60001405

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-180
AUTHOR	C. Walck; T. Kuhl; N. Whitten; P. Graff
DATE OF DOC(S)	1991
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Stevens Drilling; Lac Minerals (USA), Inc; Bondar-Clegg, Inc; Chemex Labs, Inc.
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 685'; handwritten notes; directional survey 22p.

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)

	Initials	Date
SS:	DD	5/20/08
DB:	mah	
SCANNED:		

Revised: 1/22/08

Drill Log RL-180
Rosebud

60001405 4010

60001405

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

DRILL LOG SUMMARY SHEET

PROJECT Rosebud

HOLE NUMBER RL-180 TOTAL DEPTH 685 LOGGED BY RKS

Date started 6/1

Date completed 6/3

Initial bearing –

Initial inclination -90°

Elevation 5321.6

Collar coordinates:

N 2203802.0

E 482813.7

Contractor: Stevens

Drill Type: R.C.

Hole Size: 5¼

Drilling Conditions: Buena

Footage: Wet / Dry 0 - 205 dry

205 - 685 wet

Comments: 1400 N ; ~745' SE

Not much H_2O in hole

DOWN HOLE SURVEY INFORMATION

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

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

FINE-GRAINED TUFF
LITHIC LAPILLI TUFF

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

DRILL HOLE RL-180

Page 1 of 7

LOGGED BY RKS

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV.
	B								Brnish wht					OB Qal	<	<		
05															<</<	<</<		
10															<	<		
15																		
20																		
25																		
30																		
35														Bedrock at 36' Drilling at 8:30		.03		
Bedrock 40									wht org Brnish					C+ Fine Grain Tuff(?) Strg clay alt		.06		
45									wht Org Yllw						.004	.05		
50															.004	.11	.004	
55															.005	.14		
60															.005/.005	.14/.17		
65		X							lt Grey Yllw org wht						.005	.17		
70															.004	.09		
75															.003	.08		
80									Eroed						<	.09		
85														Oxides Redox	<	.08		
90									lt Grey Grey				2	Sulfides	<	.11		
95													2		<	.06		
100													2		.003	.09	.003	

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DRILL HOLE RL-180

Page 2 of 7

LOGGED BY RKS

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% VASH RECOV.
									lt Grey lt Green Grey				2	SAA- Cr	.003	.09		
105													3		.004	.12		
110													2		4/<	.07/.06		
115									lt Grey wht				1		<	.04		
120													.5	(w/ Kaolin vn)	<	.04		
125													.5		.006	.11		
130													1		<	.07		
135													.5		<	<		
140									& lt Green				.5		<	<		
145													.5		.004	.11	.003	
150													1		.004	.13		
155													2	w/ minor Qtz vn	.004	.12		
160													2	(slight incr Qtz vn)	.004/.004	.10/.10		
165									& Green				1	(minor Qtz vn)	.004	.13		
170													2		.005	.15		
175													2		.003	.10		
180													2		.004	.11		
185									Grey wht				3	(Incr Qtz vn & sulf w/ minor Kaolin vn.)	.005	.18		
190													3		.006	.15		
195													3		.006	.15	.005	
200																		

Fault zone

LAC MINERALS (U.S.A.) INC.
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LITHIC LAPILLI TUFF

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Ca CALCITE

DRILL HOLE PL-180

Page 3 of 7

LOGGED BY RKS

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV.
									lt. Grey				.5	SAA - Ct (6/1 6/2)	.007	.17		
205									lt Grey wht Peach				1	(Break Down 12:00pm) (Start up again 12:00pm) wet drilling	.004	.10		
210													1	w/mod incr. in Qtz	.004 / .003 / .003	.12 / .14 / .12		
215													1		.04	.13		
220													1	(w/ Kaolin vn)	<	.06		
225															.002	.09		
230															.003	.06		
235															.003	.05		
240									lt Grey-Grn Peach wht						.008	.05		
245									lt Grey-Green wht				.5		.004	.05		.002
250															.002	.07		
255															.004	.05		
260													1	(w/ mod incr. in Qtz vn.)	.002 / .002	.06 / .06		
265									lt Grey-Grn Peach						.021	.09		
270									lt Grey-Grn lt Grey						<	.04		
275															<	.04		
280									¿ Grey				2	(Strg incr in Grey & clear Qtz & alf.)	.003	.08		
285									lt Gry-Grn wht Peach Grey				1		.005	.13		
290													1		.004	.08		
295													1		.008	.10	.006	
300																		

LAC MINERALS (U.S.A.) INC.
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DRILL HOLE RL-180

Page 4 of 7

LOGGED BY RKS

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	Au CHECK	% VASH RECOV.
									lt Green wht				1	SAA - Cr	.019 / .002	.08	.006	
305													1		.005	.08		
310									Grey				2		.004	.07		
315									lt Grey wht				2	(mod incr. in Qtz vn)	.005 / .006	.08 / .08	.005	
320									lt Grey wht Grey				2		.008	.06		
325									lt Grey Peach wht						.027	.11		
330															.004	.07		
335															.003	.06		
340														(w/ Kaolin vn)	.013	.08		
345													1		.013	.09	.004	
350													.5		.105 / .257	.20		
355									lt Grey lt Green Grey				.5		.011	.07		
360									lt Grey Grey wht				.5		.004	.07		
365									& flesh						.011 / .013	.07 / .08	.013	
370															.030 / .035	.07	.045	
375															.003	.06		
380															.010	.08		
385									lt Grey wht flesh					(w/ micro vn Dx)	.004	.06		
390															.005	.06		
395															.006	.08	.005	
400																		

Fault?

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DRILL HOLE RL-180

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LOGGED BY RKS

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV.
									Flesh lt Grey wht				.5	SAA - C+ (little more H_2O)	.005	.07		
405																		
410															.005	.07		
															.005	.08		
415									lt Grey Brown-red wht						.010/.009	.10/.12		
420														(slight incr. H_2O)	.012	.12		
425															.014	.11		
430									lt Grey Flesh-red wht						.011	.11		
435															.004	.17		
440														(Incr in sulf.)	.026	.57/.14		
445															.009	.14	.007	
450															.006	.12		
455															.006	.10		
460															.005	.10		
465	DY.													(w/ Kaolin vn) (w/ minor Bx & sfd)	.012/.011	.12/.02		
470															.008	.15		
475															.012	.11		
480									Brown-red lt Grey wht						.007	.11		
485									Flesh-red lt Grey wht						.006	.11		
490													1		.020	.14		
495													1		.006	.08	.006	
500																		

some clay alt

LAC MINERALS (U.S.A.) INC.
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LITHIC LAPILLI TUFF

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DRILL HOLE RL-180

Page 6 of 7

LOGGED BY RKS

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% VASH RECOV.
									lt Grey Grey lt Green				1	SAA- Ct (w/lt Green clay)	.007	.07		
505																		
510														(Grad incr. in slfd)	.006	.23		
									flesh wht lt Grey lt Green						.007	.72		
515																		
															.007	1.16		
520																		
														6/2 6/3	.007/.007	.13/.008		
525																		
													.5		.007	.26		
530																		
															.007	.45/.49/.47		
535																		
															.007	.018		
540																		
															.008	.29		
545																		
															.005	.13	.004	
550																		
									lt Green wht lt Grey flesh-Brn						.006	.23		
555																		
									lt Green wht						.006	.29		
560																		
									Green flesh-Brn wht						.004	.31		
565																		
															.007/.007	.20/.22		
570																		
														(wk Bx + larger slfd)	.004	.09		
575																		
									lt Green wht						.010	.17		
580																		
									lt Green Dark Grey wht						.003	.39		
585																		
SRF fragde zone fault													1	(w/ Dark Grey Silica Flood) (w/ minor Grey Gouge) (minor Bx)	.27	.41		
590																		
									lt Grey lt Grey-Grn				.5	Dozer tuff w/ micro Qtz vn	.28	.05		
595																		
									Olive-Green					very Fn. Grn. Featureless tuff	.004/.003	.03/.02	.006	
600																		

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

FINE-GRAINED TUFF
LITHIC LAPILLI TUFF

* Contam. from above → mostly clay from clay altered zone due to tripping out and in the hole. clay built up in cyclone and all hoses ∴

ARGILLIC
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XXXXXX DRUZY QUARTZ
XC CHALCEDONIC QUARTZ
XK STOCKWORK QUARTZ
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Ca CALCITE

∴ the driller is not at fault It's one of those things, that cannot be helped. We're doing everything possible to keep it clean!

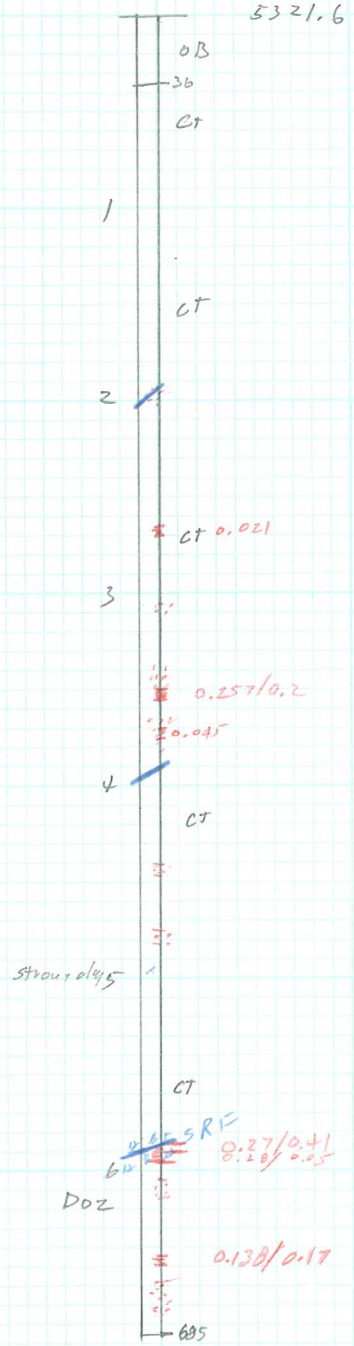
DRILL HOLE RL-180

Page 7 of 7

LOGGED BY _____

	LITH.	ALT.	% ARG. ALT. W	M	S	% SIL'N W	M	S	COLOR	% FeOx W	M	S	% SULF.	COMMENTS	Au	Ag	CHECK	% WASH RECOV.
									Olive-Green				.5	wk Bx SAA - Dozer tuff (w/micro Qtz vn and slight incr. in sulf /iron last sample)	.006	.05		
605		X							Pale Green lt Grey					(trip out worn part in hammer)	.011	.07		
* 610															.026	.12		
615															.031	.08		
620															.034 / .033	.09 / .10		
625		X												(Grad incr. in alt & sulf.)	.013	.06		
630		Y													.015	.05		
635		Y											1		.021	.08		
640		Y							wht lt Grey				.5	(Strong Bleach)	.022	.10		
645									Pale Green				.5	(w/ Kaolin vn)	.138 / .084	.17	.018	
650													.1		.003	.04		
655													.1	(trace calcite)	.009	.06		
660															.065 / .076	.12		
665															.013 / .013	.09		
670														[injecting H_2O the entire hole ∴ very little H_2O in this hole]	.010 / .011	.06 / .09 / .09		
675															.004	.06		
680														(Slight incr in H_2O)	←	.08		
685																		
690														TD at 2:30 pm				
695																		
700																		

2,203,802.0 N
482,813.7 E



ROSEBUD
RL-180
1" = 100'

RL - 180

TD 685

Lithologies

0 - 35'	Qal
35 - 585	Ct
585 - 685	Dt

Structures

185 - 200	Fault Zone
385 - 395	" " (?)
465 - 480	minor Bx
570 - 575	" "
580 - 590	Bx, Frax SRF
600 - 605	minor Bx

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

Controlled

RL180

BC BONDAR-CLEGG

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

JUN 19 1991

REPORT: R91-11051.4 (COMPLETE)

REFERENCE INFO: RL180 0-685

CLIENT: LAC MINERALS (USA) INC.
PROJECT: ROSEBUD

SUBMITTED BY: WALCK
DATE PRINTED: 18-JUN-91

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au DUP Gold Duplicate	21	0.002 OPT		Fire Assay
2	Au Gold	143	0.002 OPT		Fire Assay
3	AG DUP AG DUPLICATE	17	0.02 OPT		Fire Assay
4	AG DUP AG DUPLICATE	3	0.02 OPT		Fire Assay
5	Ag Silver	143	0.02 OPT		Fire Assay
6	AU Dup Gold Duplicate	6	0.002 OPT		Fire Assay

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
Z OTHER DRILL TYPES	137	2 -150	137	CRUSH,PULVERIZE -150	137
P PREPARED PULP	6	4 AS REC'D	6	EXCESS WETNESS/SAMP	95
				AS RECEIVED, NO SP	6
				OVERWEIGHT/LBS	74

REPORT COPIES TO: MS. CYNDIE WALCK
MR. TIM KUHL
MR. TIM KUHL

INVOICE TO: MR. TIM KUHL

Nicole Wetter

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11051.4 (COMPLETE)

DATE PRINTED: 18-JUN-91
PROJECT: ROSEBUD

STANDARD NAME	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
ANALYTICAL BLANK		-	<0.002	-	-	<0.02	-
ANALYTICAL BLANK		-	<0.002	-	-	<0.02	-
ANALYTICAL BLANK		-	<0.002	-	-	<0.02	-
ANALYTICAL BLANK		-	<0.002	-	-	<0.02	-
Number of Analyses		-	4	-	-	4	-
Mean Value		-	0.0010	-	-	0.010	-
Standard Deviation		-	0.00000	-	-	0.0000	-
Accepted Value		-	0.002	-	-	0.02	-
PD SYN STD AU/AG		-	0.037	-	-	0.41	-
PD SYN STD AU/AG		-	0.039	-	-	0.42	-
Number of Analyses		-	2	-	-	2	-
Mean Value		-	0.0380	-	-	0.415	-
Standard Deviation		-	0.00141	-	-	0.0071	-
Accepted Value		-	0.040	-	-	0.40	-
MISC STD		-	0.042	-	-	0.43	-
Number of Analyses		-	1	-	-	1	-
Mean Value		-	0.0420	-	-	0.430	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
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BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

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SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
Z2 RL-180 0-5			<0.002			<0.02	
Z2 RL-180 5-10		<0.002	<0.002	<0.02		<0.02	
Z2 RL-180 10-15			<0.002			<0.02	
Z2 RL-180 15-20			<0.002			<0.02	
Z2 RL-180 20-25			<0.002			<0.02	
Z2 RL-180 25-30			<0.002			<0.02	
Z2 RL-180 30-35			<0.002			0.03	
Z2 RL-180 35-40			<0.002			0.06	
Z2 RL-180 40-45			0.004			0.05	
Z2 RL-180 45-50			0.004			0.11	
Z2 RL-180 50-55			0.005			0.14	
Z2 RL-180 55-60		0.005	0.005	0.17		0.14	
Z2 RL-180 60-65			0.005			0.17	
Z2 RL-180 65-70			0.004			0.09	
Z2 RL-180 70-75			0.003			0.08	
Z2 RL-180 75-80			<0.002			0.09	
Z2 RL-180 80-85			<0.002			0.08	
Z2 RL-180 85-90			<0.002			0.11	
Z2 RL-180 90-95			<0.002			0.06	
Z2 RL-180 95-100			0.003			0.09	
P4 BA-90			0.034			0.06	
Z2 RL-180 100-105			0.003			0.09	
Z2 RL-180 105-110			0.004			0.12	
Z2 RL-180 110-115		<0.002	<0.002	0.06		0.07	
Z2 RL-180 115-120			<0.002			0.04	
Z2 RL-180 120-125			<0.002			0.04	
Z2 RL-180 125-130			0.006			0.11	
Z2 RL-180 130-135			<0.002			0.07	
Z2 RL-180 135-140			<0.002			<0.02	
Z2 RL-180 140-145			<0.002			<0.02	
Z2 RL-180 145-150			0.004			0.11	
Z2 RL-180 150-155			0.004			0.13	
Z2 RL-180 155-160			0.004			0.12	
Z2 RL-180 160-165		0.004	0.004	0.10		0.10	
Z2 RL-180 165-170			0.004			0.13	
Z2 RL-180 170-175			0.005			0.15	
Z2 RL-180 175-180			0.003			0.10	
Z2 RL-180 180-185		.004	0.004		0.12	0.11	
Z2 RL-180 185-190			0.005			0.18	
Z2 RL-180 190-195			0.006			0.15	

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11051.4 (COMPLETE)

DATE PRINTED: 18-JUN-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
Z2 RL-180 195-200			0.006			0.15	
P4 BA-91			<0.002			<0.02	
Z2 RL-180 200-205			0.007			0.17	
Z2 RL-180 205-210			0.004			0.10	
Z2 RL-180 210-215		0.003	0.004	0.12	0.14	0.12	0.003
Z2 RL-180 215-220			0.004			0.13	
Z2 RL-180 220-225			<0.002			0.06	
Z2 RL-180 225-230			0.002			0.09	
Z2 RL-180 230-235			0.003			0.06	
Z2 RL-180 235-240			0.003			0.05	
Z2 RL-180 240-245			0.008			0.05	
Z2 RL-180 245-250			0.004			0.05	
Z2 RL-180 250-255			0.002			0.07	
Z2 RL-180 255-260			0.004			0.05	
Z2 RL-180 260-265		0.002	0.002	0.06		0.06	
Z2 RL-180 265-270			0.021			0.09	
Z2 RL-180 270-275			<0.002			0.04	
Z2 RL-180 275-280			<0.002			0.04	
Z2 RL-180 280-285			0.003			0.08	
Z2 RL-180 285-290			0.005			0.13	
Z2 RL-180 290-295			0.004			0.08	
Z2 RL-180 295-300			0.008			0.10	
P4 BA-92			0.034			0.18	
Z2 RL-180 300-305		0.009	0.019			0.08	0.006
Z2 RL-180 305-310			0.005			0.08	
Z2 RL-180 310-315		.004	0.004		.08	0.07	
Z2 RL-180 315-320		0.006	0.005	0.08		0.08	0.005
Z2 RL-180 320-325			0.008			0.06	
Z2 RL-180 325-330			0.027			0.11	
Z2 RL-180 330-335			0.004			0.07	
Z2 RL-180 335-340			0.003			0.06	
Z2 RL-180 340-345			0.013			0.08	
Z2 RL-180 345-350			0.013			0.09	
Z2 RL-180 350-355		0.257	0.105			0.20	
Z2 RL-180 355-360			0.011			0.07	
Z2 RL-180 360-365			0.004			0.07	
Z2 RL-180 365-370		0.013	0.011	0.08		0.07	0.013
Z2 RL-180 370-375		0.030	0.035			0.07	0.045
Z2 RL-180 375-380			0.003			0.06	
Z2 RL-180 380-385			0.010			0.08	

Bondar-Clegg, Inc.
625 Spice Island Dr.
Building 1, Unit A
Sparks, Nevada 89431
702 (359-9330)

BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: R91-11051.4 (COMPLETE)

DATE PRINTED: 18-JUN-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
Z2 RL-180 385-390			0.004			0.06	
Z2 RL-180 390-395			0.005			0.06	
Z2 RL-180 395-400			0.006			0.08	
P4 BA-93			0.050			0.08	
Z2 RL-180 400-405			0.005			0.07	
Z2 RL-180 405-410			0.005			0.07	
Z2 RL-180 410-415			0.005			0.08	
Z2 RL-180 415-420		0.009	0.010	0.12		0.10	
Z2 RL-180 420-425			0.012			0.12	
Z2 RL-180 425-430			0.014			0.11	
Z2 RL-180 430-435			0.011			0.11	
Z2 RL-180 435-440			0.004			0.17	
Z2 RL-180 440-445			0.026	0.74		0.57	
Z2 RL-180 445-450			0.009			0.14	
Z2 RL-180 450-455			0.006			0.12	
Z2 RL-180 455-460			0.006			0.10	
Z2 RL-180 460-465			0.005			0.10	
Z2 RL-180 465-470		0.011	0.012	0.02		0.12	
Z2 RL-180 470-475			0.008			0.15	
Z2 RL-180 475-480			0.012			0.11	
Z2 RL-180 480-485			0.007			0.11	
Z2 RL-180 485-490			0.006			0.11	
Z2 RL-180 490-495			0.020			0.14	
Z2 RL-180 495-500			0.006			0.08	
P4 BA-94			<0.002			<0.02	
Z2 RL-180 500-505			0.007			0.07	
Z2 RL-180 505-510			0.006			0.23	
Z2 RL-180 510-515			0.007			0.72	
Z2 RL-180 515-520			0.007			1.16	
Z2 RL-180 520-525		0.007	0.007	0.13		0.13	0.008
Z2 RL-180 525-530			0.007			0.26	
Z2 RL-180 530-535			0.007	0.47	0.44	0.45	
Z2 RL-180 535-540			0.007			0.18	
Z2 RL-180 540-545			0.008			0.29	
Z2 RL-180 545-550		.006	0.005		.15	0.13	
Z2 RL-180 550-555			0.006			0.23	
Z2 RL-180 555-560			0.006			0.29	
Z2 RL-180 560-565			0.004			0.31	
Z2 RL-180 565-570		0.007	0.007	0.22		0.20	
Z2 RL-180 570-575			0.004			0.09	

Bondar-Clegg, Inc.
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REPORT: R91-11051.4 (COMPLETE)

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SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
Z2 RL-180 575-580			0.010			0.17	
Z2 RL-180 580-585			0.003			0.39	
Z2 RL-180 585-590			0.027			0.41	
Z2 RL-180 590-595			0.028			0.05	
Z2 RL-180 595-600		0.003	0.004	0.02		0.03	
P4 BA-95			0.034			0.18	
Z2 RL-180 600-605			0.006			0.05	
Z2 RL-180 605-610			0.011			0.07	
Z2 RL-180 610-615			0.026			0.12	
Z2 RL-180 615-620		.04	0.031		.05	0.08	
Z2 RL-180 620-625		0.033	0.034	0.10		0.09	
Z2 RL-180 625-630			0.013			0.06	
Z2 RL-180 630-635			0.015			0.05	
Z2 RL-180 635-640			0.021			0.08	
Z2 RL-180 640-645			0.022			0.10	
Z2 RL-180 645-650		0.084	0.138			0.17	
Z2 RL-180 650-655			0.003			0.04	
Z2 RL-180 655-660			0.009			0.06	
Z2 RL-180 660-665		0.076	0.065			0.12	
Z2 RL-180 665-670		0.013	0.013			0.09	
Z2 RL-180 670-675		0.010	0.011	0.06	0.06	0.06	
Z2 RL-180 675-680			0.004			0.06	
Z2 RL-180 680-685			<0.002			0.08	

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Geochemical Lab Report

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DATE PRINTED: 18-JUN-91
PROJECT: ROSEBUD

SAMPLE NUMBER	ELEMENT UNITS	Au DUP OPT	Au OPT	AG DUP OPT	AG DUP OPT	Ag OPT	AU Dup OPT
RL-180 180-185			0.004			0.11	
Prep Duplicate			0.004			0.12	
RL-180 310-315			0.004			0.07	
Prep Duplicate			0.004			0.08	
RL-180 545-550			0.005			0.13	
Prep Duplicate			0.006			0.15	
RL-180 615-620			0.031			0.08	
Prep Duplicate			0.040			0.05	

Chemex Labs Inc.

Analytical Chemists * Geochemists * Registered Assayers
994 West Glendale Ave., Suite 7, Sparks,
Nevada, U.S.A. 89431
PHONE: 702-356-5395

To: LAC MINERALS U.S.A. INC

1395 GREG ST., STE 107
SPARKS, NEVADA
89431

Project :
Comments:

Certificate Date: 15-JUN-91
Invoice No. : I9116227
P.O. Number :

CERTIFICATE OF ANALYSIS A9116227

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
RL-180 045-050	208	294	0.004
RL-180 095-100	208	294	0.003
RL-180 145-150	208	294	0.003
RL-180 195-200	208	294	0.005
RL-180 245-250	208	294	0.002
RL-180 295-300	208	294	0.006
RL-180 345-350	208	294	0.004
RL-180 395-400	208	294	0.005
RL-180 445-450	208	294	0.007
RL-180 495-500	208	294	0.006
RL-180 545-550	208	294	0.004
RL-180 595-600	208	294	0.006
RL-180 645-650	208	294	0.078
RL-181 045-050	208	294	< 0.001
RL-181 095-100	208	294	< 0.001
RL-181 145-150	208	294	< 0.001
RL-181 195-200	208	294	< 0.001
RL-181 345-350	208	294	< 0.001
RL-181 595-600	208	294	< 0.001

CERTIFICATION: Handle M. Adam

RL 183

BOYLES-WELNAV
ELKO, NEVADA

GYROSCOPIC DIRECTIONAL SURVEY
BY MINIMUM CURVATURE

FOR

****
* LAC MENERALS CO. *
****

JOB NUMBER: 029-0313-12CCGY

HOLE NUMBER: RL-183

LOCATION: ROSEBUD PROPERTY

SURVEY DATE: 07-11-1991

SURVEY ENGINEER: PHIL GRAFFT

GYRO REFERENCE BEARING: 340-00

********** **********
****** DEPTH MEASURED IN FEET ******* **********
********** *** THIS DIRECTIONAL SURVEY REPORT IS ****
** CORRECT TO THE BEST OF MY KNOWLEDGE ***
COMMENTS: * AND IS SUPPORTED BY ACTUAL FIELD DATA! *
** **
** Phil Graff **
** ********** **
** COMPANY REPRESENTATIVE **
****
****

BOYLES-WELNAV
ELKO, NEVADA

JOB NUMBER: 029-0313-12CCGY HOLE NUMBER: RL-183

INRUN SURVEY
BY MINIMUM CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	INCL	DIRECTION AZIMUTH	COORDINATES NORTH/SOUTH	EAST/WEST	D-LEG /100	D-LEG /CL	STATION DISPLACEMENT DISP.		DIRECTION
50.0	49.99	0.38	-88.28	097.92	0.10 S	0.74 E	3.44	1.72	0.75	AT	097.92
100.0	99.98	1.06	-88.91	091.15	0.22 S	1.96 E	1.30	0.65	1.97	AT	096.29
150.0	149.97	1.66	-88.92	086.73	0.20 S	2.91 E	0.17	0.08	2.91	AT	093.91
200.0	199.96	2.34	-88.93	078.05	0.08 S	3.84 E	0.33	0.16	3.84	AT	091.13
250.0	249.94	3.42	-88.24	060.10	0.40 N	4.96 E	1.62	0.81	4.97	AT	085.34
300.0	299.92	5.03	-87.93	040.43	1.47 N	6.21 E	1.44	0.72	6.38	AT	076.64
350.0	349.88	6.93	-87.72	033.58	2.99 N	7.34 E	0.67	0.33	7.93	AT	067.85
400.0	399.84	8.87	-87.76	026.17	4.70 N	8.33 E	0.59	0.29	9.56	AT	060.58
450.0	449.81	10.43	-88.26	001.12	6.33 N	8.77 E	1.98	0.99	10.82	AT	054.18
500.0	499.79	11.74	-88.08	007.05	7.92 N	8.89 E	0.52	0.26	11.91	AT	048.29
550.0	549.76	13.13	-88.07	002.25	9.59 N	9.02 E	0.32	0.16	13.17	AT	043.25
600.0	599.73	14.48	-88.02	000.00	11.30 N	9.06 E	0.18	0.09	14.48	AT	038.72

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*                         ********                          *
*      THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF          *
*                         ********                          *
*   600.0 FEET EQUALS     14.48    FEET AT  038.72          *
*                         ********                          *
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RL 180

BOYLES-WELNAV
ELKO, NEVADA

GYROSCOPIC DIRECTIONAL SURVEY
BY MINIMUM CURVATURE

FOR

****
* LAC MINERALS CO. *
****

JOB NUMBER: 029-0313-12CCGY

HOLE NUMBER: RL-180

LOCATION: ROSEBUD PROPERTY

SURVEY DATE: 07-11-1991

SURVEY ENGINEER: PHIL GRAFFT

GYRO REFERENCE BEARING: 196-00

********** **********
****** DEPTH MEASURED IN FEET ******* **********
********** *** THIS DIRECTIONAL SURVEY REPORT IS ****
** CORRECT TO THE BEST OF MY KNOWLEDGE ***
COMMENTS: * AND IS SUPPORTED BY ACTUAL FIELD DATA! *
** **
** Phil Graff **
** ********** **
** COMPANY REPRESENTATIVE **
****
****

BOYLES-WELNAV
ELKO, NEVADA

JOB NUMBER: 029-0313-12CCGY HOLE NUMBER: RL-180

INRUN SURVEY
BY MINIMUM CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	INCL	DIRECTION AZIMUTH	COORDINATES NORTH/SOUTH	EAST/WEST	D-LEG /100	D-LEG /CL	STATION DISP.	DISPLACEMENT DIRECTION
50.0	50.00	0.14	-89.01	098.28	0.06 S	0.43 E	1.98	0.99	0.43	AT 098.28
100.0	99.99	0.55	-88.47	104.13	0.29 S	1.50 E	1.11	0.55	1.53	AT 100.83
150.0	149.97	1.12	-88.34	103.98	0.63 S	2.85 E	0.26	0.13	2.92	AT 102.37
200.0	199.95	1.90	-88.57	130.52	1.21 S	4.03 E	1.49	0.74	4.21	AT 106.66
250.0	249.93	2.99	-88.49	145.47	2.15 S	4.88 E	0.78	0.39	5.33	AT 113.83
300.0	299.91	4.37	-88.20	169.22	3.47 S	5.40 E	1.48	0.74	6.42	AT 122.72
350.0	349.88	6.27	-87.44	175.25	5.35 S	5.64 E	1.59	0.79	7.77	AT 133.52
400.0	399.83	8.24	-87.93	187.47	7.36 S	5.61 E	1.39	0.69	9.26	AT 142.68
450.0	449.79	10.25	-87.14	192.60	9.47 S	5.22 E	1.64	0.82	10.82	AT 151.13
500.0	499.73	12.54	-87.22	190.10	11.88 S	4.74 E	0.29	0.15	12.79	AT 158.26
550.0	549.67	14.85	-87.15	188.70	14.31 S	4.34 E	0.20	0.10	14.95	AT 163.14
600.0	599.60	17.28	-86.98	187.20	16.84 S	3.98 E	0.37	0.19	17.31	AT 166.69
650.0	649.53	19.86	-86.75	191.35	19.54 S	3.54 E	0.65	0.32	19.86	AT 169.73

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*********************************************************
*                       ********                        *
*     THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF       *
*                       ********                        *
*   650.0 FEET EQUALS    19.86   FEET AT  169.73        *
*                       ********                        *
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