60001326

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-93
AUTHOR	N. Brewer; K. Tullar; J Gaige; R. Grondin
DATE OF DOC(S)	1990; 1997
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 1082'; handwritten notes; Also referred to as RL-93C 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 RL-93

ROSEBUD

60001326 4010

60001326

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

DRILL LOG SUMMARY SHEET

PROJECT ROSEBUD

HOLE NUMBER RL-93 TOTAL DEPTH 1082' LOGGED BY R.C. DAM

Date started JUNE 16, 1990

Date completed June 19, 1990

Initial bearing - 555E

Initial inclination -58°

Elevation 5241.2

Collar coordinates:

N 2204655

E 481777.1

Contractor: COATES

Drill Type: UDR

Hole Size: RC → HQ

Drilling Conditions: 462' = Rc

Footage: Wet / Dry

Comments:

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Northing)	Y (Easting)	Z (Elevation)
0	50		-58°	555E			
50	200	100	-60	S59E			
200	400	300	-61	S58E			
400	601	500	-63.5	S54E			
601	802	702	-63	S55E			
802	992	902	-63	S52E			
992	1082	1082	-63.5	S56E			

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

CHOCOLATE TUFF
BUD BRECCIA
BUD TUFF
BUD EPICLASTIC
BUD TUFF BRECCIA
DT DOZER WELDED TUFF

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

DRILL HOLE RL-93

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LOGGED BY DAM

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK Au
		~ XX							ORANGE WHITE				<1%	0-10 SILICIFIED BLEACHED FINE TUFF	.001	<	
05		~ XX													.002	<	
10		~							LT WHITE GREEN				<1%	10-95 FINE GRAIN BLEACHED WELDED TUFF	.001	<	
15															.001	<	
20															.001	<	
25															.004	.10	
30															.001	<	
35															.001	<	
40															.004	<	
45															.028	<	.034
50															.003	<	
55															.003	<	
60															.005	<	
65															.005	<	
70															.001	<	
75									RUST						.001	<	
80									LT GREEN						<	<	
85															<	<	
90															<	<	
95														LBI			
00									DARK GREEN				<1%	95-165 GREEN TO GREY GREEN FINE GRAIN WELDED TUFF & GREEN SPECKLES	.002	<	

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DRILL HOLE RC-93

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LOGGED BY DAM

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK Au
									GREEN				<1%		<	<	
105									GREY GREEN						<	<	
110															<	<	
115									GREEN						<	<	
120															.003	<	
125															.001	<	
130															.024	<	
135															.016	.15	
140															<	<	
145															.002	<	
150															.016	<	
155															.064	.16	
160		~ Vcr							LT GREEN GREY				±1%	160-245 LT GREEN, SLIGHTLY BLOCKHOOD WELDED TUFF	.024	.25	
165		~ Vcr							LT GREEN				±1%		.008	<	
170															<	<	
175															.002	<	
180															.020	.14	
185		Vcr													.005	.70	
190															.003	<	
195															.035	.30	.072/.033
200																	

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	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
		~							LT GREEN				<1%	BLEACHING DECREASING W/ DEPTH	.003	<	
205									GREEN						.002	<	
210									↓						.001	.10	
215									DK GREEN GREEN						.002	.15	
220									GREEN GREY						.001	<	
225															<	<	
230															<	<	
235															<	<	
240		~													.005	.15	
245									GREEN GREEN				<1%	245-440 PINK GREEN LEACHED TUFF LARGELY UNALTERED	.001	.25	
250									PURPLE GREY						<	.10	
255									GREEN						.001	<	
260															<	<	
265															<	.10	
270															.001	<	
275															.001	<	
280															<	<	
285															<	<	
290															<	<	
295															.001	<	
300																	

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LOGGED BY DAM

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK
									GREY GREEN				<1%		.002	<	
05															.001	<	
10															<	<	
15															.001	<	
20															<	<	
25															<	<	
30															<	<	
35									DK PURPLE GREY						<	<	
40															.001	<	
45															<	<	
50															<	<	
55															<	<	
60															<	.12	
65															<	<	
70															<	<	
75															<	.10	
80															<	<	
85															<	<	
90															<	<	
95															.001	.25	
00																	

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	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK Au
									PK RIPPLE GREY				< 1%		<	.15	
05															.001	.25	
10															.001	.15	
15															.002	.17	
20															.001	.15	
25									GREEN GREEN						.015	.21	
30															<	.10	
35									GREY						.001	<	
40									LT PINK				1-2%	440-462 MOTTLED PINK GREEN GREENISH TUFF	.001	<	
45									GREEN						.002	<	
50															.001	<	
55															.004	<	
60														T.D. = 462'	.087	.42	.116 / .101
65																	
70																	
75																	
80																	
85																	
90																	
95																	
00																	

KLK 11-12-90

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG
460					
	91			~2% VN + buck shot py	
470	95	20/ grn pyr VN			
480	100	38/ py VN bond mg			
490	100 +	25/			
500	104	40/ grn fract VN			
				2-3% VN + buck shot py	
510	98	28/ py VN			
		clay filled 15/ VN		2% VN + py + stibn	
520					

DESCRIPTION

CORE BEGAN @ 462'

LBT CMW 1/92

462 – 655 FINE GRAINED VOLC. FLOW

buff to lt sage green coloration w/ local mod/strong bleached zones w/ assoc. ↑ perv. veining overall rock is weakly to mod bleached very few unaltered - red brown - intervals pervasive weak to mod veining w/ early fine pyrite veins w/ v. fine blue green selvage w/ later calcite veining; locally clay altered v. few vuggy druzy qtz - pyrite ± clay vns. local microvein breccia intervals; weak local crackle brecciation. mod perv. fracture veining w/ bluegreen mineral lining (glauconite?)

485-490.2 strong vuggy druzy qtz-py + intermittent white clay ± local vein brecciation

462-469 intermittently brecciated; silicified w/ local vuggy druzy qtz-py replaced marcasite vns ± white clay

505.6 – 515 ↑ perv. mod str to str bleaching w/ ↑ pyrite veining; local golden yellow to white clay veins mod perv. clay alteration

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
462-466.3				.004	.23
466.3-470				.002	.17
470-475				<.001	.24
475-480				.004	.31
480-485				.003	.44
485-490.2				.004	<.10
490.2-495				<	.23
495-500				<	<
500-505.6				<	.20
505.6-510				.004	<
510-515				.006	.29
515-520				.002	.22

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG
	101			2% VN py + sfib nite	
		clay VN ±5°		~1% VN + buck SHOT py	
530	98				
540	102	55 / CaCO3 VN		NIL	
550	102	20 / clay + calcite VN		2-3% VN + buck SHOT py + poss marcasite	(py)
560	100	65 / clay + py + calcite VN + grn			
	103	82 / alt band	17 / grn + clay + VN		
570	100 +			≤ 1% VN py	
580	96	grn ±30° + calc VN			
590					

DESCRIPTION

520 - 655 FGT (continued)
description @ above

520-525 mod fracture veins w/ white clay + pyrite + stibnite

542-548 Relatively unaltered gray fine grained tuff w/ hemitite filled fracture veins ; few fine calcite veinlets followed by ~ 1' of micro Δ VNS w/ clay + calcite matrix

560-563 ↑ veining → white clay alt calcite VNS + poss py replaced marcasite ; local vug-druz qtz VNS

563-568 weak ↑ perv. bleaching w/ assoc. ↑ veining, w/ local ripped up zones of Δ w/ white clay ± serite + pyrite matrix ; locally filling vuggy druzy qtz VNS

575-590 ↓ pervasive bleaching, ↓ veining weakly auto brecciated w/ depth ; decrease in clay alteration of calcite veins

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
520-525				.004	.30
525-530				.009	.26
530-535				<	.18
535-540				<	.18
540-542				<	.15
542-545.8				<	.21
545.8-548				<	.24
548-550				<	.33
550-555				<	.18
555-560				.001	.29
560-563				.023	.27
563-564.5				.007	.25
564.5-570				.004	.24
570-575				<	.22
575-576.7				<	<
576.7-580				<	<
580-585				<	<
585-590				<	<

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	DESCRIPTION	ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
						590 - 655 FGT (CONTINUED)						
	99	80 CaCO3 VN		<1% VN + buck SHOT py		590 - 597 intermittently finely brecciated (dry) (tectonic) w/ local xtaline calcite; ~5% fine fraglets of black, concoidal fracturing - poss. obsidian, weak calcite veining w/ local red brown oxide selvage	590-595				<	<
600							595-600				<	<
	94						600-605				<	<
						601 - 612 weakly mod veining - poss white clay replaced calcite; local stearns of buckshot pyrite 1" wide x 6½" long	605-611				<	<
610	103	50 clay + py VN										
				<1% VN py		612 - 651.5 Decrease in perv. bleaching - only very weak hint - relatively unaltered lt gray	611-615				<	<
						618 - 635 w/ vesicular texture w/ deep forest green mineral fill ± SiO_2; disseminated calcite xtals, only trace veins w/ chlorite?; tr py	615-620				<	.30
620	102						620-625				<	<
						635 - 655 weak to mod pervasive alteration banding	625-630				<	.13
630	98	60 CaCO3 VN	32 f10				630-635				<	<
				NIL		642 - 655 weakly mod ↑ bl w/ depth w/ assoc. weak ↑ veining						
640	100	34 f10		<1% VN py + buck SHOT py			635-640				<	.10
						655 - 683.5 SPECKLED VESCICULAR/AMYGDULAR TUFF mod - strong pervasive clay alt; bleaching, matrix is flesh fine grained tuffaceous, vesicles are rimmed w/ lt green alt. appears most vesicles are altered; filled w/ white clay or pyrite or red brown SiO_2 matrix in micro breccia also with bleached rim very weak fracture veining CONT. →	640-645				<	.15
650	97	45 qvn banding					645-650				<	<
		35 clay fract		~2% diss + VN py			650-655				<	<
660							655-660				.004	.28

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG
670	100	25/ 5mm Pyrite VNS		1-2% diss + buck SHOT PY	
680	100				
	100	20/ Fract VN		NIL	
690	94	40/ CaCO3 VN			
				1-2% VEIN PY	
700	94	52/ PY fract VN			
	99				
710	100	41/ clay VN		~2% vein + buck SHOT PY	
720	100	42/ CaCO3 + PY VN	35/ Selvage of hard	≤ 1% PY VNS	
730					

DESCRIPTION

660 - 683.5 SPECKLED VESICULAR TUFF (CONT.)

local vesicles lined up in flow direction @ ~43°/ to core axis matrix becomes flush; matrix w/ depth

683.5 - 890 FINED GRAINED Tuff - Volc. flow predominant weak to moderate bleaching with same characteristics as interval 462 - 655 w/ local unaltered red brown intervals. Predom. lt sage green alt.

687.6 - 695.3 red brown unaltered version of the FGT

699 - 705 Increased fracture veining with white clay + deep green (chlorite?) mineral + local pyrite; local vuggy drusy quartz; fine py stkwk; ↑ peru. bleaching, local calcite veins

712.5 - 722 ↑ peru bleaching; fracture veining w/ white clay + py only very weak local deep green mineral.

722 - 745 Decrease in peru. bleaching; assoc. ↓ fracture veining w/ white clays present ≥ weak local calcite veining

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
660-665				.002	<
665-670				.001	.19
670-675				<	<
675-680				<	.18
680-684				.003	.18
684-687.6				<	<
687.6-690				<	<
690-695				<	<
695-700				<	.17
700-705				.003	<
705-710				<	<
710-715				<	<
715-720				.003	.15
720-725				.001	<
725-730				<	<

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG	DESCRIPTION
	97	20/ grn tnt VN		<1% diss tVN py		730 - 890 FINE GRAINED TUFF (continued) @ above
						730-755 Decrease in pervasive bleaching & associated fracture veining - only weak fine stockwork veinlets of pyrite, calcite + green mineral.
740	78	45 CaCO3 VN 3				
750	100	31 fract grn VN				755-772 Increased perv. bleaching to mod increase fracture veining w/ calcite + bluegreen chlorite? + local pyrite
				1-2% VN py		770.7-772 CRACKLE brecciated
760	98	±5° grn fract VN				
770	103	38 fract VN		NIL		772-776 ↓ in total alteration - is red brown in coloration & locally brecciated - AUTO to CRACKLE
780	102	50 grn fract VN		<1% diss tVN py		776-793.1 weak bleaching w/ weak primary veinlets - chlorite, local FeOx & weak loc. calcite
790	98	55 py VN		2% + diss + buck shot ↓ VN py		793.1-805.5 weakly moderate increase in fracture veining w/ assoc. pyrite, local calcite + bluegreen mineral, weak to trace white clay
800						

ASSAYS: Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
730-735				<	<
735-740				<	<
740-745				<	<
745-750				<	<
750-755				<	<
755-760				<	.10
760-765				<	<
765-770				<	<
770-775				<	.11
775-780				<	.12
780-785				<	.10
785-789				<	<
789-793.1				<	<
793.1-796				.002	<
796-800				<	<

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG
810	102	35 py VN		<1% diss +VN py local buck shot	
820	102	48 Sm fract VN			
830	92	15 sulfd VN		~2% diss +VN py +blk Ag min + tetrahedrite ?	
840	102	83 CaCO3 +py VN			
850	103	85° CaCO3 VN			
860	107	85 CaCO3 VN		1-2% diss +VN py tr Ag min.	
870	90 99	±5° (AS)			

DESCRIPTION

800 - 890 FGT CONTINUED

description @ above w/ weak perv. bleaching gives lt sage green coloration, weak to mod fine fracture veinlets w/ bluegreen (glauconite?) & local pyrite + calcite

829-854 Same fine grained tuff w/ fine (fracture) veinlets of dark gray to black silver mineral (tetrahedrite ?) w/ possible poor drilling FeO & selvage halo ~ 1/4" out from Ag veins w/ local tight - fine dendritic pattern. Few weak calcite + poss (sphalerite ?) vns.

LBI CMW

854-863 Sage green FGT w/ verigated alteration by introduction of, weak fish striations local auto brecciation trace of FeO & rim mt & fine Ag veinlets

ASSAYS

Sample No.	% Cu	% Pb	% Zn	oz/t Au	oz/t Ag
800-805				<	.16
805-810				<	<
810-815				<	<
815-820				.005	.11
820-825				.001	<
825-830				<	<
830-835				.021	<
835-840				.001	<
840-845				<	.14
845-850				<	<
850-855				<	<
855-860				.005	.11
860-865				.032	<
865-869				<	<

72-73.2

DLE # RL-93C

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERAL-IZATION	GRAPHIC LOG	DESCRIPTION	Sample No.	% Cu	% Pb	Au ✓	oz/t Au	oz/t Ag
	99		27 Δ Silt VN ~1' FAULT ZONE	1-2% diss + VN py + Ag mineral		870-890 FINE GRAINED TUFF (CONTINUED) FAULT	867-871			.001	<	.13
						869-873.7 FAULT INFLUENCED ALTERATION w/ local AUTO to CRACKLE BRECCIATION, peru. silicif. surrounding main fault zone @ 872-873.7 w/ assoc. fault rubble w/ str. clay alt (white) zone encls w/ ~1¼" breccia vein → peru. well silicified w/ fine microbreccia matrix 2-3 stages of Δ; cross cut by SiO2 + pyrite + poss. dk gray silver mineral. glauconite + SiO2 w/ bt	871-873.7			.007	<	<
							873.7-876			.002	.003	.23
880	99	56					876-880			.013	.013	<
							880-885			.004	.006	<
890	100	15 clay calcite VN		≤1% diss + VN py + poss Ag mineral		878' - 2½" silicified breccia vein, lt flesh bl + peru. glauconite 65° to CA	885-890			.002	.003	.11
						890-1041 FINE GRAINED TUFF	890-895			.003	.003	.15
900	100	45 clay calcite VN				890-941 FGT - light sage to emerald green alteration w/ weak peru. bleaching; clay alt, locally mottled flesh; green, locally tectonically brecciated mod pervasive silicification ↑ bleaching w/ depth pervasive CRACKLE; AUTO brecciation w/ milled frags to rotated angular frags - no hydrothermal Δ. pervasive moderate fine fracture stkwk w/ bluegreen mineral fill; local red orange OXIDE, weak fine pyrite veining ± $CaCO_3$ ± clay calcite-py-clay veins have post mineral FeOx rim. local ufinely dendritic Ag stkwk w/ FeOx rim. milled zones w/ fine micro breccia matrix	895-900			.001	<	<
							900-905			.003	<	.15
910	100	78 clay CaCO3 py VN					905-910			.004	<	<
							910-915			.001	.003	.22
920	100	52 clay py VN					915-920			.002	.003	<
		55 SiO2 py VN	40 (Δ)				920-925			.020	.022	.15
930	100	73 calcite py VN	40 (Δ)			925.5-926.4 ↑ peru. silicification w/ vuggy druzy qtz; hydrothermal Δ veining ~2 stages Δ w/ weak white clay locally	925-930			.043	.043	<
		35° SiO2 py VN				↑ silicif. w/ depth ↑ milling + Δ w/ depth (tectonic)	930-935			.009	.011	<
940	100	63 SiO2 py VN					935-940			.003	.003	.17

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG
950	100	80 opaline SiO2 VN	22/Δ	3% + diss + VN + buck SHOT py + poss tetrahedrite	
	86	30 CaCO3 clay VN			
		56 calc clay VN			
960			ASO Δ 22		
	97	80 calcite clay VN	50 fract VN	2% VN + diss py	
970		50 py + clay VN			
	98	45 band ing		3-4% diss + VN py + local marcasite	
980		py/25 VN			
	99		60 hydro Δ VN		
990		15 clay py + sil VN			
	100				
1000		63 clay py VN			
	98				
1010					

DESCRIPTION

940 - 1041 FGT (CONTINUED)

941 - 962 FGT - ZONE OF FAIRLY INTENSE silicif hydrothermal breccia veining, w/ slight ↑ in peruvasive silicification, bleaching local strong vuggy drvzy qtz VNS w/ white + gray clays + sulfide fill locally hydro Δ veins have SiO2 matrix w/ ~2 stages of brecciation - fine micro Δ in groundmass, local isolated milled frags w/ fine blacked sulfide, peru. AUTO & CRACKLE ΔIATION

955-962 local zones of intense white clay ± sericite alteration veins up to 1" wide & Δ VNS w/ clay replacing original matrix

→ Increase in peruvasive veining:
1) veinlets of bluegreen mineral
2) pyrite rimmed in SiO2
3) calcite to clay replaced calcite
3) hydro Δ VNS

961 - 962 intermittent broken rubble & clay gouge

962 - 976 FGT - banded - prob. due to differential alteration along fracture veins ↑ peru. bleaching weak peru. silicification, weakly moderate veining banding @ 40-45° to C.A.

976 - 1020.2 FGT buff to flesh color ALTERATION mod. str. peruvasive bleaching w/ wk peru. argillic clay alteration texturally very fine white/buff speckling - due to preferential clay alt. Intermittent hydrothermal vein brecciation up to 1' wide w/ varying matrix of predom. SiO2 & intermittent clay matrix w/ fine microbreccia in matrix (±3 stages of Δiation) w/ weak local celadonite/glauconite alt. Peruvasive mod. strong veining: cronologically: 1) fine pyrite stkwk w/ local celad. vim 2) SiO2 I py ± clay 3) white (kaolinite) clay alt calcite veins locally minor CaCO3 still present, locally white clays oxidized to golden color (post drilling)

(poss wk peru. silin.)

(local wk broken rubble zones)

(local vuggy drvzy qtz VNS + white clay fill + py replaced marcasite)

Sample No.	% Cu	% Pb	Au ✓	oz/t Au	oz/t Ag
940-945			.032	.023	<
945-949			.410	.34	.40
949-954			.088	.084	.26
954-956			.137	.142	.46
956-962			.204	.217	.50
962-966			.003	.006	.30
966-969.6			.016	.005	.36
969.6-975			.049	.069	.36
975-980			.096	.119	.24
980-985			.187	.239	.58
985-990			.071	.074	.39
990-995			.388	.332	.48
995-1000			.115	.094	.41
1000-1005			.084	.081	.42
1005-1010			.069	.058	.39

DEPTH (ft)	RECOVERY	Structure: Bd. Fol.	Structure: Faults	MINERALIZATION	GRAPHIC LOG
1020	98	5° 73 SiO2 py VN; 73 stib. clay VN		3-4% diss + VN py + stibnite	62
1030	100	42 SiO2 py VN; 25 fract VN; 85 clay SiO2 py VN	fract VN 30; SiO2 reload py FeOx VN	3% + VN + diss py + tetrahedrite; ~2% diss + VN py + poss tetrahedrite	clay
1040	99	55 SiO2 clay VN			
1050	100	28 clay VN	45 fract	1-2% diss + VN py + tetrahed.; 4% 11; 3% VN + diss py + tetra	
1060	99	78 SiO2 py VN; 60 foliat; 35 milky SiO2 VN	78 contact	+2% diss + VN py	78 contact
1070	99	70 milky SiO2 VN; 55 foliation			
1080	100	50 milky qtz; 15° SiO2 sandy	15 fract		

SOUTH RIDGE FAULT

DESCRIPTION

1010 - 1020.2 FGT - buff flesh (continued) as above
w/ ↑ pervasive bleaching to white buff
weak perv. silicification

1011.4 - 1011.7 breccia VN w/ white clay fill w/ stibnite w/in clay matrix @ 62° to C.A.

1020.2 - 1035 FGT w/ intermittent silicified breccia zones; intermittent strong broken rubble w/ assoc. white clay (Kaolinite) alteration, mod to mod str. perv. bleaching. Locally tuff is speckled from preferential clay alt. Hydrotherm Δ zones well silicified w/ 2-3 stgs of Δ.; w/ local pods of white clay weak to mod veining w/ white clay alt calcite veins; local py + SiO2 veinlets, clay vns w/ poss tetrahedrite + py. Rubble zones w/ strong clay + sericite alt.

1035 - 1041 FGT w/ ↑ brecciation well silicified w/ intermittent rubble w/ str. clay + sericite + py - tetra alteration, perv. SiO2 + clay mixed matrix

1041 - 1046.9 Brecciated - almost looks like Bud w/ green glauconite/celadonite alt. finely Δiated; str. perv. silh. predom rounded clasts ~ 1-3 mm wide

1046.9 - 1047 DARK Gray sulfide rich well silicified breccias predom. matrix w/ few rounded bl silh. clasts w/ few local pods of white clay; fine veinlets of white clay.

1047 - 1053.1
Buff well silicified; brecciated FGT, matrix supported w/ clasts - bl 2mm to 1/2" wide local orange oxides w/in matrix, clasts - rounded, few clay alt gouge zones 1/4"-1/2" touch of celadonite alt!

1053.1 - 1082
JURASSIC - Mesozoic
Black, carbonaceous shales upper contact is metamorphosed w/ foliation bands predom. 60-65° to core axis pervasively silicified w/ weak decrease to depth. Shales are interbedded w/ fine sandy unit - strong near the contact; decreases w/ depth. Weakly to mod. finely veined w/ SiO2 + white clay poss. replacing calcite veins. Locally finely brecciated, silicification decreases slightly w/ depth

1074 - 1078.5 Intermittent Δ w/ milky qtz + py fill; w/ ↑ clay alt w/ depth - very carbonaceous

ASSAYS

Sample No.	% Cu	% Pb	√ Au	oz/t Au	oz/t Ag
1010-1015				.182	.60
1015-1020				.208	.48
1020-1025				.842	1.21
1025-1030				1.682	1.93
1030-1035				.059	.31
1035-1038				.073	.21
1038-1041				.169	.39
1041-1044				.396	.53
1044-1047				.050	.21
1047-1050				.038	.51
1050-1053.1				<	<
1053.1-1055				.003	.20
1055-1060				.003	.18
1060-1065				.007	.15
1065-1070				.003	.33
1070-1075				.005	<
1075-1078.5				.003	<
1078.5-1082				.003	<

PROJECT: ROSEBUD	STATE: Nevada	NORTHING:	TOTAL: 462/1082 Page 1/2	HOLE #:
LOGD BY: HSM 03/10/97	COUNTY: Pershing	EASTING:	BEARING:	DRB RL-93
UTM#: NK 11-10-06	SEC. T. N., R.	ELEVATION:	ANGLE:	

DRILLING NOTES: Date; H2O; Casing; Bits; Hole C

STRATIGRAPHY/LITHOLOGY: ALUVM (1), BADGER (2), CHOCOLT (3), UBUD (4), BRADY (5), MKRPOR (6), LBUD (7), DOZER (8), WILDROS (9), SURGTUFF (10), ASHFLO (11), LAVA (12), AUTOBXA (13), INTRUSV (14), BASALT (15), ANDESIT (16), RHYOLIT (17)

STRCT: BROKEN (18), GOUGE (19)

GRAPHIC

ALTERATION & MINERALIZATION: OXD'TN: MANGAN (20), HEMAT (21), LIMON (22), PYRITE (23)

GRAPHIC

UNALTRD (24), PROPYLT (25), ARG (26), PLSIL (27), STKWKS (28), VEINS (29), CALCITE (30), (31)

GRAPHIC

COLOR (WET)

DEPTH in FEET: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260

COMMENTS

Sample Recovery

Composite Geochem Intervals

SAMPLE No

PALE ROCK PROBABLY Qal

0 - 13' Qal

13 - 72' T vbt PALE SAGE GREEN CLAY ALTERED, PROBABLE BLD SURGE TUFF.

BECOMES MODERATELY INTENSE GREEN BY 45' & THEN DECREASES IN INTENSITY OF COLOR GROWING MODERATELY TO STRONGLY BLEACHED BY ~70'

65-80': MIXED LITHOLOGIES & SOME GOUGE - AN APPARENT FAULT ZONE.

75-80': STRONG OCHER BRN LIMONITE STAINING

71 - 220' Tc? PLAG-BEARING? A FINE-GRAINED PORPHYRITIC LAVA. DISTINCTIVELY SPECKLED WITH MICROPORPHYRITIC (PLAG) LATHS, WITHOUT FOLIATION. MEDIUM-GRAY WHERE FRESH. WHT-GREEN (STRLY BLEACHED) WHERE PROPYLITIZED. (POSSIBLY AMPHIBOLE)

THIS LOOKS LIKE THE MATERIAL BELOW THE FAULT WHICH IS PREDICTED TO BE BRADY ANDESITE. THE MICROPHENOCRYST CONTENT IS HIGH ~5-10% & APPEARS TO HAVE BEEN ENTIRELY 0.5-1 mm AMPHIBOLES NOW DK TRANSLUSCENT GREEN & ALTERED.

FROM 160': STRONGLY BLEACHED & ARGILLIZED, SAME MATERIAL AS ABOVE. BLEACHING CONTINUES TO 205' ARGILLIZATION TO 210'. SOME OF THIS COULD BE SURGE TUFF.

155-165': COARSE WHT SPARRY CALCITE +/- TARNISHED PYRITE.

220' - 245' FAULT GOUGE PALE SAGE GREEN SURGE TUFF? OR SIMPLY MORE CLAYSHOT LAVA?

PROJECT: ROSEBUD	STATE: Nevada	NORTHING:	TOTAL 462/1082 Page 2/2
LOGD BY: HSM 03/10/97	COUNTY: Pershing	EASTING:	BEARING:
UTM#: NK 11-10-06	SEC. T. N., R.	ELEVATION:	ANGLE:

HOLE#: DRB RL93

DRILLING NOTES: TBF | Dates: H'O Cement Bits Hole C

COLOR (WET)

STRATIGRAPHY/LITHOLOGY: ALUVM (1), BADGER (2), CHOCOLT (3), BUD (4), BRADY (5), MKR POR (6), BUD (7), DOZER (8), WILDROS (9), SURGTUF (10), ASH0FLO (11), LAVA0 (12), AUTOBXA (13), INTRUSV (14), BASALT (15), ANDESIT (16), RHYOLIT (17), BROKEN (18), GOUGE (19)

STRCT GRAPHIC

ALTERATION & MINERALIZATION: OXD'T'N: MANGAN (17), HEMAT (18), LIMON (19), PYRITE (20)

GRAPHIC

UNALTRD (21), PROPYLT (22), ARG (23), PLSIL (24), STKWKS (25), VEINS (26), CALCITE (27)

GRAPHIC

COMMENTS: Sample Recovery; Composite Geochem Intervals

SAMPLE No

DEPTH in FEET: 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500

BRADY ANDESITE: DARK GRY & CRYSTALLINE WHERE FRESH WITH HmOx STAINING ON PARTINGS AND FRACTURES. PALE BLUE-GREEN GROUNDMASS & DK BLUE-GREEN MICROPHENOCRYSTS WHERE PROPYLITIZED. APPEARANCE SAME AS THAT FOUND ABOVE.

300-370': GRY MOTTLED FAINTLY WITH BLUE-GRN AND RED. THE CHIPS HAVE A SOMEWHAT TUFFACEOUS LOOK TO THEM WITH ~~WAP~~ SLUG SHAPED AIR POCKETS THRUOUT. THIS IS NOT FRAGMENTAL SURGE TUFF HOWEVER. IF IT IS ANYTHING OTHER THAT LAVA IT WOULD BE WELDED TUFF

370-380': HARD DARK GRY UNALTERED ANDESITE. VERY APHANITIC LOOKING.

380-445': INTERMITTENTLY BLEACHED & PROPYLITIZED ANDESITE AS DESCRIBED ABOVE

Qz VNLT?

445-462': FAULT ZONE. STR'LY BLEACHED, MILLED/BRECCIATED W/ TO MOD. ARGILLIZATN. SUBHEDRAL & DISS'D' PY = MOD.

T.D. 462'

RL-93 cloudy, showers 6-18-90 1 of 4

RC Ø to 462' (sample to 460-462); plugged interchange, switched to rc

Recovery Footage	% Recovery	Sample Interval	Lithology
		462 - 466.3	462 - 505.6
462-472	9.1/10 = 91%	466.3 - 470	Lt gm - pink,
472-482	95%	470 - 475	alt FGT
482-492	100%	475 - 480	local stg bx zones
492-502	100% +	480 - 485	+ silicified + mineralized
502-512	104%	485 - 490.2	stg sulfid - Si veins
512-522	98%	490.2 - 495	
522-531	9.1/9	495 - 500	505.6 - 515
531-541	98%	500 - 505.6	wht, blc stg alt
541-551	102%	505.6 - 510	FGT w/ sulfide veins
551-561	102%	510 - 515	
561-564	100%	515 - 520	515 - 542
564-572	8.2/8 = 103%	520 - 525	wht, blc FGT / lt gm
572-582	(7.1+) 100% +	525 - 530	sulfide veins
582-592	96%	530 - 535	
592-602	99%	535 - 540	542 - 545.8
602-611	8.5/9 = 94%	540 - 542	fract, gm FGT
611-621	103%	542 - 545.8	
621-631	102%	545.8 - 548	545.8 - 548
631-641.5	10.3/10.5	548 - 550	blc, FGT, lt gm
641.5-651.5	100% +	550 - 555	
Box #22 651.5-662	10.2/10.5 = 97%	555 - 560	548 - 576.7
23 662-672	100%	560 - 563	stg blc FGT
24 672-682	100%	563 - 564.5	wht, lt gm to pink tan
25 682-688	100%	564.5 - 570	
688-698.5	9.9/10.5 = 94%	570 - 575	576.7 - 611
698.5-702	3.3/3.5 = 94%	575 - 576.7	pink, tan blc,
702-712	99%		epiclastic +
712-722	(~~2.7+~~ 100%		wispy gm lamellae
722-732	100%		611 - 655
732-	(1.3		lt gm, fn clast
			pyroclastic?
			w/ banding
			640 - 655
			Lt gm FGT
			655 - 680
			Chicken Pox Rx

RL-93 6-18-90 2 of 4

Recovery Footage		% Recovery	Sample Interval	Lithology
				* 655-684
732-742	~~1.3+~~	97%	576.7-580	Chicken Pox Rx - slg mlt,
742-752		98%	580-585	fn, Si onls + sulfides
752-762		100%+	585-590	Protolith??
762-772		98%	590-595	
772-782		103%	595-600	684-687.6
782-792		102%	600-605	tan, lt gm FGT
792-802		98%	605-611	
802-812		102%	611-615	687.6-695.3
812-822		102%	615-620	maroon, red-brown FGT
822-832		92%	620-625	Chocolate?
832-842		102%	625-630	
842-852		103%	630-635	695.3-772
852-859	7.5/7	= 107%	635-640	tan, peach + lt gm
859-861	1.8/2	90%	640-645	FGT unwelded sulfides
861-871		99%	645-650	+ slg local silica bx zones
871-	(6.7+		650-655	<1ft
			655-660	
			660-665	772-793.1
			665-670	FG fragmental
			670-675	lt gm, local bx
			675-680	
			680-684	793.1-855
			684-687.6	lt gm, FGT local
			687.6-690	+ local calcite/Si
			690-695.3	Unwld + local sulfide
			695.3-700	Unwld
			700-705	
			705-710	855-
			710-715	lt gm-peach,
			715-720	FGT to a fragmental?
			720-725	slg local bx w/
			725-730	sulfides
			730-735 ✓	871-873.7
			735-740 ✓	silica bx/brecc lt gm
			740-745	+ chlor gouge
			745-750	
			750-755	

RL-93

6-19-90

3 of 4

Recovery Footage	% Recovery	Sample Interval	Lithology
		755-760	
871-881.5	10.3/10.5 = 98%	760-765	* 895-949
881.5-892	10.4/10.5 = 99%	765-770	FGT to Fragmental
892-902	100% +	770-775	mod-sty bx
902-912	100% +	775-780	w/ sulfide veins
912-922	100% +	780-785	x cutting
922-932	(~~18~~+ 100%	785-789	lt gm
932-942	100%	789-793.1	
942-952	100% +	793.1-796	* 949-962
952-962	* 86%	796-800	lt gm, sty bx
962-972	97%	800-805	FGT w/ sulfide +
972-982	98%	805-810	silica veins
982-992	99%	810-815	
992-1002	100%	815-820	* 962-1041
1002-1012	(~~5.5~~+ 98%	820-825	lt gm - peach/tan
		825-830	local sty Si bx
		830-835	w/ sulfides
		835-840	FGT
		840-845	
		845-850	
		850-855	
		855-860	
		860-865	
		865-869	
		869-871	
		871-873.7	
		873.7-876	
		876-880 ✓	
		880-885	
		885-890	
		890-895	
		895-900	
		900-905	
		905-910	
		910-915	
		915-920	
		920-925	
		925-930 ✓	

RL-93

Recovery Footage	% Recovery
1012 - 1022	98%
1022 - 1034.5	12.5 / 12.5 = 100%
1034.5 - 1042	7.4 / 7.5 = 99%
1042 - 1052	100% +
1052 - 1062	99%
1062 - 1072	99%
1072 - 1082 TD	100% +
1082 -	

6-20-90

4 of 4

Sample Interval	Lithologe
930 - 935	
935 - 940	
940 - 945	
945 - 949	949-954
949 - 954	stg S: bx w/
954 - 956	marcasite + sulfides
956 - 962	
962 - 966	1035-1041
966 - 969.6	stg silic Fault zone
969.6 - 975	1041-1047
975 - 980	ltgrn, silicified
980 - 985	pyroclastic
985 - 990	
990 - 995	1047-1053.1
995 - 1000	wht, stg blc, FGT
1000 - 1005	
1005 - 1010 ✓	
1010 - 1015	
1015 - 1020	
1020 - 1025	
1025 - 1030	
1030 - 1035	
1035 - 1038	
1038 - 1041	
1041 - 1044	
1044 - 1047	
1047 - 1050	
1050 - 1053.1	1053.1 - 1082 TD
1053.1 - 1055	Je, shales, bk,
1055 - 1060	bx, silicified
1060 - 1065	
1065 - 1070	
1070 - 1075	1075-1078.5
1075 - 1078.5	stg bk clay
1078.5 - 1082	zone

NEVADA GSI

JUL 17 1990

GEOCHEMICAL ANALYSIS REPORT

July 13, 1990

CUST. CODE: LOA
PROJECT: URBD-79014
P.O. #: XXXX
LOT ID: 7643

GEOLOGIST: NATE BREWER
COPIES TO: KEN TULLAR
COMPANY: LAC MINERALS
ANALYSIS: FIRE ASSAY FOR GOLD AND SILVER, WITH AN A.A. FINISH.
FIRE ASSAY FOR GOLD, WITH AN A.A. FINISH. (CHECKS)

	SAMPLE I.D.			Au o/t	Ag o/t	Checks Au o/t	Checks Au o/t
1.	RL-93	0	5	0.001	-0.10	-	-
2.	RL-93	5	10	0.002	-0.10	-	-
3.	RL-93	10	15	0.001	-0.10	-	-
4.	RL-93	15	20	0.001	-0.10	-	-
5.	RL-93	20	25	0.001	-0.10	-	-
6.	RL-93	25	30	0.004	0.10	-	-
7.	RL-93	30	35	0.001	-0.10	-	-
8.	RL-93	35	40	0.001	-0.10	-	-
9.	RL-93	40	45	0.004	-0.10	-	-
10.	RL-93	45	50	0.028	-0.10	0.034	-
11.	RL-93	50	55	0.003	-0.10	-	-
12.	RL-93	55	60	0.003	-0.10	-	-
13.	RL-93	60	65	0.005	-0.10	-	-
14.	RL-93	65	70	0.005	-0.10	-	-
15.	RL-93	70	75	0.001	-0.10	-	-
16.	RL-93	75	80	0.001	-0.10	-	-
17.	RL-93	80	85	-0.001	-0.10	-	-
18.	RL-93	85	90	-0.001	-0.10	-	-
19.	RL-93	90	95	-0.001	-0.10	-	-
20.	RL-93	95	100	0.002	-0.10	-	-
21.	RL-93	100	105	-0.001	-0.10	-	-
22.	RL-93	105	110	-0.001	-0.10	-	-
23.	RL-93	110	115	-0.001	-0.10	-	-
24.	RL-93	115	120	-0.001	-0.10	-	-
25.	RL-93	120	125	0.003	-0.10	-	-
26.	RL-93	125	130	0.001	-0.10	-	-
27.	RL-93	130	135	0.024	-0.10	-	-
28.	RL-93	135	140	0.016	0.15	-	-
29.	RL-93	140	145	-0.001	-0.10	-	-
30.	RL-93	145	150	0.002	-0.10	-	-

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	SAMPLE I.D.			Au o/t	Ag o/t	Checks Au o/t	Checks Au o/t
31.	RL-93	150	155	0.016	-0.10	-	-
32.	RL-93	155	160	0.064	0.16	-	-
33.	RL-93	160	165	0.024	0.25	-	-
34.	RL-93	165	170	0.008	-0.10	-	-
35.	RL-93	170	175	-0.001	-0.10	-	-
36.	RL-93	175	180	0.002	-0.10	-	-
37.	RL-93	180	185	0.020	0.14	-	-
38.	RL-93	185	190	0.005	0.70	-	-
39.	RL-93	190	195	0.003	-0.10	-	-
40.	RL-93	195	200	0.035	0.30	0.072	0.033
41.	RL-93	200	205	0.003	-0.10	-	-
42.	RL-93	205	210	0.002	-0.10	-	-
43.	RL-93	210	215	0.001	0.10	-	-
44.	RL-93	215	220	0.002	0.15	-	-
45.	RL-93	220	225	0.001	-0.10	-	-
46.	RL-93	225	230	-0.001	-0.10	-	-
47.	RL-93	230	235	-0.001	-0.10	-	-
48.	RL-93	235	240	-0.001	-0.10	-	-
49.	RL-93	240	245	0.005	0.15	-	-
50.	RL-93	245	250	0.001	0.25	-	-
51.	RL-93	250	255	-0.001	0.10	-	-
52.	RL-93	255	260	0.001	-0.10	-	-
53.	RL-93	260	265	-0.001	-0.10	-	-
54.	RL-93	265	270	-0.001	0.10	-	-
55.	RL-93	270	275	0.001	-0.10	-	-
56.	RL-93	275	280	0.001	-0.10	-	-
57.	RL-93	280	285	-0.001	-0.10	-	-
58.	RL-93	285	290	-0.001	-0.10	-	-
59.	RL-93	290	295	-0.001	-0.10	-	-
60.	RL-93	295	300	0.001	-0.10	-	-
61.	RL-93	300	305	0.002	-0.10	-	-
62.	RL-93	305	310	0.001	-0.10	-	-
63.	RL-93	310	315	-0.001	-0.10	-	-
64.	RL-93	315	320	0.001	-0.10	-	-
65.	RL-93	320	325	-0.001	-0.10	-	-
66.	RL-93	325	330	-0.001	-0.10	-	-
67.	RL-93	330	335	-0.001	-0.10	-	-
68.	RL-93	335	340	-0.001	-0.10	-	-
69.	RL-93	340	345	0.001	-0.10	-	-
70.	RL-93	345	350	-0.001	-0.10	-	-
71.	RL-93	350	355	-0.001	-0.10	-	-
72.	RL-93	355	360	-0.001	-0.10	-	-
73.	RL-93	360	365	-0.001	0.12	-	-
74.	RL-93	365	370	-0.001	-0.10	-	-
75.	RL-93	370	375	-0.001	-0.10	-	-

	SAMPLE I.D.			Au o/t	Ag o/t	Checks Au o/t	Checks Au o/t
76.	RL-93	375	380	-0.001	0.10	-	-
77.	RL-93	380	385	-0.001	-0.10	-	-
78.	RL-93	385	390	-0.001	-0.10	-	-
79.	RL-93	390	395	-0.001	-0.10	-	-
80.	RL-93	395	400	0.001	0.25	-	-
81.	RL-93	400	405	-0.001	0.15	-	-
82.	RL-93	405	410	0.001	0.25	-	-
83.	RL-93	410	415	0.001	0.15	-	-
84.	RL-93	415	420	0.002	0.17	-	-
85.	RL-93	420	425	0.001	0.15	-	-
86.	RL-93	425	430	0.015	0.21	-	-
87.	RL-93	430	435	-0.001	0.10	-	-
88.	RL-93	435	440	0.001	-0.10	-	-
89.	RL-93	440	445	0.001	-0.10	-	-
90.	RL-93	445	450	0.002	-0.10	-	-
91.	RL-93	450	455	0.001	-0.10	-	-
92.	RL-93	455	460	0.004	-0.10	-	-
93.	RL-93	460	462	0.087	0.42	0.116	0.101

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THIS REPORT REVIEWED AND APPROVED BY:

Jerry Gaige

JERRY GAIGE, CHIEF CHEMIST

NEVADA GSI

JUL 31 1990

GEOCHEMICAL ANALYSIS REPORT

July 28, 1990

CUST. CODE: LOA
PROJECT: URBD
P.O. #: XXXX
LOT ID: 7838

GEOLOGIST: NATE BREWER
COPIES TO: SAME
COMPANY: LAC MINERALS
ANALYSIS: FIRE ASSAY FOR GOLD AND SILVER, WITH AN A.A. FINISH.

	SAMPLE I.D.			Au o/t	Ag o/t
1.	RL-93C	462	466.3	0.004	0.23
2.	RL-93C	466.3	470	0.002	0.17
3.	RL-93C	470	475	-.001	0.24
4.	RL-93C	475	480	0.004	0.31
5.	RL-93C	480	485	0.003	0.44
6.	RL-93C	485	490.2	0.004	-.10
7.	RL-93C	490.2	495	-.001	0.23
8.	RL-93C	495	500	-.001	-.10
9.	RL-93C	500	505.6	-.001	0.20
10.	RL-93C	505.6	510	0.004	-.10
11.	RL-93C	510	515	0.006	0.29
12.	RL-93C	515	520	0.002	0.22
13.	RL-93C	520	525	0.004	0.30
14.	RL-93C	525	530	0.009	0.26
15.	RL-93C	530	535	-.001	0.18
16.	RL-93C	535	540	-.001	0.18
17.	RL-93C	540	542	-.001	0.15
18.	RL-93C	542	545.8	-.001	0.21
19.	RL-93C	545.8	548	-.001	0.24
20.	RL-93C	548	550	-.001	0.33
21.	RL-93C	550	555	-.001	0.18
22.	RL-93C	555	560	0.001	0.29
23.	RL-93C	560	563	0.023	0.27
24.	RL-93C	563	564.5	0.007	0.25
25.	RL-93C	564.5	570	0.004	0.24
26.	RL-93C	570	575	-.001	0.22
27.	RL-93C	575	576.7	-.001	-.10
28.	RL-93C	576.7	580	-.001	-.10
29.	RL-93C	580	585	-.001	-.10
30.	RL-93C	585	590	-.001	-.10
31.	RL-93C	590	595	-.001	-.10
32.	RL-93C	595	600	-.001	-.10
33.	RL-93C	600	605	-.001	-.10

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	SAMPLE I.D.			Au o/t	Ag o/t
34.	RL-93C	605	611	-.001	-.10
35.	RL-93C	611	615	-.001	-.10
36.	RL-93C	615	620	-.001	0.30
37.	RL-93C	620	625	-.001	-.10
38.	RL-93C	625	630	-.001	0.13
39.	RL-93C	630	635	-.001	-.10
40.	RL-93C	635	640	-.001	0.10
41.	RL-93C	640	645	-.001	0.15
42.	RL-93C	645	650	-.001	-.10
43.	RL-93C	650	655	-.001	-.10
44.	RL-93C	655	660	0.004	0.28
45.	RL-93C	660	665	0.002	-.10
46.	RL-93C	665	670	0.001	0.19
47.	RL-93C	670	675	-.001	-.10
48.	RL-93C	675	680	-.001	0.18
49.	RL-93C	680	684	0.003	0.18

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This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Laboratory Director

NEVADA GSI

AUG 14 1990

GEOCHEMICAL ANALYSIS REPORT

August 6, 1990

CUST. CODE: LOA
PROJECT: URBD
P.O. #: XXXX
LOT ID: 7852

GEOLOGIST: NATE BREWER
COPIES TO: SAME
COMPANY: LAC MINERALS
ANALYSIS: FIRE ASSAY FOR GOLD AND SILVER, WITH AN A.A. FINISH.

	SAMPLE I.D.			Au o/t	Ag o/t
1.	RL-93C	684	687.6	-0.001	-.10
2.	RL-93C	687.6	690	-0.001	-.10
3.	RL-93C	690	695.3	-0.001	-.10
4.	RL-93C	695.3	700	-0.001	0.17
5.	RL-93C	700	705	0.003	-.10
6.	RL-93C	705	710	-0.001	-.10
7.	RL-93C	710	715	-0.001	-.10
8.	RL-93C	715	720	0.003	0.15
9.	RL-93C	720	725	0.001	-.10
10.	RL-93C	725	730	-0.001	-.10
11.	RL-93C	730	735	-0.001	-.10
12.	RL-93C	735	740	-0.001	-.10
13.	RL-93C	740	745	-0.001	-.10
14.	RL-93C	745	750	-0.001	-.10
15.	RL-93C	750	755	-0.001	-.10
16.	RL-93C	755	760	-0.001	0.10
17.	RL-93C	760	765	-0.001	-.10
18.	RL-93C	765	770	-0.001	-.10
19.	RL-93C	770	775	-0.001	0.11
20.	RL-93C	775	780	-0.001	0.12
21.	RL-93C	780	785	-0.001	0.10
22.	RL-93C	785	789	-0.001	-.10
23.	RL-93C	789	793.1	-0.001	-.10
24.	RL-93C	793.1	796	0.002	-.10
25.	RL-93C	796	800	-0.001	-.10
26.	RL-93C	800	805	-0.001	0.16
27.	RL-93C	805	810	-0.001	-.10
28.	RL-93C	810	815	-0.001	-.10
29.	RL-93C	815	820	0.005	0.11
30.	RL-93C	820	825	0.001	-.10
31.	RL-93C	825	830	-0.001	-.10
32.	RL-93C	830	835	0.021	-.10
33.	RL-93C	835	840	0.001	-.10

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	SAMPLE I.D.			Au o/t	Ag o/t
34.	RL-93C	840	845	-0.001	0.14
35.	RL-93C	845	850	-0.001	-.10
36.	RL-93C	850	855	-0.001	-.10
37.	RL-93C	855	860	0.005	0.11
38.	RL-93C	860	865	0.032	-.10
39.	RL-93C	865	869	-0.001	-.10

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This report reviewed and approved by:

Richard A. Grondin

Richard Grondin, Laboratory Director

NEVADA GSI

JUL 17 1990

GEOCHEMICAL ANALYSIS REPORT

July 13, 1990

CUST. CODE: LOA
PROJECT: URBD
P.O. #: XXXX
LOT ID: 7698

GEOLOGIST: NATE BREWER
COPIES TO: SAME
COMPANY: LAC MINERALS
ANALYSIS: FIRE ASSAY FOR GOLD, 1 ASSAY TON GRAVIMETRIC.
A.A. ANALYSIS FOR SILVER.
FIRE ASSAY FOR GOLD, WITH AN A.A. FINISH. (CHECKS)
FIRE ASSAY FOR GOLD, 1 ASSAY TON
GRAVIMETRIC. (CHECKS)

	SAMPLE I.D.			Au o/t	Ag o/t	Checks Au o/t	Checks Au o/t
1.	RL-93C	869	871	-0.0025	0.13	0.001	-
2.	RL-93C	871	873.7	-0.0025	-0.10	0.007	-
3.	RL-93C	873.7	876	0.003	0.23	0.002	-
4.	RL-93C	876	880	0.013	-0.10	0.013	-
5.	RL-93C	880	885	0.006	-0.10	0.004	-
6.	RL-93C	885	890	0.003	0.11	0.002	-
7.	RL-93C	890	895	0.003	0.15	0.003	-
8.	RL-93C	895	900	-0.0025	-0.10	0.001	-
9.	RL-93C	900	905	-0.0025	0.15	0.003	-
10.	RL-93C	905	910	-0.0025	-0.10	0.004	-
11.	RL-93C	910	915	0.003	0.22	0.001	-
12.	RL-93C	915	920	0.003	-0.10	0.002	-
13.	RL-93C	920	925	0.022	0.15	0.020	-
14.	RL-93C	925	930	0.043	-0.10	0.043	-
15.	RL-93C	930	935	0.011	-0.10	0.009	-
16.	RL-93C	935	940	0.003	0.17	0.003	-
17.	RL-93C	940	945	0.023	-0.10	0.032	-
18.	RL-93C	945	949	0.340	0.40	0.410	-
19.	RL-93C	949	954	0.084	0.26	0.088	-
20.	RL-93C	954	956	0.142	0.46	0.137	-
21.	RL-93C	956	962	0.217	0.50	0.204	-
22.	RL-93C	962	966	0.006	0.30	0.003	-
23.	RL-93C	966	969.6	0.005	0.36	0.016	-
24.	RL-93C	969.6	975	0.069	0.36	0.049	-
25.	RL-93C	975	980	0.119	0.24	0.096	-
26.	RL-93C	980	985	0.239	0.58	0.187	-
27.	RL-93C	985	990	0.074	0.39	0.071	-
28.	RL-93C	990	995	0.332	0.48	0.388	-
29.	RL-93C	995	1000	0.094	0.41	0.115	-
30.	RL-93C	1000	1005	0.081	0.42	0.084	-

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	SAMPLE I.D.			Au o/t	Ag o/t	Checks Au o/t	Checks Au o/t
31.	RL-93C	1005	1010	0.058	0.39	0.069	-
32.	RL-93C	1010	1015	0.182	0.60	0.177	-
33.	RL-93C	1015	1020	0.208	0.48	0.196	-
34.	RL-93C	1020	1025	0.842	1.21	0.759	-
35.	RL-93C	1025	1030	1.682	1.93	1.144	-
36.	RL-93C	1030	1035	0.059	0.31	0.057	-
37.	RL-93C	1035	1038	0.073	0.21	-	-
38.	RL-93C	1038	1041	0.169	0.39	-	0.173
39.	RL-93C	1041	1044	0.396	0.53	-	0.322
40.	RL-93C	1044	1047	0.006	0.21	-	-
41.	RL-93C	1047	1050	0.038	0.51	-	-
42.	RL-93C	1050	1053.1	-0.0025	-0.10	-	-
43.	RL-93C	1053.1	1055	0.003	0.20	-	-
44.	RL-93C	1055	1060	0.003	0.18	-	-
45.	RL-93C	1060	1065	0.007	0.15	-	-
46.	RL-93C	1065	1070	0.003	0.33	-	-
47.	RL-93C	1070	1075	0.005	-0.10	-	-
48.	RL-93C	1075	1078.5	0.003	-0.10	-	-
49.	RL-93C	1078.5	1082	0.003	-0.10	-	-

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THIS REPORT REVIEWED AND APPROVED BY:

Jerry Gaige

JERRY GAIGE, CHIEF CHEMIST

RL-93 Brief Summary LOG

ROTARY: 0-460 FGT

CORE:

462-655 FGT - flow
655 - 683.5 - SPECKLED - VESICULAR TUFF
683.5 - 890 FGT (RBU) locally bleached
890 - 1041 FGT bl LBT
941-962 X w hydrothermal Δ vning
962-976 banded FGT
976-1020.2 flesh FGT
1020.2 - 1035 intermittent silic. Δ zones
1035 - 1053.1 SOUTH RIDGE FAULT
1035 - 1041 FGT ↑ Δ + X
1041 - 1046.9 looks like green Bud
1046.9 - 1047 gray sulfide rich X Δ
1047 - 1053.1 FGT X Δ

1053.1 - 1082 Jurrassic carbonaceous shales