

HECLA MINING COMPANY - ROSEBUD PROJECT
SOUTH ZONE BULK DENSITY RESULTS

29-Jul-96

	Hole ID	Intercept		Sect. #	Rock Formation	Type Lithology	Au (opt)	Ag (opt)	Specific Gravity (g/cc)	Bulk Density (lb/cubic ft)	Tonnage Factor (cubic ft/ton)
		From	To								
McClelland Labs 3/5/90	RE-40	263.0	263.5	250.0	LBUD	SURGE	0.001	0.00	2.04	127.3	15.7
McClelland Labs 3/5/90	RE-40	92.5	93.0	300.0	LBUD	SURGE	0.001	0.14	2.21	137.9	14.5
McClelland Labs 3/5/90	RE-41	113.0	113.5	375.0	LBUD	SURGE	0.000	0.15	2.28	142.3	14.1
McClelland Labs 3/5/90	RE-41	149.0	149.5	375.0	LBUD	SURGE	0.002	0.00	2.13	132.9	15.0
McClelland Labs 3/5/90	RE-40	457.5	458.0	175.0	LBT	PMBX	0.105	1.77	2.24	139.8	14.3
McClelland Labs 1/6/92	RL-196C	474.0	474.5	200.0	LBT	PMBX	0.038	0.62	2.03	126.7	15.8
McClelland Labs 1/6/92	RL-210C	415.0	415.4	200.0	LBT	PMBX	0.301	3.25	1.86	116.1	17.2
McClelland Labs 1/6/92	RL-210C	425.5	426.0	200.0	LBT	PMBX	0.093	4.59	2.48	154.8	12.9
McClelland Labs 3/5/90	RE-41	420.0	420.7	400.0	LBT	PMBX	0.179	1.56	2.06	128.5	15.6
McClelland Labs 3/5/90	RE-41	432.0	432.5	400.0	LBT	PMBX	0.499	37.19	2.15	134.2	14.9
McClelland Labs 3/5/90	RE-41	436.0	436.4	400.0	LBT	PMBX	0.041	0.90	2.31	144.1	13.9
McClelland Labs 1/6/92	RL-209C	550.0	550.3	500.0	LBT	PMBX	0.463	0.91	2.31	144.1	13.9
McClelland Labs 3/5/90	RE-55	515.0	515.5	650.0	LBT	PMBX	0.030	0.05	2.19	136.7	14.6
McClelland Labs 3/5/90	RE-55	400.0	400.5	650.0	LBT	PLAT	0.014	0.00	2.31	144.1	13.9
McClelland Labs 1/6/92	RL-195C	629.4	629.7	1000.0	LBT	PLAT	0.086	0.19	2.29	142.9	14.0
McClelland Labs 1/6/92	RL-209C	461.0	461.4	500.0	LBT	LST	0.115	1.64	2.34	146.0	13.7
McClelland Labs 1/6/92	RL-192C	488.4	488.8	700.0	LBT	LST	0.787	16.97	2.45	152.9	13.1
McClelland Labs 1/6/92	RL-208C	528.0	528.4	725.0	LBT	LST	0.457	8.49	2.36	147.3	13.6
McClelland Labs 1/6/92	RL-123C	547.3	547.8	800.0	LBT	LST	1.591	6.76	2.38	148.5	13.5
McClelland Labs 1/6/92	RL-193C	563.1	563.5	900.0	LBT	LST	1.678	6.33	2.10	131.0	15.3
McClelland Labs 3/5/90	RE-55	684.0	684.5	650.0	TD	RHYOLIT	0.000	0.00	2.52	157.2	12.7
McClelland Labs 2/19/91	RL-89C	606.0	606.3	1600.0	MBUD	SURGE	0.331	0.91	2.07	129.2	15.5
Average of All Samples (22)							0.310	4.20	2.23	139.3	14.4
Average of All Samples >=0.10 Au opt (11)							0.591	7.80	2.21	138.0	14.6
Average of All Samples >=0.14 Au opt (9)							0.698	9.15	2.19	136.9	14.7
Average of Host Rocks in the South Zone Chimney Area (sections 500 - 1000)							0.580	4.59	2.30	143.7	14.0
Average of Host Rocks in the South Zone Stratabound Area (sections 0 - 400)							0.179	7.13	2.16	134.9	14.9
Average of Host Rocks in All of the South Zone Area.							0.405	5.70	2.24	139.9	14.4
Average Chimney PMBX							0.247	0.48	2.25	140.4	14.3
Average Chimney PLAT							0.050	0.10	2.30	143.5	14.0
Average Chimney LST							0.926	8.04	2.33	145.1	13.8
Average Stratabound PMBX							0.179	7.13	2.16	134.9	14.9

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	Hole ID	Intercept		Rock Type			Au (opt)	Ag (opt)	ecific Gra (g/cc)	ulk Densit (lb/cubic ft)
		From	To	Section	Formation	Lithology				
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McClelland Labs 3/5/90	RE-55	684.0	684.5	650	LBT	PMBX	0.000	0.00	2.52	157.2
McClelland Labs 2/19/91 NORTH	RL-89C	606.0	606.3	1600	MBud	Surge/old	0.331	0.91	2.07	129.2
McClelland Labs 1/6/92	RL-123C	547.3	547.8	800	LBT	LST?	1.591	6.76	2.38	148.5
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GRADES
DON'T MATCH

29-Jul-96

nnage Factor
cubic ft/ton)

14.5

15.7

14.3

14.1

15.0

15.6

14.9

13.9

13.9

14.6

12.7

15.5

13.5

14.0

15.8

13.6

13.7

13.9

17.2

12.9

13.1

15.3

14.4

14.6

14.7