Light lime green to olive green fragmental w/ drusy qtz sulfide vns pervasive argillic alt | | | | | | " | | | | " | " | .002 | | .12 | | | | |
| 385 | " | HINT MINT GREEN WHITE calcedonic tuff fine grained pervasive argillic alt weak drusy qtz veins (crumb) mud have been bleached near pervasive epiclastics | | | | | | green white | | | | 1-2% VN tdsp py trace cpy | | .006 | | <.1 | | | | |
| 390 | " | same w/ slight more grn texture? | | | | | | " | | | | " | | .003 | | <.1 | | | | |
| 395 | " | fresh green fragmental drusy vns pervasive argillic alt w/ to w/ly mod sl sulfide vns | | | | | | " | | | | @ 2-3% | | .001 | | .12 | | | | |
| 400 | | | | | | | | | | | | | | | | | | | | |

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 9 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ALTERATION: ARGILLIC (W M S) | ALTERATION: SILICIFICATION (W M S) | ALTERATION: PROPYLLITIC (W M S) | COLOR FINES | MINERALIZATION: LIMONITE (W M S) | MINERALIZATION: HEMATITE (W M S) | MINERALIZATION: JAROSITE (W M S) | % SULFIDES | OTHER COMMENTS | ANALYSES: Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 400 | | Medium chlorite green fine fragmental mod qtz ±drusy veins weak fine crystalline sta-quartz weak propylitic silicification weak argillic alt locally strong in fragmental | | | | | | green | | | | 2% diss ±vns py | | .001 | | .12 | | | | |
| 405 | " | Same - however deep chlorite green w/ mod strong qtz ±drusy veins w/ local vk Pimon assoc | | | | | | deep green | | | | " 2-3% | wk bloded sulfides | .005 | | .11 | | | | |
| 410 | " | same w/ ↑ argillic alt - pervasively mod drusy qtz + cap sulfide veins low leaching bulk epi-fracs w/ surfaces drusy qtz vein about calcedony vn - 2 cm | | | | | | lv green | | | | " | " | .004 | | <.1 | | | | |
| 415 | " | same @ 410-415' | | | | | | " | | | | " | " | .003 | | <.1 | | | | |
| 420 | " | Same @ 400-405 w/ very strong vuggy drusy qtz veins ±pyrite | | | | | | " | | | | " | " | .003 | | <.1 | | | | |
| 425 | " | Same w/ mod - pervasive qtz veins possible tuff or tuffaceous component to fragmental pervasive argillic alt | | | | | | " | | | | 1-2% vns diss py | " | .004 | | .12 | | | | |
| 430 | " | Same w/ strong chlorite alteration 1%-2% grain sulfides sulfide frags & qtz vns | | | | | | " | | | | " | | .015 | | .10 | | | | |
| 435 | " | Same w/ local argillic ↓ drusy vns ↑ pvs SiO2 | | | | | | " | | | | " | | .003 | | <.1 | | | | |
| 440 | " | Fine grained tuff pervasively well silicified ~40% translucent ±pink qtz ~20% dark gray subhedral frags trace white clay (tuff) to (444' Lava?) trace drusy qtz | | | | | | gray | | | | 1-2% prom visible diss py | gray frags may have strong sulfide content | .004 | | <.1 | | | | |
| 445 | " | Rhyolite + Tuff - silicified part gray sulfide rich white bleached intrusive ~50% w/ local sulfide stained pervasive silicic zone ⇒ plus diss w/ soft gray clay qtz stockwork | | | | | | gray + white | | | | ~3% visible diss ± vns py | " up to 7-8% | .019 | | <.1 | | | | |
| 450 | | | | | | | | | | | | | | | | | | | | |

L/ MINERALS U.S.A. INC.

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 10 OF 14

| | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ALTERATION ARGILLIC W M S | SILICIFICATION W M S | PROPYLLITIC W M S | COLOR FINES | MINERALIZATION LIMONITE W M S | HEMATITE W M S | JAROSITE W M S | % SULFIDES | OTHER COMMENTS | ANALYSES Au | Au ✓ | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 450 * | GOOD | Buff lapilloclastic w/ ~5% dark gray sulfide rich foramento permeability silicified weak lt gray clay fractured - fault zone, weak drusy qtz-encap pyr w/ SKWK qtz | | XK | | | | BUFF | | | | 2-3% diss w/ local strong % w/ concentration in qtz frac | | .023 | | .90 | | | | |
| 455 * | " | same w/ ↓ pervasive SiO2 ↑ " argillic alt | | XK | | | | " | | | | 3-4% vn + diss py + marcasite | plus dark gray sulfide | .031 | | .55 | | | | |
| 460 * | " | same w/ faint lt green gray tr. gray frag w/ white clay | | XK | | | | " | | | | " @ 2-3% | | .131 | .115 | 1.36 | | | | |
| 465 * | LOW | same w/ white waxy clay veins ↑ sulfide veins w/ SiO2 encap no gray frag | | XK | | | | " | | | | 3-4% vn + diss marcasite | ± 2% diss py | .034 | | .20 | | | | |
| 470 * * | MODERATE | same w/ pervasive strong argillic alteration w/ ↑ pyrite veins w/ ↑ white waxy clay ↳ w/ local SiO2 encapsulation no gray frag | | XK | | | ? | " | | | | up to 1% diss. py + vn marcasite | | .033 | | .38 | | | | |
| 475 | " | same w/ moderate pervasive argillic alt no gray frag | | XK | | | ? | " | | | | " | | .037 | | .22 | | | | |
| 480 | GOOD | same w/ strong sulfides local white clay encapsulated py veins | | XK | | | ? | " | | | | up to 10% py veins one more | plus wk ~1-2% fine diss | .027 | | .10 | | | | |
| 485 | " | same w/ pervasive lt/faint mint green ↓ drusy SKWK qtz vns ↓ clay encap sulfide veins | | XK | | | ? | LT greenish buff | | | | 3-4% diss py + vn marcasite | | .015 | | <.1 | | | | |
| 490 | " | same @ 485-490' | | XK | | | ? | " | | | | " | | .021 | | <.1 | | | | |
| 495 | " | same @ 485-490' | | XK | | | ? | " | | | | 1-2% diss py | | .016 | | <.1 | | | | |
| 500 | | | | | | | | | | | | | | | | | | | | |

L MINERALS U.S.A. INC.

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 11 OF 14

| Depth | Recovery | Lithologic Description | Graphic Log | Graphic Alt | Alteration: Argillic (W M S) | Alteration: Silicification (W M S) | Alteration: Propyllitic (W M S) | Color Fines | Mineralization: Limonite (W M S) | Mineralization: Hematite (W M S) | Mineralization: Jarosite (W M S) | % Sulfides | Other Comments | Analyses: Au | Au ✓ | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | to 40 minutes to go 5' rainy all day; least night 1:40 quit - pulled out 6 rods till 2:10pm | | | | | | | | | | | | | | | | | | |
| 50 | GOOD | Lt army green epiclastic, pervasive propylitic alteration area silicic, wk drizzy w/ sulfide veins pervasive (weak) propylitic alt (weak (very) hairline stkwk local weak burgundy mottled mineral, diss | | X K | | | | lt green | | | | 1-2% diss; vn; py | | .031 | | .10 | | | | |
| 55 | " | same w/ minor tuffaceous component trace contamination | | X X K | | | | " | | | | " | w/ tr marcasite flowers | .066 ~~.023~~ | .059 | .55 .19 | | | | |
| 60 | " | same w/ ~50-60% white, bleached epiclastic - 40% lt green very wk drizzies | | X X K | | | | " to white | | | | " @ 2-3% | " | .009 | | <.1 | | | | |
| 65 | " | same | | X X K | | | | lt green white | | | | " | " | .005 | | <.1 | | | | |
| 70 | " | same w/ very few dark gray siliceous frag w/ 5tr sulfide content orange mineral assoc w/ hairline stkwk | | X X K | | | | " | | | poss | " | " | .009 | | <.1 | | | | |
| 75 | * " | same w/ few black sulfide + org mineral + SiO2 stkwk; wk SiO2 + white clay + py + poss silver (black) mineral veins ↳ hard (or could it be a vnlte?) ↑ pervasive diss sulfides | | X X K | | | | " | | | poss | " @ ~3-4% | " poss w/ Ag mineral | .006 | | <.1 | | | | |
| 80 | * " | LOOKS GREAT! ↓ same w/ ↑ argillic alt ↑ sulfides + white waxy clay veins | | X Qp X K | | | | " | | | | " up to 5% | wk marcasite poss w/ Ag mineral | .011 | | <.1 | | | | |
| 85 | " | Looks Good! ↓ same w/ ↑ argillic alt ↑ sulfides w/ tr calcite veins | | X Qp X K | | | | " | | | | " @ ~3% | " | .006 | | <.1 | | | | |
| 90 | " | same w/ weak milky calcite + marcasite(?) bladed sulfide veins | | X Qp X K | | | | " | | | | " | " | <.001 | | .25 | | | | |
| 95 | " | same w/ pervasive ↑ lt army green flush w/ wk diss wg - poss felk | | X Qp X K | | | | " | | | | " @ ~2% | " | .009 | | <.1 | | | | |
| 100 | | | | | | | | | | | | | | | | | | | | |

L. MINERALS U.S.A. INC.

LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 12 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION (lithology transition →) | GRAPHIC LOG | GRAPHIC ALT | ALTERATION ARGILLIC W M S | SILICIFICATION W M S | PROPYLLITIC W M S | COLOR FINES | MINERALIZATION LIMONITE W M S | HEMATITE W M S | JAROSITE W M S | % SULFIDES | OTHER COMMENTS | ANALYSES Au | Au ✓ | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 550 | GOOD | Very light tan w/ green, pisolitic, porous or gritty alt, weak SiO2 flash, lt. lime, hairline stockwork w/ local subtle gel, weak calcite veins, wk-tr chrysocolla encap sulfide veins | | | | | | Lt green | | | | 1-2% diss + vn py | poss other mineral sulfide present Ag type | .003 | | <.1 | | | | |
| 555 | " | same w/ local wk white clay veins w/ tr dk orange mineral - jarosite? tr clay encap sulfide veins | | | | | | " | | | poss | " | " | .009 | | <.1 | | | | |
| 560 | " | same w/ tr soft white clay poss wk contamination | | | | | | " | | | | " | " | .006 | | .21 | | | | |
| 565 | " | same - becoming more → @ tr grtzy well pervasively silicified ↑ fine stkwk ↑ sulfide w/ local clay encap sulfide veins local 1/4" pure py vns | | | | | | Lt greenish to grayish buff | | | | " @ ~2% | w/ poss marcasite | .008 | | <.1 | | | | |
| 570 | " | same w/ @ least 2 stgo lime stkwk qtz - locally w/ sulfide(py) very weak FeOx vein lets w/ poss tuffaceous component few calcite + pyrite veins | | | | | | " | | | | " @ ~3% | " | .005 | | <.1 | | | | |
| 575 | " | same | | | | | | " | | | | " | py cubes + more golden yellow sulfide | .012 | | <.1 | | | | |
| 580 | " | same w ↑ stockwork SiO2 + w/ lithic tuffy component poss tr dk gray to black silver mineral | | | | | | " | | | | " 2-3% | " | .013 | | .22 | | | | |
| 585 | " | same w/ local ~~SiO2~~ burnishy ~~to~~ translucent mineral - poss jarosite? | | | | | | " | | | poss | " | py + marcasite | .005 | | <.1 | | | | |
| 590 | " | same w/ grayish white soft clay balls lithic tuff w/ epiclastic local ↑ bleaching to white | | | | | | " | | | poss | " | " | .003 | | <.1 | | | | |
| 595 | " | same wk calcite vns becoming ↑ prun tuffaceous tr vein vns becoming ↑ bleaching ↓ green hue | | | | | | " | | | | | | .004 | | <.1 | | | | |
| 600 | | | | | | | | | | | | | | | | | | | | |

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LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 13 OF 14

| Depth | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ARGILLIC W M S | SILICIFICATION W M S | PROPYLLITIC W M S | COLOR FINES | LIMONITE W M S | HEMATITE W M S | JAROSITE W M S | % SULFIDES | OTHER COMMENTS | Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 600 | 60% | (sag) White w/ hint very light green lime (?) rhodonite tuff w/ poss relict flow banding texture? lime stockwork quartz locally w/ sulfide fill pervasive bleach pervasive silicification tr calcite VNS weak epiclastic component w/c calc? + sulfide VNS | | XX XK CA | | | | LT. GREEN WHITE | | | | Poss | 2% diss + VN py + marcasite blebs | wk oxyred mineral (jaro.) ? | .012 | | <.1 | | | | |
| 605 | " | (sag) same mottled very lt green to very bleached chalk white | | XX XK CA | | | | " | | | | | " | | .005 | | <.1 | | | |
| 610 | " | same ↑ bleach ↓ green | | XX XK CA | | | | " | | | | | " | | .006 | | <.1 | | | |
| 615 | " | same weak calcite + marcasite veins tr py (?) + white clay veins | | XX XK CA | | | | " | | | | | " | | .005 | | <.1 | | | |
| 620 | " | (sag) ↓ bleach ↑ pervasive lt green same w/ ~ 7% visible contamination by FeOx frags + ALT TUFF+EPI ↑ | | XX XK CA | | | | LT GREEN | | | | | " @ 1-2% | | .005 | | <.1 | | | |
| 625 | " | same w/ epiclastic low (10%) frags w/ w/ more chlorite (?) green flush (sag) | | XX XK CA | | | | LT. GREEN WHITE | | | | | " | | .003 | | <.1 | | | |
| 630 | " | same w/ more pervasive sage green low avg FeOx veinlet-flush ↓ pervasive bleach | | XX XK CA | | | | " | | | | | " @ ~1% | | .005 | | <.1 | | | |
| 635 | " | same w/ more pervasive sage green wk vec/avg FeOx + CaCO3 + sulfide veinlets | | XX XK CA | | | | " | | | | | " @ 1-2% | | .008 | | <.1 | | | |
| 640 | " | same w ↑ bleaching w/c drusy qtz low calcite ± pyrite veins w/ ↓ sage green ~ 5-7% contamination - visible FeOx | | XX XK CA | | | | " | | | | | " | | .005 | | <.1 | | | |
| 645 | * " | LOOKS GOOD! same w/ ↑ pervasive SiO2 + stkwk qtz mod to mod str epiclastic component weak drusy qtz veinlets | | XXX XK | | | | OFF White (grayish) | | | | | 2% + VN + diss py + blebs of | sulfide | .008 | | <.1 | | | |
| 650 | | | | | | | | | | | | | | | | | | | | |

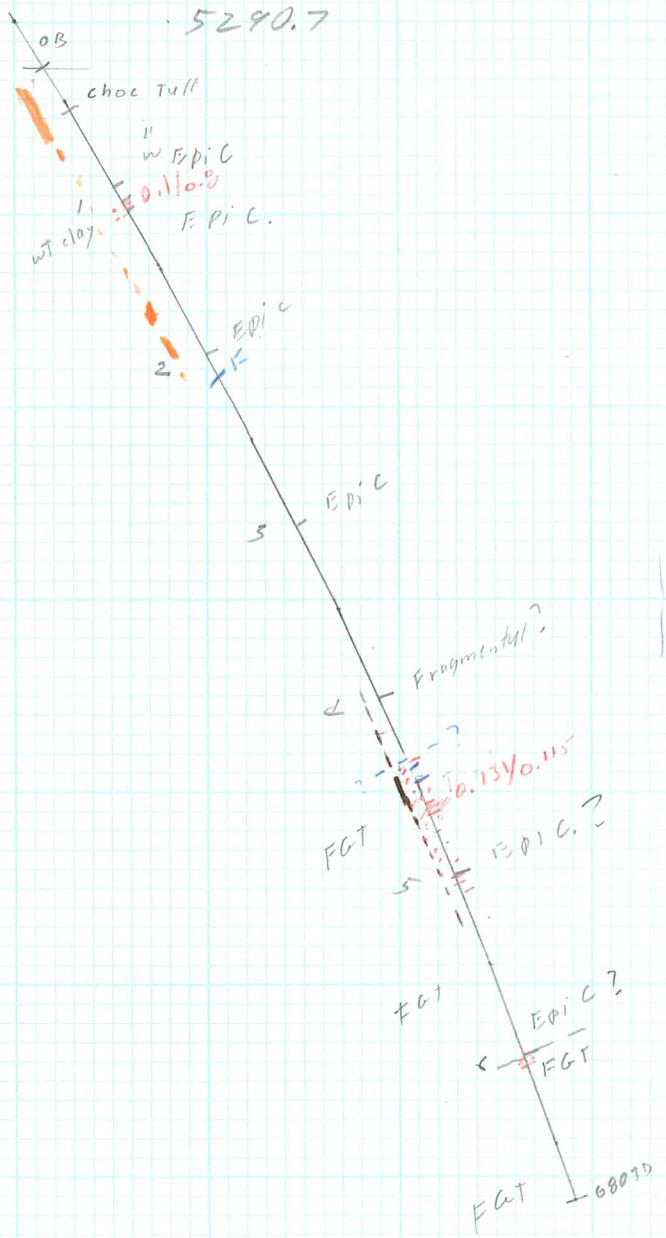
L/ MINERALS U.S.A. INC.

LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. RE-8 PAGE 14 OF 14

| | RECOVERY | LITHOLOGIC DESCRIPTION | GRAPHIC LOG | GRAPHIC ALT | ALTERATION ARGILLIC W M S | SILICIFICATION W M S | PROPYLLITIC W M S | COLOR FINES | MINERALIZATION LIMONITE W M S | HEMATITE W M S | JAROSITE W M S | % SULFIDES | OTHER COMMENTS | ANALYSES Au | Au V | Ag | As | Hg | Sb | Se |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 650 | GOOD | mottled white to lt sage green tn. grt tuff pervasive silicification stockworks & veins, weak epiclastic component weak calcite veins ~3 stgs SiO2, weak bleaching | | XXX XK CA | | | | lt sage olive | | | | 2% vnlt diss py + moved sulf | | .002 | | <.1 | | | | |
| 655 | " | same w/ ↓ sage green alt ↓ wk stkwk well pervasively silic. | | XXX XK CA | | | | " | | | | " @ 1-2% | | .003 | | .18 | | | | |
| 660 | " | same w/ contamination + wk qtz + bladed sulfide vns ↑ perv. sage green | | XX XK CA | | | | " | | | | " | | .003 | | <.1 | | | | |
| 665 | " | same w/ orange calcite stockwork + drusy qtz | | XX XK CA | | | | " | | | | " @ 2% | | .001 | | <.1 | | | | |
| 670 | " | same w/ contamination 3% Feldk frag + drusy qtz | | XX XK CA | | | | " | | | | " | | .003 | | <.1 | | | | |
| 675 | " | same w/ weak contamination w/ poss weak epiclastic component possible drusy marcasite vein - or may be contamination | | XX XK CA | | | | " | | | | " @ ~1% + | | <.001 | | .83 | | | | |
| 680 to 680.25 | " | same w ~30-40% upper hole contamination T.D. | | | | | | " | | | | " | | .002 | | <.1 | | | | |
| 5 | | TRICONE DIED | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | |

N 2,203,624.0
E 482,212.3

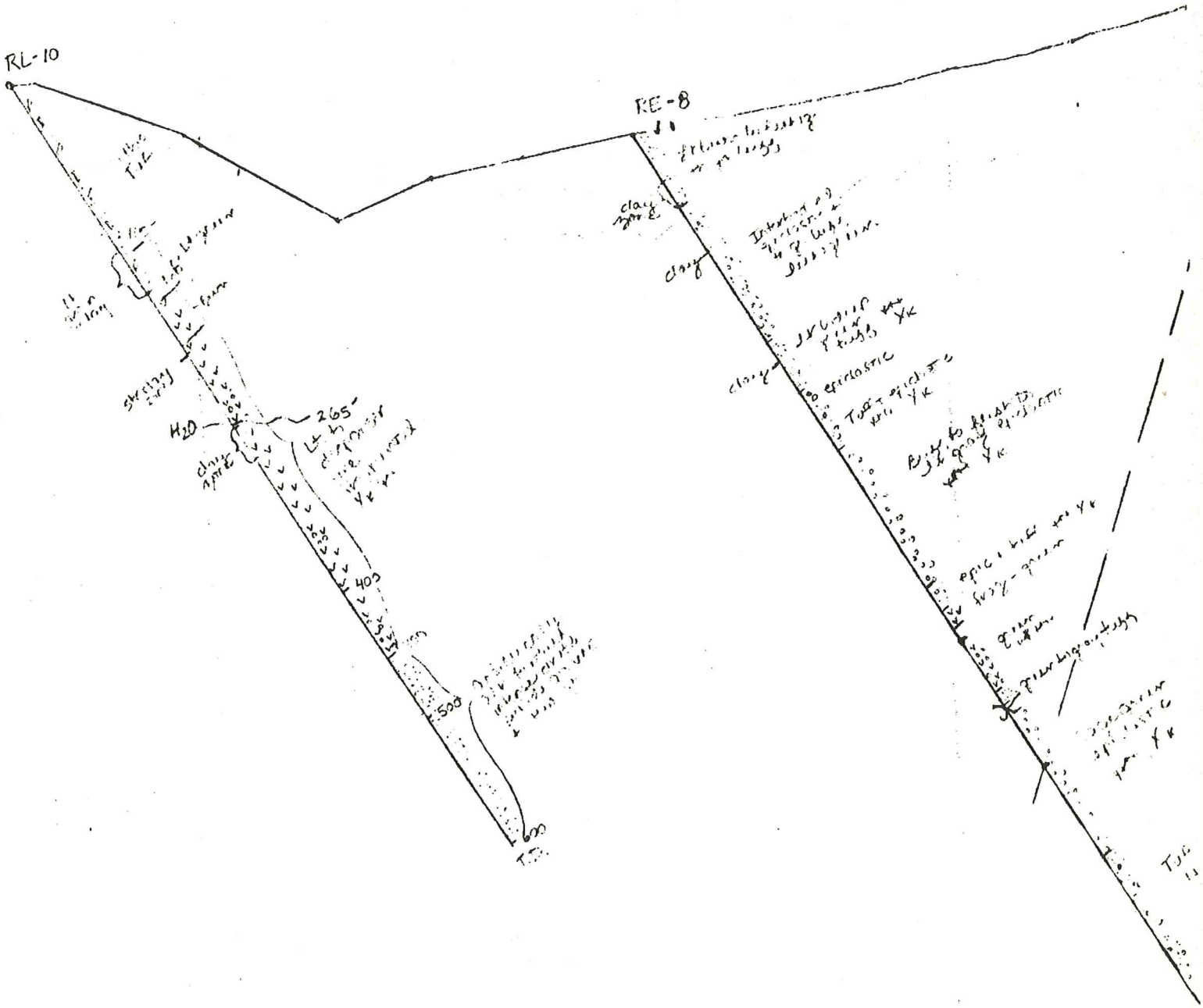



ROSEBUD

RE-8

1" = 100'

In plane of Hole


RL-10
RE-8
H2O
265'
400
500
600
clay
clay

NEVADA GSI
GEOCHEMICAL SERVICES, INC.

JUN 01 1989

# GEOCHEMICAL ANALYSIS REPORT

May 30, 1989

Kristen Kenner
Lac Minerals USA, Inc.
1475 Greg St.
Sparks, NV 89431

Number of Samples: 101
Project: 615411
GSI Number: 4160
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

| | Sample I.D. | | | | Au o/t | Ag o/t |
|---|---|---|---|---|---|---|
| 1 | SAMPLE: | RE-8 | 0 | 5 | <.001 | <.10 |
| 2 | SAMPLE: | RE-8 | 5 | 10 | <.001 | <.10 |
| 3 | SAMPLE: | RE-8 | 10 | 15 | 0.001 | <.10 |
| 4 | SAMPLE: | RE-8 | 15 | 20 | 0.001 | <.10 |
| 5 | SAMPLE: | RE-8 | 20 | 25 | 0.001 | <.10 |
| 6 | SAMPLE: | RE-8 | 25 | 30 | 0.002 | <.10 |
| 7 | SAMPLE: | RE-8 | 30 | 35 | 0.014 | <.10 |
| 8 | SAMPLE: | RE-8 | 35 | 40 | 0.003 | <.10 |
| 9 | SAMPLE: | RE-8 | 40 | 45 | 0.001 | <.10 |
| 10 | SAMPLE: | RE-8 | 45 | 50 | 0.002 | <.10 |
| 11 | SAMPLE: | RE-8 | 50 | 55 | 0.004 | <.10 |
| 12 | SAMPLE: | RE-8 | 55 | 60 | 0.001 | <.10 |
| 13 | SAMPLE: | RE-8 | 60 | 65 | 0.003 | <.10 |
| 14 | SAMPLE: | RE-8 | 65 | 70 | 0.004 | <.10 |
| 15 | SAMPLE: | RE-8 | 70 | 75 | 0.005 | <.10 |
| 16 | SAMPLE: | RE-8 | 75 | 80 | 0.002 | <.10 |
| 17 | SAMPLE: | RE-8 | 80 | 85 | 0.002 | <.10 |
| 18 | SAMPLE: | RE-8 | 85 | 90 | 0.002 | <.10 |
| 19 | SAMPLE: | RE-8 | 90 | 95 | 0.002 | <.10 |
| 20 | SAMPLE: | RE-8 | 95 | 100 | 0.002 | <.10 |
| 21 | SAMPLE: | RE-8 | 100 | 105 | 0.004 | <.10 |
| 22 | SAMPLE: | RE-8 | 105 | 110 | 0.006 | <.10 |
| 23 | SAMPLE: | RE-8 | 110 | 115 | 0.099 | 0.12 |
| 24 | SAMPLE: | RE-8 | 115 | 120 | 0.007 | <.10 |
| 25 | SAMPLE: | RE-8 | 120 | 125 | 0.003 | <.10 |
| 26 | SAMPLE: | RE-8 | 125 | 130 | 0.002 | <.10 |
| 27 | SAMPLE: | RE-8 | 130 | 135 | 0.003 | <.10 |
| 28 | SAMPLE: | RE-8 | 135 | 140 | 0.002 | <.10 |
| 29 | SAMPLE: | RE-8 | 140 | 145 | 0.003 | <.10 |
| 30 | SAMPLE: | RE-8 | 145 | 150 | 0.002 | <.10 |

1498 Kleppe Lane • Sparks, Nevada 89431 • FAX: 702/359-6605 • 702/359-6600

| Sample I.D. | | | | Au o/t | Ag o/t |
|---|---|---|---|---|---|
| 31 | SAMPLE: | RE-8 | 150 155 | 0.013 | <.10 |
| 32 | SAMPLE: | RE-8 | 155 160 | 0.011 | <.10 |
| 33 | SAMPLE: | RE-8 | 160 165 | 0.004 | <.10 |
| 34 | SAMPLE: | RE-8 | 165 170 | 0.003 | <.10 |
| 35 | SAMPLE: | RE-8 | 170 175 | 0.002 | <.10 |
| 36 | SAMPLE: | RE-8 | 175 180 | 0.002 | <.10 |
| 37 | SAMPLE: | RE-8 | 180 185 | 0.002 | <.10 |
| 38 | SAMPLE: | RE-8 | 185 190 | 0.002 | <.10 |
| 39 | SAMPLE: | RE-8 | 190 195 | 0.001 | <.10 |
| 40 | SAMPLE: | RE-8 | 195 200 | 0.005 | <.10 |
| 41 | SAMPLE: | RE-8 | 200 205 | 0.005 | <.10 |
| 42 | SAMPLE: | RE-8 | 205 210 | 0.003 | 0.12 |
| 43 | SAMPLE: | RE-8 | 210 215 | 0.002 | <.10 |
| 44 | SAMPLE: | RE-8 | 215 220 | 0.001 | 0.16 |
| 45 | SAMPLE: | RE-8 | 220 225 | 0.003 | <.10 |
| 46 | SAMPLE: | RE-8 | 225 230 | 0.003 | <.10 |
| 47 | SAMPLE: | RE-8 | 230 235 | 0.004 | <.10 |
| 48 | SAMPLE: | RE-8 | 235 240 | 0.004 | <.10 |
| 49 | SAMPLE: | RE-8 | 240 245 | 0.003 | <.10 |
| 50 | SAMPLE: | RE-8 | 245 250 | 0.006 | <.10 |
| 51 | SAMPLE: | RE-8 | 250 255 | 0.003 | <.10 |
| 52 | SAMPLE: | RE-8 | 255 260 | 0.004 | <.10 |
| 53 | SAMPLE: | RE-8 | 260 265 | 0.051 | <.10 |
| 54 | SAMPLE: | RE-8 | 265 270 | 0.003 | <.10 |
| 55 | SAMPLE: | RE-8 | 270 275 | 0.006 | <.10 |
| 56 | SAMPLE: | RE-8 | 275 280 | 0.003 | <.10 |
| 57 | SAMPLE: | RE-8 | 280 285 | 0.005 | 0.33 |
| 58 | SAMPLE: | RE-8 | 285 290 | 0.011 | 0.10 |
| 59 | SAMPLE: | RE-8 | 290 295 | 0.004 | <.10 |
| 60 | SAMPLE: | RE-8 | 295 300 | 0.009 | 1.20 |
| 61 | SAMPLE: | RE-8 | 300 305 | 0.007 | 0.90 |
| 62 | SAMPLE: | RE-8 | 305 310 | 0.008 | 0.77 |
| 63 | SAMPLE: | RE-8 | 310 315 | 0.004 | 0.30 |
| 64 | SAMPLE: | RE-8 | 315 320 | 0.006 | 0.31 |
| 65 | SAMPLE: | RE-8 | 320 325 | 0.006 | 0.12 |
| 66 | SAMPLE: | RE-8 | 325 330 | 0.005 | <.10 |
| 67 | SAMPLE: | RE-8 | 330 335 | 0.005 | <.10 |
| 68 | SAMPLE: | RE-8 | 335 340 | 0.003 | <.10 |
| 69 | SAMPLE: | RE-8 | 340 345 | 0.004 | <.10 |
| 70 | SAMPLE: | RE-8 | 345 350 | 0.006 | <.10 |
| 71 | SAMPLE: | RE-8 | 350 355 | 0.004 | <.10 |
| 72 | SAMPLE: | RE-8 | 355 360 | 0.002 | 0.13 |
| 73 | SAMPLE: | RE-8 | 360 365 | 0.004 | 0.12 |
| 74 | SAMPLE: | RE-8 | 365 370 | 0.004 | <.10 |
| 75 | SAMPLE: | RE-8 | 370 375 | 0.002 | 0.15 |
| 76 | SAMPLE: | RE-8 | 375 380 | 0.004 | 0.10 |

| | Sample I.D. | | | | Au o/t | Ag o/t |
|---|---|---|---|---|---|---|
| 77 | SAMPLE: | RE-8 | 380 | 385 | 0.002 | 0.12 |
| 78 | SAMPLE: | RE-8 | 390 | 395 | 0.006 | <.10 |
| 79 | SAMPLE: | RE-8 | 395 | 400 | 0.003 | <.10 |
| 80 | SAMPLE: | RE-8 | 400 | 405 | 0.001 | 0.12 |
| 81 | SAMPLE: | RE-8 | 405 | 410 | 0.005 | 0.11 |
| 82 | SAMPLE: | RE-8 | 410 | 415 | 0.004 | <.10 |
| 83 | SAMPLE: | RE-8 | 415 | 420 | 0.003 | <.10 |
| 84 | SAMPLE: | RE-8 | 420 | 425 | 0.003 | <.10 |
| 85 | SAMPLE: | RE-8 | 425 | 430 | 0.004 | 0.12 |
| 86 | SAMPLE: | RE-8 | 430 | 435 | 0.015 | 0.10 |
| 87 | SAMPLE: | RE-8 | 435 | 440 | 0.003 | <.10 |
| 88 | SAMPLE: | RE-8 | 440 | 445 | 0.004 | <.10 |
| 89 | SAMPLE: | RE-8 | 445 | 450 | 0.019 | <.10 |
| 90 | SAMPLE: | RE-8 | 450 | 455 | 0.023 | 0.90 |
| 91 | SAMPLE: | RE-8 | 455 | 460 | 0.031 | 0.55 |
| 92 | SAMPLE: | RE-8 | 460 | 465 | 0.131 | 1.35 |
| 93 | SAMPLE: | RE-8 | 465 | 470 | 0.034 | 0.20 |
| 94 | SAMPLE: | RE-8 | 470 | 475 | 0.033 | 0.38 |
| 95 | SAMPLE: | RE-8 | 475 | 480 | 0.037 | 0.22 |
| 96 | SAMPLE: | RE-8 | 480 | 485 | 0.027 | <.10 |
| 97 | SAMPLE: | RE-8 | 485 | 490 | 0.015 | <.10 |
| 98 | SAMPLE: | RE-8 | 490 | 495 | 0.021 | <.10 |
| 99 | SAMPLE: | RE-8 | 495 | 500 | 0.016 | <.10 |
| 100 | SAMPLE: | RE-8 | 500 | 505 | 0.031 | <.10 |
| 101 | SAMPLE: | RE-8 | 505 | 510 | 0.066 | <.55 |

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This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

NEVADA GSI GEOCHEMICAL SERVICES, INC.

JUN 01 1989

# GEOCHEMICAL ANALYSIS REPORT

May 30, 1989

Lac Minerals USA, Inc.
1475 Greg St.
Sparks, NV 89431

Number of Samples: 128
Project: 615411
GSI Number: 4207
Analysis: Fire Assay for Gold and Silver, with an A.A. finish.

| | Sample I.D. | Au o/t | Ag o/t |
|---|---|---|---|
| 1 | RE-8 505 510 A | 0.023 | 0.19 |
| 2 | RE-8 510 515 | 0.009 | <.10 |
| 3 | RE-8 515 520 | 0.005 | <.10 |
| 4 | RE-8 520 525 | 0.009 | <.10 |
| 5 | RE-8 525 630 | 0.006 | <.10 |
| 6 | RE-8 530 535 | 0.011 | <.10 |
| 7 | RE-8 535 540 | 0.006 | <.10 |
| 8 | RE-8 540 545 | 0.009 | 0.25 |
| 9 | RE-8 545 550 | 0.001 | <.10 |
| 10 | RE-8 550 555 | 0.003 | <.10 |
| 11 | RE-8 555 560 | 0.009 | <.10 |
| 12 | RE-8 560 565 | 0.006 | 0.21 |
| 13 | RE-8 565 570 | 0.008 | <.10 |
| 14 | RE-8 570 575 | 0.005 | <.10 |
| 15 | RE-8 575 580 | 0.012 | <.10 |
| 16 | RE-8 580 585 | 0.013 | 0.22 |
| 17 | RE-8 585 590 | 0.005 | <.10 |
| 18 | RE-8 590 595 | 0.003 | <.10 |
| 19 | RE-8 595 600 | 0.004 | <.10 |
| 20 | RE-8 600 605 | 0.012 | <.10 |
| 21 | RE-8 605 610 | 0.005 | <.10 |
| 22 | RE-8 610 615 | 0.006 | <.10 |
| 23 | RE-8 615 620 | 0.005 | <.10 |
| 24 | RE-8 620 625 | 0.005 | <.10 |
| 25 | RE-8 625 630 | 0.003 | <.10 |
| 26 | RE-8 630 635 | 0.005 | <.10 |
| 27 | RE-8 635 640 | 0.008 | <.10 |
| 28 | RE-8 640 645 | 0.005 | <.10 |
| 29 | RE-8 645 650 | 0.008 | <.10 |
| 30 | RE-8 650 655 | 0.002 | <.10 |

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| | Sample I.D. | | | Au o/t | Ag o/t |
|---|---|---|---|---|---|
| 31 | RE-8 | 655 | 660 | 0.003 | 0.18 |
| 32 | RE-8 | 660 | 665 | 0.003 | <.10 |
| 33 | RE-8 | 665 | 670 | 0.001 | <.10 |
| 34 | RE-8 | 670 | 675 | 0.003 | <.10 |
| 35 | RE-8 | 675 | 680 | 0.002 | 0.83 |
| 36 | RE-8 | 680 | 680 .25 | 0.003 | <.10 |
| 37 | RE-9 | 0 | 5 | 0.001 | <.10 |
| 38 | RE-9 | 5 | 10 | 0.001 | <.10 |
| 39 | RE-9 | 10 | 15 | <.001 | <.10 |
| 40 | RE-9 | 15 | 20 | <.001 | <.10 |
| 41 | RE-9 | 20 | 25 | 0.004 | <.10 |
| 42 | RE-9 | 25 | 30 | 0.001 | <.10 |
| 43 | RE-9 | 30 | 35 | <.001 | <.10 |
| 44 | RE-9 | 35 | 40 | 0.005 | <.10 |
| 45 | RE-9 | 40 | 45 | 0.003 | <.10 |
| 46 | RE-9 | 45 | 50 | 0.002 | <.10 |
| 47 | RE-9 | 50 | 55 | 0.002 | <.10 |
| 48 | RE-9 | 55 | 60 | 0.002 | <.10 |
| 49 | RE-9 | 60 | 65 | 0.003 | <.10 |
| 50 | RE-9 | 65 | 70 | 0.001 | <.10 |
| 51 | RE-9 | 70 | 75 | 0.001 | <.10 |
| 52 | RE-9 | 75 | 80 | 0.002 | <.10 |
| 53 | RE-9 | 80 | 85 | 0.002 | <.10 |
| 54 | RE-9 | 85 | 90 | 0.001 | <.10 |
| 55 | RE-9 | 90 | 95 | 0.002 | <.10 |
| 56 | RE-9 | 95 | 100 | 0.001 | <.10 |
| 57 | RE-9 | 100 | 105 | <.001 | <.10 |
| 58 | RE-9 | 105 | 110 | <.001 | <.10 |
| 59 | RE-9 | 110 | 115 | <.001 | <.10 |
| 60 | RE-9 | 115 | 120 | <.001 | <.10 |
| 61 | RE-9 | 120 | 125 | <.001 | <.10 |
| 62 | RE-9 | 125 | 130 | 0.014 | <.10 |
| 63 | RE-9 | 130 | 135 | <.001 | <.10 |
| 64 | RE-9 | 135 | 140 | 0.001 | <.10 |
| 65 | RE-9 | 140 | 145 | <.001 | <.10 |
| 66 | RE-9 | 145 | 150 | <.001 | <.10 |
| 67 | RE-9 | 150 | 155 | 0.003 | 0.62 |
| 68 | RE-9 | 155 | 160 | 0.001 | <.10 |
| 69 | RE-9 | 160 | 165 | 0.001 | <.10 |
| 70 | RE-9 | 165 | 170 | <.001 | <.10 |
| 71 | RE-9 | 170 | 175 | <.001 | <.10 |
| 72 | RE-9 | 175 | 180 | 0.001 | <.10 |
| 73 | RE-9 | 180 | 185 | 0.005 | 0.29 |
| 74 | RE-9 | 185 | 190 | 0.003 | 0.16 |
| 75 | RE-9 | 190 | 195 | <.001 | <.10 |
| 76 | RE-9 | 195 | 200 | 0.001 | <.10 |

| | Sample I.D. | | | Au o/t | Ag o/t |
|---|---|---|---|---|---|
| 77 | RE-9 | 200 | 205 | 0.001 | 0.15 |
| 78 | RE-9 | 205 | 210 | <.001 | 0.14 |
| 79 | RE-9 | 210 | 215 | <.001 | <.10 |
| 80 | RE-9 | 215 | 220 | <.001 | 0.11 |
| 81 | RE-9 | 220 | 225 | <.001 | <.10 |
| 82 | RE-9 | 225 | 230 | <.001 | <.10 |
| 83 | RE-9 | 230 | 235 | <.001 | <.10 |
| 84 | RE-9 | 235 | 240 | <.001 | <.10 |
| 85 | RE-9 | 240 | 245 | <.001 | <.10 |
| 86 | RE-9 | 245 | 250 | <.001 | <.10 |
| 87 | RE-9 | 250 | 255 | <.001 | <.10 |
| 88 | RE-9 | 255 | 260 | <.001 | <.10 |
| 89 | RE-9 | 260 | 265 | <.001 | <.10 |
| 90 | RE-9 | 265 | 270 | <.001 | <.10 |
| 91 | RE-9 | 270 | 275 | <.001 | <.10 |
| 92 | RE-9 | 275 | 280 | <.001 | <.10 |
| 93 | RE-9 | 280 | 285 | <.001 | <.10 |
| 94 | RE-9 | 285 | 290 | 0.001 | <.10 |
| 95 | RE-9 | 290 | 295 | <.001 | <.10 |
| 96 | RE-9 | 295 | 300 | <.001 | <.10 |
| 97 | RE-9 | 300 | 305 | 0.007 | <.10 |
| 98 | RE-9 | 305 | 310 | 0.049 | 0.8 |
| 99 | RE-9 | 310 | 315 | 0.005 | <.10 |
| 100 | RE-9 | 315 | 320 | 0.002 | 0.19 |
| 101 | RE-9 | 320 | 325 | 0.004 | <.10 |
| 102 | RE-9 | 325 | 330 | <.001 | <.10 |
| 103 | RE-9 | 330 | 335 | <.001 | 0.11 |
| 104 | RE-9 | 335 | 340 | 0.001 | <.10 |
| 105 | RE-9 | 340 | 345 | <.001 | <.10 |
| 106 | RE-9 | 345 | 350 | <.001 | <.10 |
| 107 | RE-9 | 350 | 355 | <.001 | <.10 |
| 108 | RE-9 | 355 | 360 | <.001 | <.10 |
| 109 | RE-9 | 360 | 365 | <.001 | <.10 |
| 110 | RE-9 | 365 | 370 | <.001 | 0.27 |
| 111 | RE-9 | 370 | 375 | <.001 | <.10 |
| 112 | RE-9 | 375 | 380 | <.001 | <.10 |
| 113 | RE-9 | 380 | 385 | <.001 | <.10 |
| 114 | RE-9 | 385 | 390 | <.001 | 0.34 |
| 115 | RE-9 | 390 | 395 | <.001 | <.10 |
| 116 | RE-9 | 395 | 400 | <.001 | <.10 |
| 117 | RE-9 | 400 | 405 | <.001 | <.10 |
| 118 | RE-9 | 405 | 410 | <.001 | <.10 |
| 119 | RE-9 | 410 | 415 | <.001 | <.10 |
| 120 | RE-9 | 415 | 420 | <.001 | <.10 |
| 121 | RE-9 | 420 | 425 | <.001 | <.10 |
| 122 | RE-9 | 425 | 430 | <.001 | <.10 |

| Sample I.D. | | | Au o/t | Ag o/t |
|---|---|---|---|---|
| 123 | RE-9 | 430 435 | <.001 | <.10 |
| 124 | RE-9 | 435 440 | <.001 | <.10 |
| 125 | RE-9 | 440 445 | <.001 | <.10 |
| 126 | RE-9 | 445 450 | <.001 | <.10 |
| 127 | RE-9 | 450 455 | <.001 | <.10 |
| 128 | RE-9 | 455 460 | <.001 | <.10 |

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This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

NEVADA GSI GEOCHEMICAL SERVICES, INC.

JUN 26 1989

# GEOCHEMICAL ANALYSIS REPORT

June 16, 1989

Kristen Kenner
Lac Minerals USA, Inc.
1475 Greg St.
Sparks, NV 89431

Number of Samples: 4
GSI Number: 4160A
Analysis: Gold 1 assay ton checks.

| | Sample I.D. | Au o/t |
|---|---|---|
| 1 | 23 RE-8 110-115 | 0.078 |
| 2 | 53 RE-8 260-265 | 0.082 |
| 3 | 92 RE-8 460-465 | 0.115 |
| 4 | 101 RE-8 505-510 | 0.059 |

This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Operations Manager

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RE-8 QUICKLOG FEB. 6, 1990

0 - 30 OVERBURDEN

30 - 233 lt/ smoky green granular to FGT
120 - 125 ✓ 166' - fractured
216' - →

233 - 240 poss FAULT zone Δ iated str w/ sulfide vns
294' hit fault w/ ↑ $H_2O$

240 - 320 fine grained to granular tuff, perv bl
w/ str. drusy qtz sulfide vns
310 - 315 Δ

320 - 440 green argillic
385 - 395 strongly bleached w/ FeSulfate stain
410 - 440 ↑ bleaching

440 - 450 fault zone w/ str $SiO_2$; concentrated
fine dissem. sulfides

450 - 490 Bleached white; wh clay alt
Sandstone granular tuff
w/ FeSulfate stain

490 - 680.25 lt/ dk green granular tuff to FGT
weakly bleached poss SGT contact
640 - 657 ↑ bleaching
w/ local amber chalcedony vns
665 - 670 Δ - orange