6000 6796

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. WW-1
AUTHOR	C. Muerhoff; S. Faircloth; C. Eppler
DATE OF DOC(S)	1994-1996
MULTI_DIST Y / N? Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Hecla Mining Co.; Rosebud Project
COMMODITY If not obvious	gold; silver
NOTES	drill logs; geology; assay; total depth 530' receipt; handwritten notes; water 18p. Note: Scan notes on folder

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 4/30/08
Initials Date

DB:
Initials Date

SCANNED:
Initials Date

Revised: 1/22/08

WW 1

6000 0796 4010

WW-1 2203705.571N

WW-2

WW-3 479,363.887S

5080.104S

Hecla
MINING COMPANY

ROSEBUD PROJECT
DIAMOND DRILL LOG

2203705.571
479,363.887
5080.104'

6000 0796

HOLE NUMBER	WW1	LOCATION	
PAGE	1 OF 5	NORTHING	
DATE	12/14	EASTING	
LOGGED BY	L.J.B.	ELEVATION	
SCALE	1"=20'	AZIMUTH	
TOTAL DEPTH	530	INCLINATION	

REMARKS RUD rig
WATER WELL
0-530 Chocolate Tuff

%REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		0-20 dk brown fine grain, volcaniclastic textures, fine-ashy, white clasts (minor)				0-20 Hem rock
		20-60 Mixed hematitic + ashy-fine grain green chips w/ hairline hem veinlets	20, 40, 60			20-60 wk alt, hairline hem veinlets/stockwork
		60-140 lt green ashy-fine grain V. clastics w/ minor hem chips w/ fine py dissem	80, 100			60-140 wk-mod alt

ANALYTICAL DATA

FROM	TO	W	ppb Au	ppm Ag	Au2	Ag2
0	10	10	<5	<.5		
10	20	10				
20	30	10				
30	40	10				
40	50	10				
50	60	10	<5	<.5		
60	70	10	<5	.5		
70	80	10	15	.6		
80	90	10	12	1.3		
90	100	10	<5	.8		

HOLE NUMBER WW11 PAGE 2 OF 5

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	ppb Au	ppm Ag	Au2	Ag2
							100	110	10	8	1.1		
							110	120	10	10	<.5		
			120				120	130	10	12	.7		
							130	140	10	77 Au.	25.9		
		140-150 50:50 brown + lt grey/v. lt green chips finely ground clastic texture, fine py disseminations	140			140-260 v. ulc chl. alt 140-150 tr drussy qtz coating (TRACE)	140	150	10	136	27.2	0.105 ppm Au 29.37 ppm Ag	
							150	160	10	102	350	opt .003 Au .86 Ag	
			160			160-170 tr ca vn	160	170	10	88	4.7		
							170	180	10	36	5.1		
		180-260 SAB, but larger chip size	180			180-190 tr ca vn	180	190	10	22	9.6		
							190	200	10	34	8.2		
			200				200	210	10	3752	19.5	.110 .1090 ~~.122~~	.57
						210-220 tr ca vn (clear)	210	220	10	14	1.7		
			220				220	230	10	12 Au.	1.4		
							230	240	10	12	9.6		
			240										

HOLE NUMBER WW-1 PAGE 3 OF 5

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
						220-230 tr gfz + ca vn							
			240				240	250	10	6	1.2		
						240-250 Tr ca vn	250	260	10	40	.8		
		260-380 fine grain cream-pink chds, clastics w/ wk hem matrix mod, fine py dissem	260			260-380 wk sil	260	270	10	264	3.0	0.008	
							270	280	10	125	1.7	0.004	
			280				280	290	10	100	1.6		
						290-300 wk gfz-py vn w/ alk sulf rim	290	300	10	155	2.6		
			300				300	310	10	128	2.8		
							310	320	10	226	2.9		
			320				320	330	10	174	2.6		
							330	340	10	244	3.5		
			340				340	350	10	122	3.9		
							350	360	10	604	2.9	.018	
			360										

HOLE NUMBER WW-1 PAGE 4 OF 5

SEC	RGD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		380 - 400 fine platy-Angular chips lt gray, white, tan chips	380			380 - 400 wk-mod sil wk alte sulf veinlets
		400 - 430 whitish fine grain Tuff w/ py dissem	400			400-430 wk Argillic w/ wk py veinlets
			420			
		430 - 530 fine-med grain Tuff w/ fine py dissem	440			470 - 510 wk argillic-sil wk Fe ox coats on frac 430-470 wk qtz veinlets (white)
			460			460-470 wk qtz veinlets poss calcopyrite
			480			480-490 wk qtz veinlets wk py veinlets
			500			

FROM	TO	W	Au	Ag	Au2	Ag2
360	370	10	100	1.6		
370	380	10	118	2.6		
380	390	10	124	2.8		
390	400	10	94	2.9		
400	410	10	38	2.6		
410	420	10	436	3.5	.013	.018 .11
420	430	10	782	3.9	.023	
430	440	10	146	2.9		
440	450	10	58	2.2		
450	460	10	52	7.5		
460	470	10	478	2.3	.014	.011 .07
470	480	10	306	3.9	.009	
480	490	10	330	0.9	.010	
490	500	10	162	1.6		

HOLE NUMBER WW-1 PAGE 5 OF 5

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		SAS					500	510	10	152	1.0		
						510 - 520 wksil	510	520	10	34	0.5		
			520				520	530	10	18	0.5		
				TD 530									

Hecla
MINING COMPANY

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	WW1	LOCATION	
PAGE 1 OF	5	NORTHING	
DATE	12/14	EASTING	
LOGGED BY	L.J.B.	ELEVATION	
SCALE	1"=20'	AZIMUTH	
TOTAL DEPTH	530	INCLINATION	

REMARKS RUD rig
WATER WELL
0-530 Chocolate Tuff

%REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		0-20 dk brown fine grain, volcaniclastic textures, fine-ashy white clasts (minor)				0-20 Hem rock
		20-60 Mixed hemititic + ashy-fine grain green chips w/ hairline hem veinlets	20, 40			20-60 wk alt, hairline hem veinlets/stockwork
		60-140 lt green ashy-fine grain V. clastics w/ minor hem chips w/ fine py dissem	60, 80, 100			60-140 wk-mod alt

ANALYTICAL DATA

FROM	TO	W	ppb Au	ppm Ag	Au2	Ag2
0	10	10	<5	<.5		
10	20	10				
20	30	10				
30	40	10				
40	50	10				
50	60	10	<5	<.5		
60	70	10	<5	.5		
70	80	10	15	.6		
80	90	10	12	1.3		
90	100	10	<5	.8		

HOLE NUMBER WW1 PAGE 2 OF 5

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		140-180 50:50 brown + lt grey/v. lt green chips finely ground clastic texture, fine py dissem	120, 140, 160, 180			140-260 v. ukchl. alt 140-150 tr. drussy qtz coating (Trace)
		180-260 SAB, but larger chip size	200, 220, 240			160-170 tr ca vn 180-190 tr ca vn 210-220 tr ca vn (clear)

ANALYTICAL DATA

FROM	TO	W	ppb Au	ppm Ag	oz/t Au2	Ag2
100	110	10	8	1.1		
110	120	10	10	<.5		
120	130	10	12	.7		
130	140	10	77 Au.	25.9		
140	150	10	136	27.2		
150	160	10	102	35.0		
160	170	10	88	4.7		
170	180	10	36	5.1		
180	190	10	22	9.6		
190	200	10	34	8.2		
200	210	10	3752	19.5	.122	
210	220	10	14	1.7		
220	230	10	12 Au.	1.4		
230	240	10	12	9.6		

HOLE NUMBER WW-1 PAGE 3 OF 5

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		260-380 fine grain cream-pink chips, clastics w/ wk hem matrix mod, fine py dissem	240, 260, 280, 300, 320, 340, 360			220-230 tr gte + ca vn 240-250 Tr ca vn 260-380 wk sil 250-300 wk gte-py vn w/ alte sulf rim

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2	Ag2
240	250	10	6	1.2		
250	260	10	40	.8		
260	270	10	264	3.0		
270	280	10	125	1.7		
280	290	10	100	1.6		
290	300	10	188	2.6		
300	310	10	128	2.8		
310	320	10	226	2.9		
320	330	10	174	2.6		
330	340	10	244	3.5		
340	350	10	122	3.9		
350	360	10	604	2.9		

HOLE NUMBER WW-1 PAGE 4 OF 5

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		380 - 400 fine platy-angular chips lt gray, white, tan chips	380			380 - 400 wk-mod sil wk alte sulf veinlets
		400 - 430 white fine grain Tuff w/ py dissem	400			400-430 wk Argillic w/ wk py veinlets
		430 - 530 fine-med grain Tuff w/ fine py dissem	420			470 - 510 wk argillic-sil wk Fe ox coats on fracs
			440			430-470 wk gtz vn (white)
			460			460-470 wk gtz vn poss calcopyrite
			480			480-490 wk gtz vn wk py veinlets
			500			

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	Ag2
360	370	10	100	1.6		
370	380	10	118	2.6		
380	390	10	124	2.8		
390	400	10	94	2.9		
400	410	10	38	2.6		
410	420	10	436	3.5		
420	430	10	782	3.9		
430	440	10	146	2.9		
440	450	10	58	2.2		
450	460	10	52	7.5		
460	470	10	478	2.3		
470	480	10	306	3.9		
480	490	10	330	0.9		
490	500	10	162	1.6		

HOLE NUMBER WW-1 PAGE 5 OF 5

REC	RQD	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2	Ag2
		SAS					500	510	10	152	1.0		
						510 - 530 wksil	510	520	10	34	0.5		
			520				520	530	10	18	0.5		
				TD 530									

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

HOLE NUMBER WW-1
PAGE 1 OF 3
DATE 3/13/96
LOGGED BY KBA
TOTAL DEPTH 530'

LOCATION
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MATRIX %	SILICIFICATION CLASTS %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	AG-SULF %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MOISTURE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
10		TB/QAL	BARGER FM, OR BARGER QAL. HETEROLITHIC VOLCANIC MATRIX SUPPORTED BRECCIA. CLAST CONSIST OF LATITIC-ANDESITIC FLOW OR TUFF? DISSEMINATED HEMATITE REDISH-BROWN	MH	CLASTIC						<									PRIMER X													✓								
20		TB/QAL		MH	CLASTIC						<									X													✓								
30		TB/QAL		MH	CLASTIC						<									X													✓								
40		TB/QAL		MH-MS	CLASTIC						<									X													✓								
50		TB/QAL		MH-MS	CLASTIC						<				X				X					X			100						✓	✓		✓					
		TB/QAL		MH-MS	CLASTIC						X				X				X					X			100						✓	✓		✓					
60		?	FINE-GRAINED, SLIGHTLY PORPHYRITIC. PROPYLITIZED ASH-FLOW TUFF? INCREASED EUHEDRAL PYRITE DISSEMINATIONS & MINOR EUHEDRAL PYRITE VEINLETS. THE PYRITE HAS BEEN TARNISHED & SOME POSSIBLE COPPER CONTENT PYRITE OR CPY PRESENT. FELDSPAR PHENOS HAVE BEEN REPLACED BY LIGHT GREENISH CLAY. SOME INTERVALS CONTAIN LATH LIKE PHENOS THAT LOOK LIKE MONZONITE MICROCLINE LT GREEN	MS	SP+S						X				X								X			100										X						
70		DACITE?		MS	↓						X					X								X			100							X							
80				MS	↓						X					X								X			99	TR						X							
90				MS	↓						X					X								X			99	TR						X							
100			MINOR POTASIC ALT.	MS	↓						X					X								X			99	TR						X							
110			PG SP ASH-FLOW-SAA. PROYLITIZATION DECREASES POTASIC ALT INCREASES - POSSIBLY FOLK, DISS PY INCREASES.	MS	↓						X					X			X					X			99	1						X							
120				MS	↓						X					X			X					X			99	1						X							
130				MS	↓						X					X			X					X			98	2						X							
140				MS	↓						X					X			X					X										X							
150			SiO2 STOCKWORK (MINOR Bx) PRESENT. MINOR OPEN SPACE.	MS	↓	X					X					X			X				1%	Qtz	X										X							
160				MS	↓	X					X					X			X				1%	Qtz	X										X							
170				MS	↓	X					X					X			X				1%	Qtz	X										X							
180			MINOR DARK GREEN GLASSY MINERAL?	MS	↓	X					X					X			X				1%	Qtz	X										X							
190				MS	↓	X					X					X			X				1%	Qtz	X										X							
200				MS	↓	X					X					X			X				1%	Qtz		X		98	2						X							

Hecla MINING COMPANY

ROSEBUD PROJECT
DRILL LOG

HOLE NUMBER WW-1
PAGE 2 OF 3
DATE 3/13/96
LOGGED BY KAA
TOTAL DEPTH 530'

LOCATION
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MATRIX %	SILICIFICATION CLASTS %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	AG-SUL %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MIXCURE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
210		?bozer?	FG, SLIGHTLY PORPHYRITIC, POTASSICALLY? & PROPYLITICALLY ALTERED, ASH-FLOW TUFF? PRESENCE OF LK GREEN MINERAL INCREASES	MS	SP+S	X					X				X			X				1%	Qtz	X			98	2						X							
220				MS		X					X				X			X				1%		X			98	2						X							
230				MS		X					X				X			X				1%		X			98	2						X							
240				MS-MH		X					X				X			X				3%		X			95	5?						X							
250				MS-MH		X					X				X			X				3%		X										X							
260			SILICA ± Py ± CPY STOCK WORK ON VEINLETS INCREASES MINOR BX TEXTURES	MS-MH							X				X			X				3%		X										X							
270				MS-MH		X					X				X			X				3%		X										X							
280				MS-MH		X					X				X			X				3%		X										X							
290				MS-MH		X					X				X			X				3%		X										X							
300				MS-MH		X					X				X			X				3%		X										X							
310			INCREASED BX TEXTURE DECREASED PROP.	MH-H			X				X				X			X				5%		X										X							
320				MH-H			X				X				X			X				5%		X										X							
330				MH-H			X				X				X			X				5%		X										X							
340				MH-H			X				X				X			X				5%		X										X							
350				MH-H			X				X				X			X				5%		X										X							
360				MS-MH		X					X				X			X				3%		X										X							
370				MS-MH		X					X				X			X				3%		X										X							
380				MS-MH		X					X				X			X				3%		X										X							
390				MS-MH		X					X				X			X				3%		X										X							
400				MS-MH		X					X				X			X				3%		X										X							

Hecla MINING COMPANY

ROSEBUD PROJECT DRILL LOG

HOLE NUMBER WW-1
PAGE 3 OF 3
DATE 3/13/96
LOGGED BY KLA
TOTAL DEPTH 530'

LOCATION
NORTHING
EASTING
ELEVATION
AZIMUTH
INCLINATION

AREA
DRILLING CO.
RIG TYPE
HOLE SIZE
DOWN HOLE SURVEY BY

FEET	GRAPHIC	ROCK TYPE	LITHOLOGY	HARDNESS	TEXTURE	ALTERATION: SILICIFICATION 5%	SILICIFICATION 15%	SILICIFICATION +25%	SILICIFICATION MATRIX %	SILICIFICATION CLASTS %	ARGILLIC 5%	ARGILLIC 15%	ARGILLIC +25%	ARGILLIC TYPE	PROPYLITIC % CHLORITE	PROPYLITIC % CALCITE	POTASSIC % K-SPAR	POTASSIC % ALUNITE	OXIDATION 5%	OXIDATION 15%	OXIDATION +25%	VIENING %	VIENING TYPE	MINERALIZATION: SULFIDES 5%	SULFIDES 15%	SULFIDES +25%	PY %	CPY %	MAR %	AG-SULF %	STIBNITE %	BARITE %	METALLURGY: OXIDE	SULF	CARBON	MIXTURE	ANALYTICAL DATA: FROM	TO	W	Au	Ag
410		?DOZER?	FG, SLIGHTLY PORPHYRITIC POTASSICALLY ALT? ASH-FLOW TUFF?	MS-MH	SP-S	X					X				X			X				3	QTZ	X			95	5						X							
420				MS-MH		X					X				X			X				3		X										X							
430				MS-MH		X					X				X			X				3		X										X							
440		?	POSSIBLE STRUCTURE: FG TUFF LOOSES PORPHYRITIC TEXTURE - BECOMES DOMINANTLY SUGARY	MS-MH		X					X				X			X	X					X									X	X		X					
450			POSSIBLE ROCK TYPE CHANGE?	MS-MH		X					X				X			X	X					X									X	X		X					
460			NON-PORPHYRITIC FG ASH TUFF?	MS-MH		X					X				X			X	X					X									X	X		X					
470				MS-MH	S	X					X				X			X	X					X			95	5					X	X		X					
480			ROSENOPYRITE PRESENT	MS-MH		X					X				X			X	X						X		90	ARSENO 10					X	X		X					
490				MS-MH		X					X				X			X	X						X		95	5					X	X		X					
500				MS-MH		X					X				X			X	X						X		95	5					X	X		X					
510				MS-MH		X					X				X			X	X						X		90	10					X	X		X					
520				MS-MH		X					X				X			X	X						X		95	5					X	X		X					
530				MS-MH		X					X				X			X	X						X		95	5					X	X		X					
TD			TD @ 530'																																						

ANALYSIS REPORT

American Assay Laboratories

P.O. BOX 71060
RENO, NV,,U.S.A.,
Ph.1-702-356-0606, Fax.1-702-356-1413
Telex:

HECLA MINING CO.

COPIES TO : CHARLIE MUERHOFF
:
:
:

CLIENT REFERENCE No: WW-1 RECEIVED : 2/08/94

LABORATORY JOB No. : SP030252 REPORTED : 18/08/94

SAMPLE TYPE : No. SAMPLES : 53

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
AuGRAV	GRAV	15%	OPT	0.001
AuII	RESPLIT	15%	OPT	0.001
Ag	D210	10%	ppm	0.5

SIGNATORY : Sue Faircloth M.S.

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : WW-1
JOB NUMBER : SP030252
REPORTED : 18/08/94

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	AuGRAV GRAV OPT	AuII RESPLIT OPT	Ag D210 ppm
WW-1 000-010	<5				<0.5
WW-1 010-020	<5				<0.5
WW-1 020-030	<5	<5			<0.5
WW-1 030-040	<5				<0.5
WW-1 040-050	<5				<0.5
WW-1 050-060	<5				<0.5
WW-1 060-070	<5				0.5
WW-1 070-080	18				0.6
WW-1 080-090	12				1.3
WW-1 090-100	<5				0.8
WW-1 100-110	8				1.1
WW-1 110-120	10				<0.5
WW-1 120-130	12				0.7
WW-1 130-140	80	74			25.9
WW-1 140-150	136				27.2
WW-1 150-160	102				35.0
WW-1 160-170	88				4.7
WW-1 170-180	36				5.1
WW-1 180-190	22				9.6
WW-1 190-200	34				8.2
WW-1 200-210	3752		0.122	ISF	19.5
WW-1 210-220	14				1.7
WW-1 220-230	14	10			1.4
WW-1 230-240	12				9.6
WW-1 240-250	6				1.2

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : WW-1
JOB NUMBER : SP030252
REPORTED : 18/08/94

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	AuGRAV GRAV OPT	AuII RESPLIT OPT	Ag D210 ppm
WW-1 250-260	40				0.8
WW-1 260-270	264				3.0
WW-1 270-280	122	138			1.7
WW-1 280-290	100				1.6
WW-1 290-300	188				2.6
WW-1 300-310	124				2.8
WW-1 310-320	226				2.9
WW-1 320-330	174				2.6
WW-1 330-340	244				3.5
WW-1 340-350	122				3.9
WW-1 350-360	604				2.9
WW-1 360-370	100				2.2
WW-1 370-380	118				7.5
WW-1 380-390	124				2.3
WW-1 390-400	94				3.9
WW-1 400-410	38				0.9
WW-1 410-420	436				1.6
WW-1 420-430	782				2.2
WW-1 430-440	146				26.2
WW-1 440-450	58				13.3
WW-1 450-460	54	50			1.2
WW-1 460-470	478				22.8
WW-1 470-480	306	286			1.5
WW-1 480-490	330				1.7
WW-1 490-500	162				1.0

AMERICAN ASSAY LABORATORIES
ANALYSIS REPORT

American Assay Laboratories

CLIENT : HECLA MINING CO.
PROJECT : ROSEBUD
REFERENCE : WW-1
JOB NUMBER : SP030252
REPORTED : 18/08/94

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	AuGRAV GRAV OPT	AuII RESPLIT OPT	Ag D210 ppm
WW-1 500-510	152				1.0
WW-1 510-520	34				0.5
WW-1 520-530	18				0.5

WHITE—DIVISION OF WATER RESOURCES
CANARY—CLIENT'S COPY
PINK—WELL DRILLER'S COPY

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY
Log No.
Permit No.
Basin

NOTICE OF INTENT NO. 26863

1. OWNER Hecla Mining
MAILING ADDRESS P. O. 1861
Lovelock, NV 89419

ADDRESS AT WELL LOCATION Rosebud Mine
55 miles north of Lovelock

2. LOCATION SE ¼ NE ¼ Sec. 24 T. 34 (N)/S R. 29 E. Pershing County
PERMIT NO. 60131T (Issued by Water Resources) | Parcel No. | WW#1 (Subdivision Name)

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other

4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal/Industrial ☐ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☒ Rotary ☐ RVC
☐ Air ☐ Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
allivian				
silt, gravel		0	18	18
gray tuff		18	534	516
no change in				
formation from				
18 to 534 ft				
water in random				
fractures from				
145 to 534				

Date started July 23, 1994
Date completed July 29, 1994

7. WELL TEST DATA
TEST METHOD: ☐ Bailer ☒ Pump ☐ Air Lift

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
30		8 hrs

8. WELL CONSTRUCTION
Depth Drilled 534 Feet Depth Cased 518 Feet

HOLE DIAMETER (BIT SIZE)

		From	To
12 ½ Inches		0 Feet	534 Feet
Inches		Feet	Feet
Inches		Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
8 5/8	22.36	.250	+2	120
8 5/8	22.36	.250	160	200
8 5/8	22.36	.250	220	260

Perforations:
Type perforation mill slot-triple row
Size perforation 3 x 1/8
From 120 feet to 160 feet
From 200 feet to 220 feet
From 260 feet to 280 feet
From 320 feet to 380 feet
From 420 feet to 460 feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 55
Placement Method: ☐ Pumped ☒ Poured
Seal Type: ☐ Neat Cement ☒ Cement Grout ☐ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 55 feet to 518 feet

9. WATER LEVEL
Static water level 45 feet below land surface
Artesian flow G.P.M. P.S.I.
Water temperature norm °F Quality goodd

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Humboldt Drilling & Pump Co. Inc. (Contractor)
Address P. O. Box 590 (Contractor)
Winnemucca, NV 89446
Nevada contractor's license number issued by the State Contractor's Board 015234
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1195
Signed C. C. Epler (By driller performing actual drilling on site or contractor)
Date 9-04-94

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

WHITE—DIVISION OF WATER RESOURCES
CANARY—CLIENT'S COPY
PINK—WELL DRILLER'S COPY

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY
Log No.
Permit No.
Basin

NOTICE OF INTENT NO. 26863

1. OWNER Hecla Mining
MAILING ADDRESS P.O. Box 1861
Lovelock, NV 89419

ADDRESS AT WELL LOCATION Rosebud Mine
55 miles north of Lovelock

2. LOCATION SE ¼ NE ¼ Sec. 24 T. 34 N/S R. 29 E. Pershing County
PERMIT NO. 601311 (Issued by Water Resources) | Parcel No. | WW#1 (Subdivision Name)

3. WORK PERFORMED
☐ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other

4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal/Industrial ☐ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☒ Rotary ☐ RVC
☐ Air ☐ Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness

Date started July 23, 19 94
Date completed July 29, 19 94

7. WELL TEST DATA

TEST METHOD: ☐ Bailer ☐ Pump ☐ Air Lift

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)

8. WELL CONSTRUCTION
Depth Drilled ____ Feet Depth Cased ____ Feet

HOLE DIAMETER (BIT SIZE)

	From	To
Inches	Feet	Feet
Inches	Feet	Feet
Inches	Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
8 5/8	22.36	.250	280	320
8 5/8	22.36	.250	380	420
8 5/8	22.36	.250	460	500

Perforations:
Type perforation mill slot-triple row
Size perforation 3 x 1/8
From 500 feet to 518 feet
From ____ feet to ____ feet
From ____ feet to ____ feet
From ____ feet to ____ feet
From ____ feet to ____ feet

Surface Seal: ☐ Yes ☐ No
Depth of Seal
Placement Method: ☐ Pumped ☐ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☐ Concrete Grout

Gravel Packed: ☐ Yes ☐ No
From ____ feet to ____ feet

9. WATER LEVEL
Static water level ____ feet below land surface
Artesian flow ____ G.P.M. ____ P.S.I.
Water temperature ____ °F Quality

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.

Name Humboldt Drilling & Pump Co. Inc. (Contractor)
Address P.O. Box 590 (Contractor)
Winnemucca, NV 89446

Nevada contractor's license number issued by the State Contractor's Board 015234
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1195

Signed C. C. Gale (By driller performing actual drilling on site or contractor)
Date 9-24-94

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627