60001387

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-159C
AUTHOR	C. Walck; K. Tullar; N. Brewer; J. Gaige
DATE OF DOC(S)	1990
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Coates Drilling Lac Minerals (USA), Inc
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 852' handwritten notes 25p.

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 5/20/08
Initials Date

DB: mdh
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

DRILL LOGS
Rosebud

RL-159

6600138? 4010

6000 1387

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

DRILL LOG SUMMARY SHEET

PROJECT Rosebud

HOLE NUMBER RL-159C TOTAL DEPTH 852' LOGGED BY CMW

Date started 11-08-90

Date completed 11-10-90

Initial bearing S55E

Initial inclination -70°

Elevation 5235.6

Collar coordinates:

N 2,203,976.0

E 481674.1

Contractor: Coates

Drill Type: UDR-650

Hole Size: 4¾" hammer to 300', HMQ to TD

Drilling Conditions:

Footage: Wet / Dry

Comments:

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLINATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)
0	50	25'	-70°	S55E			
50	200	125	-72°	S62E			
200	401	300	-72°	S63E			
401	601	501	-73°	S64E			
601	776	688.5	-74°	S64E			
776	852	814	-74°	S64E			

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

fine grained tuff
lithic lapilli tuff

ARGILLIC
XX SILICIFICATION
OX OXIDIZED
DRUZY QUARTZ
XC CHALCEDONIC QUARTZ
XK STOCKWORK QUARTZ
P P P PROPYLITIZATION
Ca CALCITE

DRILL HOLE RL-159

Page 1 of 3

1-91
LOGGED BY CMW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
	Tmb								white to lt grey					0-90: Probably TMb white to light grey fgt, w/ ~	.001	<	
05														2-5% white phenos (plag?)	.003		
10														1-2mm, fairly hard, 'sugary' text	<		
15														under scope, w/ ~ 5-10%	.001		
20														bare brown FeOx stain, ~ 5%	.002		
25														yellow clay. Overall mdly alt'd	.002		
30															.001		
35															.001		
40															.002		
45															.001		
50															.001		
55															.001		
60															.001		
65															<		
70															.001		
75															.001		
80															.003		
85															.003		
90	BUD	wk arg							med-dk green, lt green					90-300 BUD lithic lapilli tuff	.004		
95									& orangy brown					90-120: Mix med-dk green w/ white clasts lt + bleached chips of same & FeOx stained	.002		
100														chips of same			

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

ARGILLIC
XX SILICIFICATION
DX OXIDIZED
DRUZY QUARTZ
XC CHALCEDONIC QUARTZ
XK STOCKWORK QUARTZ
P P P PROPYLITIZATION
Ca CALCITE

DRILL HOLE RL-159

LOGGED BY CMW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
	BUD cont	WK arg ~							med-dk green, lt green						.001	<.2	
105		~							orang-brown						<.2		
110		~													.001		
115		~													<.2		
120		mod arg ~							light green					120-170: BUD clt; lt green & med green sugary text under scope fgt & clt Prob overall mod bleached & argillized, mod amt lt blue-green clay (15%) Very minor small specks w/ FeOx	<.2		
125		~													.001		
130		~													.001		
135		~													<.2		
140		~													<.2		
145		~													.001	.13	
150		~													.001	<.2	
155		~													.001	<.2	
160		~													.001	<.2	
165		~													<.2	<.2	
170		~															
175		fairly fresh							dk green				<1%	170-300 BUD clt Dark green clt w/ ~30% lt grey to white irregular shaped (broken?) clasts	.033	<.2	
180															<.2	.20	
185														Minor py/Mc (<1%) often w/ qtz - prob broken piece of small vnlts.	.002	<.2	
190		wk bleach							med green						.004	<.2	
195															.004	<.2	
200															.001	<.2	

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

	ARGILLIC
XX	SILICIFICATION
OX	OXIDIZED
~~XX~~	DRUZY QUARTZ
XC	CHALCEDONIC QUARTZ
XK	STOCKWORK QUARTZ
P P P	PROPYLITIZATION
Ca	CALCITE

DRILL HOLE RL-159

Page 3 of 3

LOGGED BY CMW

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
	BUD	wk bleach							med green				<1%	BUD lt+cont, as above	.002	<	
205															.002		
210															.001		
215															.001		
220		fairly fresh							dk green						.004		
225															.018		
230															.012	.12	
235															.022	.11	
240															.006	<	
245															.004	<	
250															.003	<	
255															.002	<	
260															.029	.18	
265															.051	.14	
270															<	.14	
275															<	<	
280															<		
285															<		
290															.005		
295									med greyn & purple					Mix of wk bleach med green Bud lt & frgr. dk purple chips	<		
300																	

HOLE # RL-159 LOGGED BY CM Walck DATE 12-3-90 PAGE 1 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.
300	7/150	33° to c.a.	None	None		fairly fresh
	96	33°				
310	100		Rare vnlts	Minor Calc		
320	100					
330	100					
340	99	None	wk vnlts	Q+py & dk green		wk bleached
350	99		wk Bx'd wk vnlts	chalc, dk gr & Q+py Q+py		
360	99		w-m vnlts wk vnlts			m-str arg & bleached
372						

DESCRIPTION

0-300 Reverse Circ.

300 - 344.5 Green wispy lithic lapilli tuff (BUD), very minor calc veinlets

300 - 308': ~20% clasts, green, lt grey & lt red-brown in green-grey wispy matrix. No veining

308 - 344.5; w/ ~ 30 - 40% lt green & white clasts, 1/4" - 2" in grey-green matrix w/ large wisps (2"-4" long, 1/4" wide). Very minor calc. veinlets (< 1/ft, 1/4" wide) Wisps / bedding at ~ 33° to c.a.

344.5 - 755.5 Lower Bud Tuff / RBUR, variably altered. 344.5 - 587 is fine grained tuff, 587 - is lithic-poor lapilli tuff

344.5 - 359; lt-med blue-green f.g.t. w/ very thin fractures w/ dk green ± chlor? (< 1/4mm wide, 2-10 per inch) Weak py + qtz veinlets (1/ft, 1/8" - 1/4" wide). 353 - 355 is weakly bx'd - almost clast supp. w/ vein matrix of dark green?, chalcedony & qtz ± py.

359 - 417; Mottled pale to lt blue-green f.g.t w/ med green 1/8" - 1/4" speckles → amygdules Contains ~ 10% amygdules, to white in ctr w/ dk green rim They are lt-grey Groundmass mod to mod-str argillized - generally can scratch w/ fingernail Generally wk py + qtz vnlts (2-3/ft, 1/16 - 1/4"), minor Drusy qtz.

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
342-347				.006	<.10
347-352				.001	<
352-357				.003	<
357-362				.004	<
362-367				.003	<
367-372				.038	<

HOLE # RL-159 LOGGED BY CMW DATE 12-3-90 PAGE 2 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.
380	96	None	Wk vnlts	Py+ Qtz minor Dr Q Minor Kaol		M-S arg/ bleach
390	100		W-M vnlts			Mod Arg/ Bleach
	100		Wk vnlts			
400			Bxd			
	100		Wk vnlts			
410	100					
420	100		Wk vnlts & abt fract's w/ very thin vnlts	Py+ Qtz, Dk green? & minor kaol		Mod bleached W-M arg
430	100					
440						

DESCRIPTION

344.5 - 755.5 cont Alt'd LBT/RBUR

359 - 417 cont: 359 - 383 m-str arg, 383 - 417 little quartz, mod arg

371 - 372 : Vuggy drusy qtz + Mc

400 - 402 : Vein bx'd (str crackle bxa w/ 1/4" qtz ± py veins on fract's)

417 - 442 : Med blue-green fine grained porphyritic tuff; ~ 5% tiny (1/4mm) dk green phenos. Few 2 foot amygdular beds. Mod amnt fractures w/ thin (< 1/32" - 1/16") veinlets dk green & py + qtz, rare kaol. Also weak 1/8" - 1/4" vnlts (2 /ft) py + qtz, minor kaol.

(Cont quite scratch w/ fingernail → w-m arg)

437 - 441 is crackle/vein bx'd w/ dk red FeOx + qtz vein matrix

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
372-377				.008	< .10
377-382				.006	<
382-387				.006	<
387-392				.004	<
392-397				.012	<
397-402				.003	<
402-407				.003	<
407-412				.008	<
412-417				.002	<
417-422				.013	<
422-427				.004	<
427-432				.004	<
432-437				.028	<
437-442				.005	<

HOLE # RL-159 LOGGED BY CMW DATE 12-3-90 PAGE 3 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION
450	100	None	wk vnlts & w-m fracts w/ very thin vnlts	Py + Qtz, minor Kaol		w-m bleached wk arg	344.5-755.5 cont. altrd LBT / RBUR cont 442-460: Med blue-green w/ 5% tiny dk green phenos, less bleached & fract'd than above. w-m fracts w/ very thin py, dk green, or FeOx vnlts, & wk vnlts (1-2 /ft, 1/16"-1/4" wide) py + qtz ± kaol
460	94		w-m vnlts			mod bleached	460-462.5 More fract'd & bleached to lt green, w-m py + qtz vnlts
470	95		weak fract's	minor dk green		v wk bleached	462.5-469: weakly bleached, med-dk grey-green fgt weak fractures w/ dk green.
480	100		weak vnlts & fracts	py + Qtz, dk green? minor Kaol		wk bleached	469-485: weak to w-m bleached, med grey green fgt w-m fine fracts w/ dk green, weak vnlts (1-2 ft, 1/16"-1/8" wide) py + qtz, dk green, minor kaol.
490	97			Py + Qtz + Kaol, Dk green		w-m bleached	485-498: ¿Auto bx'd text?, lt-med green clasts (80%) in med pink-grey matrix Wk vnlts 1-3 ft, 1/16"-1/4", py + qtz + kaol. Dk green in thin fracts.
500	100		W to w-m vnlts	Py + Qtz ± Kaol		mod bleached & arg	498-519: Mod bleached mottled tan & lt green fgt. — background is pale green, w/ 35% lt-med tan/flesh 1/4" ◊ ◊ mottles. Overall mod arg - barely scratched by fingernail. Wk to w-m vnlts, 2-4 /ft, 1/16"-1/4" wide, py + qtz ± kaol. 512-513 more broken up w/ mod kaol + py veining.
510	98						

ASSAYS					
Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
442-447				.002	<.10
447-452				.004	<
452-457				.013	<
457-462				.021	.15
462-467				.017	<
467-472				.001	<
472-477				.004	<
477-482				.006	<
482-487				.002	<
487-492				.003	<
492-497				.003	.10
497-502				.004	<
502-507				.022	.20
507-512				.014	.25

HOLE # RL-159 LOGGED BY CMW DATE 12-3-90 PAGE 4 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION
520	93	None	W to w-m vnlts	Py + Qtz ± Kaol ± dk green		Mod bleach + arg	344.5 - 755.5 cont.: Alt'd LBT / RBUR
530	97		W-M vnlts	Kaol + qtz + py + dk green ± Fox or py		Mod bleach w-m arg	519 - 528: More coarsely mottled flesh + lt green fgt. W-M veinlets 3-5 /ft, 1/8" - 1/2" wide, py + qtz ± kaol ± dk green. 526-527 1" wide vein Can almost scratch w/ fingernail
540	91		Mod vnlts			M-S bleach mod arg	528 - 562 Spotted (amygdular) fgt; Pale green background, w/ 15 - 20% flesh colored spots, avg ~ 1/4", prob. were amygdules,
550	98		W-M vnlts			M-S bleach M-S arg	Overall mod-str bleached, w-m to locally m-str argillized. W-M veinlets 3-6 /ft, 1/16" - 1/2" wide; Kaol + qtz + py, dk green ? + dk red Fe Ox, dk green + py,
			Mod vnlts			M-S bleach w-m arg	1/2" wide veins at 531-532, 535-537, 544-545 mostly Kaol, w/ py/mc, qtz
			W-M vnlts				539-542 + 545-546 are more strongly argillized + core is more broken up. Can easily scratch w/ fingernail.
			Wk vnlts				
560	90		Vein bx'd	Qtz + Mc + Kaol		M-S arg	562-570: Vein bx'd + rubbly spotted rock (as above).
	100					M-S bleach w-m arg	Locally vein bx'd - 1/4" - 3/4" wide grey qtz + Mc ± Kaol veins break rock up at 563-64, 566-70.
570	94		Mod vnlts	Qtz + py/Mc + Kaol + dk green + py		Mod bleach wk arg	565-567 is more argillized / rubbly Can't tell if hydrothermal or fault, but think hydroth
580			Crackle bx'd mod vnlts				

ASSAYS					
Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
512-517				.048	2.71
517-522				.012	.20
522-527				.011	.18
527-532				.300	4.99
532-537				.225	2.31
537-542				1.338	1.56
542-547				.125	.41
547-552				.068	.91
552-557				.008	.17
557-562				.058	.32
562-567				1.129	1.44
567-572				1.169	1.92
572-577				.495	.68
577-582				.764	1.00

HOLE # RL-159 LOGGED BY CMW DATE 12-3-90 PAGE 5 OF 9

DEPTH (ft) | RECOVERY | Structure: Bd. Fol. / Faults | MINERAL-IZATION | GRAPHIC LOG | ALTER.

344.5 - 755.5 cont] Alt'd LBT / RBOR

570 - 581.5 : Mod flesh color w/ some green mottles fgt, mod fract'd to locally crackle bx'd. Mod veined : Qtz + py/Mc + Kaol ± DK green ? py, 6-10 / ft, 1/8" - 1/2"

581.5 - 587 : Vein bx'd ~~to~~ locally rotated clast bx'd med flesh colored fgt - Prob hydrothermal bx'n ? Vein / matrix is lt grey to green-grey qtz w/ Mc ± Kaol Some Drusy qtz + Mc vugs.

[Clasts comprise > 80% of material, 1/4" to 2" pieces]

587 - 631 Lithic lapilli tuff; lt green ± flesh angular lithics, 1/4" - 1" avg size, floating in med flesh colored tuff matrix. (Clasts comprise 10-25%.) Overall mod bleached ± locally wk arg (can't scratch w/ fingernail ± only locally can w/ plastic ruler, overall mod hard)

w-m to Mod veined : Qtz + py/Mc + white Kaol (white Kaol replacing qtz ?) ~ 2-8 vnlts/ft, 1/8" - 1/3" wide. Some drusy qtz + Mc vugs. (Strongest veining at 595-597, 612-615)

631 - 644.5; lithic lapilli tuff as above, but a little more brecciated-up ± veined ... Brecciated zones at: 632 - 632.5, (vein bx'd to rotated clast) 633 - 633.5, 634 - 634.5, 636.5 - 637, 637.5 - 638.5, 641 - 642, 644 - 644.5, matrix qtz + Mc ± Kaol. Outside bx'd zones see w-m vnlts

644.5 - 691.5: lithic lapilli tuff / tuff breccia. Pale to lt green ± lt flesh angular lithic clasts 1/8" - > 5" in size, unsorted, floating in

ASSAYS					
Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
582-587				1.264	1.68
587-592				.225	4.44
592-597				.270	1.15
597-602				.125	.35
602-607				.300	.91
607-612				.184	.31
612-617				.917	1.17
617-622				.310	.40
622-627				.049	<.10
627-632				.035	<
632-637				.070	.14
637-642				.595	.86
642-647				.310	.35
647-652				.127	<.10

HOLE # RL-159 LOGGED BY CMW DATE 12-4-90 , PAGE 6 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.	DESCRIPTION
660	98	None	W-M vnlts	Py+ Qtz ± Kaol, dk green ± Py, green Kaol, & minor calc + Py		Mod bleach	344.5-755.5 cont. RBUR/LBT cont 644.5-691.5 cont: Lithic lap tuff / tuff bxa cont; med flesh (brick color) matrix. Clasts comprise ~ 20% to 45%, 644-667; fairly hard, 667 ↓ is little more argillized - can barely scratch w/ fingernail Overall w-m vnlts 2-6/ ft, 1/16" - 1/8" wide; Py + qtz ± minor Kaol, and dk green + Py and green waxy Kaol.
670	99		W-M vnlts & local vein bx'd			Mod Bleach W-M Arg	667-672: is either fine grained intrbed or very large 'clast' - med flesh color wk crackle bx'd fgt
680	101		W-M vnlts				672-674: is llt / tuff bxa but is more broken up / veined & contains vugs w/ drusy qtz + Mc. 674-682: is mix of flesh fgt & llt; w/ a few 1" to 4" vein bx'd zones - qtz+Mc/Py at 677.5-677.75, 680.25-680.5, & 681.5-681.75.
690	98		Crackle bx'd to wk bxa	Q+Py & lt grey Kaol			690-691 Crackle / Vein bx'd - 1/8" - 1/4" qtz ± Py vnlts on crackle fractures.
700	97		Mod to M-S vnlts	lt grey Kaol, white Kaol, Py + QTZ		W-M to Mod bleach	691.5-695.5: Str. crackle bx'd to barely matrix supp. bx'd zone in lt-med pink-flesh fgt, generally a fine spiderweb network of qtz+Py & dull lt grey-green Kaol. Mod arg. 695.5-703: Med grey-pink / flesh color fgt w/ Mod to Mod-Str veinlets of lt grey-green Kaol, white Kaol, & minor Py+qtz, drusy qtz+Mc. ~ 1 vnlt / inch, 1/8" - 1/2" wide.
710	107		W-M vnlts	lt green Kaol, Py+Q, Dr Q+ Mc			703-724: Med greenish grey to pinkish grey f.gt. Generally w/ W-M vnlts, locally w/ little stronger veining (Mod), mostly lt green 'duckbutter' (4 white) Kaol, w/ lesser Py+qtz & drusy qtz+Mc. Veins gen 1/8" - 1/3" wide.
721			W-M to Mod vnlts				

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
652-657				.967	1.14
657-662				.595	1.20
662-667				.240	1.37
667-672				2.261	14.44
672-677				.505	1.11
677-682				1.317	1.71
682-687				.123	.18
687-692				.405	.54
692-697				.058	.17
697-702			.0063	.011	<.10
702-706			.0165	.018	.30
706-711			.0275	.063	.17
711-716.5				.025	.41
716.5-722				.027	.22

HOLE # RL-159 LOGGED BY CMW DATE 12-4-90 PAGE 7 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.
	102	None	W-M Vnlts; WK vnlts	py + Qtz ± Kaol, & lt green Kaol		W-M to Mod bleach
730	102		W-M to Mod Vnlts			
740	103		WK Vnlts			
750	100		Mod vnlts			
760	101		Bx'd ¿fault? Zone	milky Qtz + Kaol & lt grey qtz ± Mc		Mod Bleach & wk arg
770	101		V wk vnlts/stringers	V. minor Qtz + py		wk arg ?
			Bx'd/fault	Gouge		wk Silic ?
780	100		W-M vnlts & str fract	calc, & minor Kaol		M-S Silic Str Arg
			Crackle to bx'd	dk grey qtz + sulf		wk bleach & wk silic ?
790			W-M vnlts bx'd	grey qtz & Kaol		str silic

DESCRIPTION

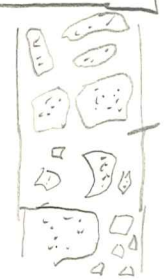
344.5 – 755.5 cont Alt'd RBOR/LBT

703-724 cont: Areas w/ mod veining at 714.5-716, 717.5-718, 719.5-720
704-718 has mod amnt Dusy qtz + Mc vugs

724~755.5: Med pinkish grey to greenish grey fine grained tuff. Generally weakly veined 1-3/ft; py + qtz ± Kaol, lt green Kaol. Locally a little more broken up & veined (MOD) at 735-736, 737-738, 741-742, 743.5-744.5, 754.5-755.5. Locally broken up/rubbly at 730-732, 742-744

755.5 – 767.5 Brecciated (fault?) zone. WK Argillized. Spotted clasts comprise 70-85% → dk flesh/brick color w/ 20% 1-2mm tiny spots of softer material – now lt green clay clasts are < 1/4" – >3". Matrix is mix of milky white qtz + Kaol & lt grey qtz w/ minor Mc

SRF



767.5 – 777 Green epiclastic grading down into silicified bxa/fault zone.

767.5 ~ 774: Green tuffaceous ss? – somewhat bedded, lt green, grey & minor black (Jr/Tr shale) clasts, 1 mm – 1 cm, arg size increasing ↓. Appears weakly silic 772-774

774 – 777: Silicified, brecciated zone; most clasts similar to above + some grey f.g. silica Δ clasts – at least 2

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
722-727				.020	.27
727-732				.040	.37
732-737				.053	.27
737-741			Final	.035	<.10
741-744			.0695	.026	.22
744-749			.0985	.092	.28
749-754.5			.0263	.069	.31
754.5-759.5			.1325	.141	.33
759.5-763.5			.1420	.107	.40
763.5-767			.1195	.096	.31
767-772			.0885	.032	<
772-777			.2703	.151	.29
777-782				.014	.23
782-787				.002	.15
787-792				.002	<

HOLE # RL-159 LOGGED BY CMW DATE 12-4-90 PAGE 8 OF 8

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.
800	99	None	W-M VNLTS	Qtz+ py + calc		WK bleach & WK arg?
	99		WK to W-M VNLTS	Kaol + Mc + minor py + Qtz		
810	100					
820	100					
830	100					
840	100					
850						
852 T.D.						

DESCRIPTION

767-777 cont

stages of bx'n. Overall blue-green & med grey color. Matrix is lt grey silica

777-777.5 Clay gouge / breccia zone; 20% clasts of fgt floating in lt grey-white clay gouge

777.5-852 T.D. Dozer / Sage green tuff, WK to Mod veined & locally bx'd (fairly broken up & veined for Dozer)

777.5-783.5 Strongly fractured light green fgt w/ med green ? chlor? on thin fracts. W-M calc + leasor white Kaol vnlts & fracture fill. (1/16"-1/4" wide, 4-8/ft)

783.5-787: Crackle bx'd to rotated clast bxa (Clasts comprise 85-90%) Matrix is dk grey - qtz + dk sulfide? & some qtz+py ± Kaol

787-788.5: W-M veined, dk grey qtz+? & white Kaol

788.5-790: Matrix supported bxa; lt green clasts (1/8"-3/4") comprise 40-50%. Matrix is dk grey, hardly scratched by metal → qtz + dk sulfide?

790-799: Mod cracked up w/ med-green on thin fracts, W-M qtz+py & calc vnlts (2-5/ft, 1/16"->1/3")

799-852: lt green fgt w/ WK to W-M veinlets, mostly White Kaol + Mc, minor qtz+py. (2-5/ft, 1/32"-1/4" wide). Overall prob WK arg.

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
792-797				.001	<.10
797-802				.001	<
802-807				.001	<
807-812				.004	<
812-817				.001	<
817-822				.002	<
822-827				.003	<
827-832				.002	<
832-837				.002	<
837-842				.001	<
842-847				.003	<
847-852				.002	<

HOLE # RL-159 LOGGED BY (MW) DATE 12-3-90 PAGE 5 OF

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	ALTER.
	99	None	Bx'd Zone	Qtz + Mc + Kaol		Mod bleach & wk arg
590	99		W-M vnlts	Qtz + py/Mc + Kaol & some Dr Q + Mc		
600	100		Mod vnlts; W-M vnlts			
610	99		Mod vnlts; W-M vnlts			Mod Bleach
620	94					
630	95		local 4"-6" Bx'd zones & W-M vnlts			
640	93		W-M vnlts	py + Q, dk green + py & green		
650						

DESCRIPTION

344.5 – 755.5 cont Alt'd LBT / RBOR

570 – 581.5 : med flesh color w/ some green mottles fgt, mod fract'd to locally crackle bx'd. Mod veined : Qtz + py/Mc + Kaol & Dk green + py, 6-10 / ft, 1/8" – 1/2"

581.5 – 587 : Vein bx'd to locally rotated clast bx'd med flesh colored fgt – Prob hydrothermal bx'n? Vein / matrix is lt grey to green-grey qtz w/ Mc & Kaol. Some Drusy qtz + Mc vugs.

[Clasts comprise > 80% of material, 1/4" to 2" pieces]

587 – 631 Lithic lapill tuff; lt green & flesh angular lithics, 1/4" – 1" avg size, floating in med flesh colored tuff matrix. (Clasts comprise 10-25%.) Overall mod bleached & locally wk arg (can't scratch w/ fingernail & only locally can w/ plastic ruler, overall mod hard)

W-M to Mod veined : Qtz + py/Mc + white Kaol (white Kaol replacing qtz?) ~ 2-8 vnlts/ft, 1/8" – 1/3" wide. Some drusy qtz + Mc vugs. (Strongest veining at 595-597, 612-615)

631-644.5; lithic lapilli tuff as above, but a little more busted-up & veined ... Brecciated zones at: 632 – 632.5, 633 – 633.5, 634 – 634.5, 636.5 – 637, 637.5 – 638.5, 641 – 642, 644 – 644.5 ... matrix qtz + Mc ± Kaol. Outside bx'd zones see W-M vnlts (vein bx'd to rotated clast)

644.5 – 691.5: lithic lapilli tuff / tuff breccia. Pale to lt green & lt flesh angular lithic clast 1/8" – > 5" in size, unsorted, floating in

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
582-587				1.264	1.68
587-592				.225	4.44
592-597				.270	1.15
597-602				.125	.35
602-607				.300	.91
607-612				.184	.31
612-617				.917	1.17
617-622				.310	.40
622-627				.049	<.10
627-632				.035	<
632-637				.070	.14
637-642				.595	.86
642-647				.310	.35
647-				[illegible]	[illegible]

DEPTH (ft)	RECOVERY	Struct: Bd. Fol.	Struct: Faults	MINERAL-IZATION	GRAPHIC LOG	ALTER.
660	98	None	W-M vnlts	py+ Qtz ± Kaol, dk green ± py, green Kaol, ± minor calc + py		Mod bleach
	101					
670	99		W-M vnlts & local vein bx'd			Mod Bleach & W-M Arg
680	101		W-M vnlts			
690	98		crackle bx'd to wk bxa	Q+py & lt grey Kaol		
			Mod to M-S vnlts	lt grey Kaol, white Kaol, py+ QTZ		
700	97		W-M vnlts	lt green Kaol, py+Q, DrQ+ Mc		W-M to Mod bleach
710	107		W-M to Mod vnlts			

DESCRIPTION

344.5 - 755.5 cont RBUR/LBT cont.

644.5 - 691.5 cont: Lithic lap tuff / tuff bxa cont:
med Flesh (brick color) matrix. Clast comprise ~ 20% to 45%, 644 - 667; fairly hard, 667 ↓ a little more argillized - can barely scratch w/ fingernail
Overall w-m vnlts 2-6/ ft, 1/16" - 1/8" wide; py + qtz ± minor Kaol, and dk green ± py and green waxy Kaol.

667 - 672: a either fine grained intrusive or very large 'clast' - med flesh color ish crackle bx'd fgt

672 - 674: a lft / tuff bxa but is more broken up / veined & contains vugs w/ drusy qtz + Mc.

674 - 682: a mix of flesh fgt & lft; w/ a few 1" to 4" vein bx'd zones - qtz + Mc / py at 677.5 - 677.75, 680.25 - 680.5, & 681.5 - 681.75.

690 - 691 Crackle / Vein bx'd - 1/8" - 1/4" qtz ± py vnlts on crackle fractures.

691.5 - 695.5; Str. crackle bx'd to barely matrix supp. bx'd zone in lt-med pink-flesh fgt, generally a fine spiderweb network of qtz + py & dull lt grey-green Kaol. Mod arg.

695.5 - 703; Med grey-pink / flesh color fgt w/ Mod to Mod-Str veinlets of lt grey-green Kaol, white Kaol, & minor py + qtz, drusy qtz + Mc. ~ 1 vnlt / inch, 1/8" - 1/2" wide.

703 - 724: Med greenish grey to pinkish grey f.gt. Generally w/ W-M vnlts, locally w/ little stronger veining (Mod), mostly lt green & white 'duckbutter' Kaol, w/ less or py + qtz & drusy qtz + Mc.

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
652-657				.967	1.14
657-662				.595	1.20
662-667				.240	1.37
667-672				2.261	14.44
672-677				.505	1.11
677-682				1.317	1.71
682-687				.123	.18
687-692				.465	.54
692-697				.058	.17
697-702				.011	<.10
702-706				.018	.30
706-711				.063	.17
711-716.5				.025	.41
716.5-722				.027	.20

ASSAYS

RL-159 0-300' RC KNT

Sample Rec	Sample % Rec		Sample	Lithology
		P (300-342)		– 344.2
300–302	3.5/2		342–347	H – sage grn lithic lapilli tuff w/ wispy "bedding"
302–312	96%		347–352	
312–322	100		352–357	
322–332	100		357–362	
332–342	100%		362–367	344.2 – ±582
342–352	96		367–372	H grn, FGT
352–362	99%		372–377	with minor lithic tuff
362–372	99%		377–382	interbeds
372–382	96%	C	382–387	
382–392	100%	U	387–392	* ±502 – 582 Fmamble
392–402	100	T	392–397 ✓	↑ blc, to flesh, wht
402–412	100		397–402	increase in qtz sulfide
412–422	100		402–407	unig to "chicken pox"
422–432	100		407–412	texture
432–442	100		412–417	
442–452	100		417–422	
452–462	94%		422–427	± 582 – 787
462–472	95%		427–432	peach, lithic tuff; mod blc
472–482	100%		432–437	local slg fracturing + qtz sulfide
482–492	97%		437–442	unig
492–502	100		442–447	
502–512	98%		447–452	+ 582–652 fmamble
512–522	93%		452–457	
522–532	97		457–462	~~882~~ 852'
532–542	91%		462–467	787 – ~~885~~ TD
542–552	98%		467–472	FGT silicified, blc,
552–562	90%		472–477	fn network of Si fractures
562–572	100%+	S	477–482	
572–582	94	P	482–487	
582–592	99	L	487–492	
592–602	99	I	492–497	
602–612	100	T	497–502	
612–622	99%		502–507	
622–632	94		507–512	
632–642	95%	(	512–517	
642–652	93		517–522	
652–662	98	U	522–527	
662–672 (8.8)	101	T	527–532	

532-537
537-542
542-547
547-552
552-557
557-562
562-567
567-572
572-577
577-582
582-587
587-592
592-597
597-602
602-607
607-612
612-617
617-622
622-627
627-632
632-637
637-642
642-647
647-652
652-657
657-662
662-667
667-672 ✓

CUT

SPLIT

RL-159

Sample Rec	% Rec
672-682	99
682-692	101
692-702	98
702-712	97
712-722	107
722-732	102
732-742	102
742-752	103
752-762	100
762-772	101
772-782	101
782-792	100
792-802	99
802-812	99
812-822	100
822-832	100
832-842	100
842-852 T.D.	100

	Sample	Lithology
SPLIT	672-677	? (<672) - 777
	677-682	dk peach to dk
	682-687	gray pink let
	687-692	to tuff bxa
	692-697	gen wk silic?
	697-702	& wk-mod vein
CUT	702-706	w/ qtz + py &
	706-711	White & green Kaol + py, loc
	711-716.5	Drusy qtz + Mc
	716.5-722	
	722-727	704-718: abt
	727-732	vugs-Dr Qtz + Mc
	732-737	
	737-741	741-743 abt Dr Qtz
	741-744	+ Mc vugs
	~~744~~	
	744-749	
	749-754.5	
CUT	754.5-759.5	777-778
	759.5-763.5	fault -
	763.5-767.5	rounded clast
		in clayey
	767.5-772	matrix
	772-777	778-TD
	777-782	fgt
	782-787	(sorry it's
	787-792	dark out
SPLIT	792-797	837-842
	797-802	842-847
	802-807	847-852 TD
	807-812	
	812-817	
	817-822	
	822-827	
	827-832	
	832-837	

NOV 29 1990

NEVADA GSI, INC.

GEOCHEMICAL ANALYSIS REPORT

Client: Mr. Nate Brewer

LAC Minerals USA, Inc.
1395 Greg St. #107
Sparks, NV 89431 tel:702/356-8058

Job #: LOAS8797
Samples: 385
Project: URBD
Product: FA2/AA
P.O. #:

This report has been reviewed and approved by:

Jerry Gaige, Production Manager

11-26-90
Date

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NEVADA GSI, INC.

GEOCHEMICAL ANALYSIS REPORT

Job No.: LOAS8797

No.	Sample Id			Au opt	Ag opt
1	RL-159	0	5	0.0010	-0.1000
2	R-53			0.0340	0.2500
3	RL-159	5	10	0.0030	-0.1000
4	RL-159	10	15	-0.0010	-0.1000
5	RL-159	15	20	0.0010	-0.1000
6	RL-159	20	25	0.0020	-0.1000
7	RL-159	25	30	0.0020	-0.1000
8	RL-159	30	35	0.0010	-0.1000
9	RL-159	35	40	0.0010	-0.1000
10	RL-159	40	45	0.0020	-0.1000
11	RL-159	45	50	0.0010	-0.1000
12	RL-159	50	55	0.0010	-0.1000
13	RL-159	55	60	0.0010	-0.1000
14	RL-159	60	65	0.0010	-0.1000
15	RL-159	65	70	-0.0010	-0.1000
16	RL-159	70	75	0.0010	-0.1000
17	RL-159	75	80	0.0010	-0.1000
18	RL-159	80	85	0.0030	-0.1000
19	RL-159	85	90	0.0030	-0.1000
20	RL-159	90	95	0.0040	-0.1000
21	RL-159	95	100	0.0020	-0.1000
22	R-54			0.0410	-0.1000
23	RL-159	100	105	0.0010	-0.1000
24	RL-159	105	110	-0.0010	-0.1000
25	RL-159	110	115	0.0010	-0.1000
26	RL-159	115	120	-0.0010	-0.1000
27	RL-159	120	125	-0.0010	-0.1000
28	RL-159	125	130	0.0010	-0.1000
29	RL-159	130	135	0.0010	-0.1000
30	RL-159	135	140	-0.0010	-0.1000
31	RL-159	140	145	-0.0010	-0.1000
32	RL-159	145	150	0.0010	0.1300
33	RL-159	150	155	0.0010	-0.1000
34	RL-159	155	160	0.0010	-0.1000
35	RL-159	160	165	0.0010	-0.1000
36	RL-159	165	170	-0.0010	-0.1000
37	RL-159	170	175	0.0330	-0.1000
38	RL-159	175	180	-0.0010	0.2000
39	RL-159	180	185	0.0020	-0.1000
40	RL-159	185	190	0.0040	-0.1000
41	RL-159	190	195	0.0040	-0.1000
42	R-55			0.0340	-0.1000
43	RL-159	195	200	0.0010	-0.1000
44	RL-159	200	205	0.0020	-0.1000
45	RL-159	205	210	0.0020	-0.1000
46	RL-159	210	215	0.0010	-0.1000
47	RL-159	215	220	0.0010	-0.1000
48	RL-159	220	225	0.0040	-0.1000
49	RL-159	225	230	0.0180	-0.1000
50	RL-159	230	235	0.0120	0.1200

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NEVADA GSI, INC.

GEOCHEMICAL ANALYSIS REPORT

Job No.: LOAS8797

No.	Sample Id			Au opt	Ag opt
51	RL-159	235	240	0.0220	0.1100
52	RL-159	240	245	0.0060	-0.1000
53	RL-159	245	250	0.0040	-0.1000
54	RL-159	250	255	0.0030	-0.1000
55	RL-159	255	260	0.0020	-0.1000
56	RL-159	260	265	0.0290	0.1800
57	RL-159	265	270	0.0510	0.1400
58	RL-159	270	275	-0.0010	0.1400
59	RL-159	275	280	-0.0010	-0.1000
60	RL-159	280	285	-0.0010	-0.1000
61	RL-159	285	290	-0.0010	-0.1000
62	R-56			0.0750	-0.1000
63	RL-159	290	295	0.0050	-0.1000
64	RL-159	295	300	-0.0010	-0.1000
65	RL-165	0	5	-0.0010	-0.1000
66	RL-165	5	10	0.0010	-0.1000
67	RL-165	10	15	0.0010	-0.1000
68	RL-165	15	20	0.0010	-0.1000
69	RL-165	20	25	0.0010	-0.1000
70	RL-165	25	30	0.0010	-0.1000
71	RL-165	30	35	0.0010	0.1000
72	RL-165	35	40	-0.0010	-0.1000
73	RL-165	40	45	-0.0010	-0.1000
74	RL-165	45	50	-0.0010	-0.1000
75	RL-165	50	55	-0.0010	-0.1000
76	RL-165	55	60	-0.0010	-0.1000
77	RL-165	60	65	0.0010	-0.1000
78	RL-165	65	70	0.0010	-0.1000
79	RL-165	70	75	0.0020	-0.1000
80	RL-165	75	80	0.0010	-0.1000
81	RL-165	80	85	0.0010	-0.1000
82	R-57			0.0310	-0.1000
83	RL-165	85	90	0.0010	-0.1000
84	RL-165	90	95	0.0010	-0.1000
85	RL-165	95	100	0.0010	-0.1000
86	RL-165	100	105	0.0010	-0.1000
87	RL-165	105	110	0.0010	-0.1000
88	RL-165	110	115	0.0020	-0.1000
89	RL-165	115	120	0.0010	-0.1000
90	RL-165	120	125	0.0010	-0.1000
91	RL-165	125	130	0.0020	-0.1000
92	RL-165	130	135	0.0010	-0.1000
93	RL-165	135	140	0.0020	-0.1000
94	RL-165	140	145	0.0010	-0.1000
95	RL-165	145	150	0.0010	-0.1000
96	RL-165	150	155	0.0030	-0.1000
97	RL-165	155	160	0.0020	-0.1000
98	RL-165	160	165	0.0010	-0.1000
99	RL-165	165	170	0.0010	-0.1000
100	RL-165	170	175	0.0010	-0.1000

NEVADA GSI, INC.

GEOCHEMICAL ANALYSIS REPORT

Job No.: LOAS8834

No.	Sample Id			Au opt	Ag opt
1	RL-159	337	342	0.006	-0.100
2	R-97			0.033	0.120
3	RL-159	342	347	0.001	-0.100
4	RL-159	347	352	0.003	-0.100
5	RL-159	352	357	0.004	-0.100
6	RL-159	357	362	0.003	-0.100
7	RL-159	362	367	0.038	-0.100
8	RL-159	367	372	0.008	-0.100
9	RL-159	372	377	0.006	-0.100
10	RL-159	377	382	0.006	-0.100
11	RL-159	382	387	0.004	-0.100
12	RL-159	387	392	0.012	-0.100
13	RL-159	392	397	0.003	-0.100
14	RL-159	397	402	0.003	-0.100
15	RL-159	402	407	0.003	-0.100
16	RL-159	407	412	0.002	-0.100
17	RL-159	412	417	0.013	-0.100
18	RL-159	417	422	0.004	-0.100
19	RL-159	422	427	0.004	-0.100
20	RL-159	427	432	0.028	-0.100
21	RL-159	432	442	0.005	-0.100
22	R-100			0.053	-0.100
23	RL-159	442	447	0.002	-0.100
24	RL-159	447	452	0.004	-0.100
25	RL-159	452	457	0.013	-0.100
26	RL-159	457	462	0.021	0.150
27	RL-159	462	467	0.017	-0.100
28	RL-159	467	472	0.001	-0.100
29	RL-159	472	477	0.004	-0.100
30	RL-159	477	482	0.006	-0.100
31	RL-159	482	487	0.002	-0.100
32	RL-159	487	492	0.003	-0.100
33	RL-159	492	497	0.003	0.100
34	RL-159	497	502	0.004	-0.100
35	RL-159	502	507	0.022	0.200
36	RL-159	507	512	0.014	0.250
37	RL-159	512	517	0.048	2.710
38	RL-159	517	522	0.012	0.200
39	RL-159	522	527	0.011	0.180
40	RL-159	527	532	0.300	4.990
41	RL-159	532	537	0.225	2.310
42	S-1			0.037	-0.100
43	RL-159	537	542	1.328	1.560
44	RL-159	542	547	0.125	0.410
45	RL-159	547	552	0.068	0.910
46	RL-159	552	557	0.008	0.170
47	RL-159	557	562	0.058	0.320
48	RL-159	562	567	1.129	1.440
49	RL-159	567	572	1.169	1.920
50	RL-159	572	577	0.495	0.680

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NEVADA GSI, INC.

GEOCHEMICAL ANALYSIS REPORT

Job No.: LOAS8834

No.	Sample Id			Au opt	Ag opt
51	RL-159	577	582	0.764	1.000
52	RL-159	582	587	1.264	1.680
53	RL-159	587	592	0.225	4.440
54	RL-159	592	597	0.270	1.150
55	RL-159	597	602	0.125	0.350
56	RL-159	602	607	0.300	0.910
57	RL-159	607	612	0.184	0.310
58	RL-159	612	617	0.917	1.170
59	RL-159	617	622	0.310	0.400
60	RL-159	622	627	0.049	-0.100
61	RL-159	627	632	0.035	-0.100
62	S-2			-0.001	-0.100
63	RL-159	632	637	0.070	0.140
64	RL-159	637	642	0.595	0.860
65	RL-159	642	647	0.310	0.350
66	RL-159	647	652	0.127	-0.100
67	RL-159	652	657	0.967	1.140
68	RL-159	657	662	0.595	1.200
69	RL-159	662	667	0.240	1.370
70	RL-159	667	672	2.261	14.440
71	RL-159	672	677	0.505	1.110
72	RL-159	677	682	1.317	1.710
73	RL-159	682	687	0.123	0.180
74	RL-159	687	692	0.405	0.540
75	RL-159	692	697	0.058	0.170
76	RL-159	697	702	0.011	-0.100
77	RL-159	702	706	0.018	0.300
78	RL-159	706	711	0.063	0.170
79	RL-159	711	716	0.025	0.410
80	RL-159	716.5	722	0.027	0.220
81	RL-159	722	727	0.020	0.270
82	S-5			0.028	0.190
83	RL-159	727	732	0.040	0.370
84	RL-159	732	737	0.053	0.270
85	RL-159	737	741	0.035	-0.100
86	RL-159	741	744	0.026	0.220
87	RL-159	744	749	0.092	0.280
88	RL-159	749	754	0.069	0.310
89	RL-159	754.5	759	0.141	0.330
90	RL-159	759.5	763	0.107	0.400
91	RL-159	763.5	767	0.096	0.310
92	RL-159	767.5	772	0.032	-0.100
93	RL-159	772	777	0.151	0.290
94	RL-159	777	782	0.014	0.230
95	RL-159	782	787	0.002	0.150
96	RL-159	787	792	0.002	-0.100
97	RL-159	792	797	0.001	-0.100
98	RL-159	797	802	0.001	-0.100
99	RL-159	802	807	0.001	-0.100
100	RL-159	807	812	0.004	-0.100

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No.	Sample Id			Au opt	Ag opt
101	RL-159	812	817	0.001	-0.100
102	S-6			0.054	-0.100
103	RL-159	817	822	0.002	-0.100
104	RL-159	822	827	0.003	-0.100
105	RL-159	827	832	0.002	-0.100
106	RL-159	832	837	0.002	-0.100
107	RL-159	837	842	0.001	-0.100
108	RL-159	842	847	0.003	-0.100
109	RL-159	847	852	0.002	-0.100
110	RL-158	300	302	0.001	-0.100
111	RL-158	302	307	0.001	-0.100
112	RL-158	307	312	0.001	-0.100
113	RL-158	312	317	0.002	-0.100
114	RL-158	317	322	0.001	-0.100
115	RL-158	322	327	0.002	-0.100
116	RL-158	327	332	0.002	-0.100
117	RL-158	332	337	0.002	-0.100
118	RL-158	337	342	0.002	0.180
119	RL-158	342	349	0.002	-0.100
120	RL-158	349	354	0.003	-0.100
121	RL-158	354	359	0.011	-0.100
122	S-8			-0.001	-0.100
123	RL-158	359	364	0.002	-0.100
124	RL-158	364	369	0.002	-0.100
125	RL-158	369.5	374	0.003	-0.100
126	RL-158	374.5	380	0.003	-0.100
127	RL-158	380	385	0.002	-0.100
128	RL-158	385	390	0.002	-0.100
129	RL-158	390.5	395	0.002	-0.100
130	RL-158	395.5	400	0.002	-0.100
131	RL-158	400.5	405	0.004	-0.100

NEVADA GSI, INC.

GEOCHEMICAL ANALYSIS REPORT

Job No.: LOAS8834

No.	Sample Id			Au opt	Ag opt
1	RL-159	337	342	0.006	-0.100
2	R-97			0.033	0.120
3	RL-159	342	347	0.001	-0.100
4	RL-159	347	352	0.003	-0.100
5	RL-159	352	357	0.004	-0.100
6	RL-159	357	362	0.003	-0.100
7	RL-159	362	367	0.038	-0.100
8	RL-159	367	372	0.008	-0.100
9	RL-159	372	377	0.006	-0.100
10	RL-159	377	382	0.006	-0.100
11	RL-159	382	387	0.004	-0.100
12	RL-159	387	392	0.012	-0.100
13	RL-159	392	397	0.003	-0.100
14	RL-159	397	402	0.003	-0.100
15	RL-159	402	407	0.003	-0.100
16	RL-159	407	412	0.002	-0.100
17	RL-159	412	417	0.013	-0.100
18	RL-159	417	422	0.004	-0.100
19	RL-159	422	427	0.004	-0.100
20	RL-159	427	432	0.028	-0.100
21	RL-159	432	442 437	0.005	-0.100
22	R-100			0.053	-0.100
23	RL-159	442	447	0.002	-0.100
24	RL-159	447	452	0.004	-0.100
25	RL-159	452	457	0.013	-0.100
26	RL-159	457	462	0.021	0.150
27	RL-159	462	467	0.017	-0.100
28	RL-159	467	472	0.001	-0.100
29	RL-159	472	477	0.004	-0.100
30	RL-159	477	482	0.006	-0.100
31	RL-159	482	487	0.002	-0.100
32	RL-159	487	492	0.003	-0.100
33	RL-159	492	497	0.003	0.100
34	RL-159	497	502	0.004	-0.100
35	RL-159	502	507	0.022	0.200
36	RL-159	507	512	0.014	0.250
37	RL-159	512	517	0.048	2.710
38	RL-159	517	522	0.012	0.200
39	RL-159	522	527	0.011	0.180
40	RL-159	527	532	0.300	4.990
41	RL-159	532	537	0.225	2.310
42	S-1			0.037	-0.100
43	RL-159	537	542	1.328	1.560
44	RL-159	542	547	0.125	0.410
45	RL-159	547	552	0.068	0.910
46	RL-159	552	557	0.008	0.170
47	RL-159	557	562	0.058	0.320
48	RL-159	562	567	1.129	1.440
49	RL-159	567	572	1.169	1.920
50	RL-159	572	577	0.495	0.680

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NEVADA GSI, INC.

GEOCHEMICAL ANALYSIS REPORT

Job No.: LOAS8834

No.	Sample Id			Au opt	Ag opt
51	RL-159	577	582	0.764	1.000
52	RL-159	582	587	1.264	1.680
53	RL-159	587	592	0.225	4.440
54	RL-159	592	597	0.270	1.150
55	RL-159	597	602	0.125	0.350
56	RL-159	602	607	0.300	0.910
57	RL-159	607	612	0.184	0.310
58	RL-159	612	617	0.917	1.170
59	RL-159	617	622	0.310	0.400
60	RL-159	622	627	0.049	-0.100
61	RL-159	627	632	0.035	-0.100
62	S-2			-0.001	-0.100
63	RL-159	632	637	0.070	0.140
64	RL-159	637	642	0.595	0.860
65	RL-159	642	647	0.310	0.350
66	RL-159	647	652	0.127	-0.100
67	RL-159	652	657	0.967	1.140
68	RL-159	657	662	0.595	1.200
69	RL-159	662	667	0.240	1.370
70	RL-159	667	672	2.261	14.440
71	RL-159	672	677	0.505	1.110
72	RL-159	677	682	1.317	1.710
73	RL-159	682	687	0.123	0.180
74	RL-159	687	692	0.405	0.540
75	RL-159	692	697	0.058	0.170
76	RL-159	697	702	0.011	-0.100
77	RL-159	702	706	0.018	0.300
78	RL-159	706	711	0.063	0.170
79	RL-159	711	716	0.025	0.410
80	RL-159	716.5	722	0.027	0.220
81	RL-159	722	727	0.020	0.270
82	S-5			0.028	0.190
83	RL-159	727	732	0.040	0.370
84	RL-159	732	737	0.053	0.270
85	RL-159	737	741	0.035	-0.100
86	RL-159	741	744	0.026	0.220
87	RL-159	744	749	0.092	0.280
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90	RL-159	759.5	763	0.107	0.400
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98	RL-159	797	802	0.001	-0.100
99	RL-159	802	807	0.001	-0.100
100	RL-159	807	812	0.004	-0.100

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128	RL-158	385	390	0.002	-0.100
129	RL-158	390.5	395	0.002	-0.100
130	RL-158	395.5	400	0.002	-0.100
131	RL-158	400.5	405	0.004	-0.100

cmw 12/90

RL-159 Summary

300 - 344.5 : Green wispy Bud lit

344.5 - 755.5 LBT / RBUR

344.5 - 587 : fgt

344.5 - 360 wk bleach, wk vnlts, blue-green

360 - 417 mottled / amygdular, M-St arg, wk vnlts

417 - 462 mod bleach (blue-green), wk vnlts, wk arg

462 - 498 wk bleach (lt green), wk vnlts

498 - 528 mottled (lt green), mod bleach / arg, w-m vnlts

528 - ~~587~~ spotted (lt green) / amygdular fgt M-S bleach / arg, w-m to m vnlts

(562 - 570 & 581 - 587 above rock, flesh color vein bx'd)

587 - 691.5 lit flesh color gen mod bleach, w-m vnlts,

691.5 - 703 fgt mod bleach, w-m arg, mod vnlts; bottom crackle bx'd, flesh color

703 - 755.5 pink or green-grey fgt, w-m to m bleach, wk to w-m vnlts,

755.5 - 767.5 Bx'd LBT w arg spotted clasts, brick color, in milky qtz + kaol matrix

767.5 - 777 Green 'epiclastic' grades ↓ to silic bxa / faolt

777 - 777.5 clay gouge

777.5 - 852 Dozer fgt, wk to mod veined, fairly broken up & veined for Dozer.