6000 0929

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. RS-D369-99
AUTHOR	B. Morris
DATE OF DOC(S)	1999
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Hecla Mining Co.
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; [redacted]; total depth 465' receipt; handwritten notes; photographs 46p.

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:	DP	5/12/08
DB:	Mah	
SCANNED:		

Revised: 1/22/08

RS - D369 - 99

60000929 4010

369

- quartz, chalcedony, silicification 735
- faults, fractures 741
- FeOx 745½
- sulfide 745
- calcite, carbonate 741½
- argillization, white clays
- propylitization 738½
- potassic alteration
- chlorite, chloritic clays 738

6000 0929

Hecla
MINING COMPANY

ROSEBUD PROJECT
DIAMOND DRILL LOG

HOLE NUMBER	RS-D-369-99	LOCATION	
PAGE 1 OF		NORTHING	
DATE	12/1/99	EASTING	
LOGGED BY	PTL	ELEVATION	
SCALE	1" = 10'	AZIMUTH	
TOTAL DEPTH	465	INCLINATION	

REMARKS
268 - 465 sample whole core
remainder not sent to lab.

LITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
TOS	O	TOS 0 - 274.5 Mottled Dark Greenish Brown, Grey and Red-brown slightly hard. Clast supported Pebble conglomerate Epiclastic. Clasts variable from Sand to 1".	10 20 30 40 50	HD	0-92 Minor Jointing. rare Calcite filled Joints.	0-92' Unaltered to slight Propylitic. Some ox in matrix and clasts.

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	A

HOLE NUMBER RS-D-369-99 PAGE 2 OF 7

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
TOS	O	0-274.5 TOS										
			60									
			70									
			80									
		92	90			92-234						
	R	Becomes mottled med and Lt Green				Becomes moderatly Propylitized						
			100		100-107 Rock becomes slightly Sil. with open Joints with Drusy qtz coating and Pyrite xtals ± marc.							
			110									
			120									

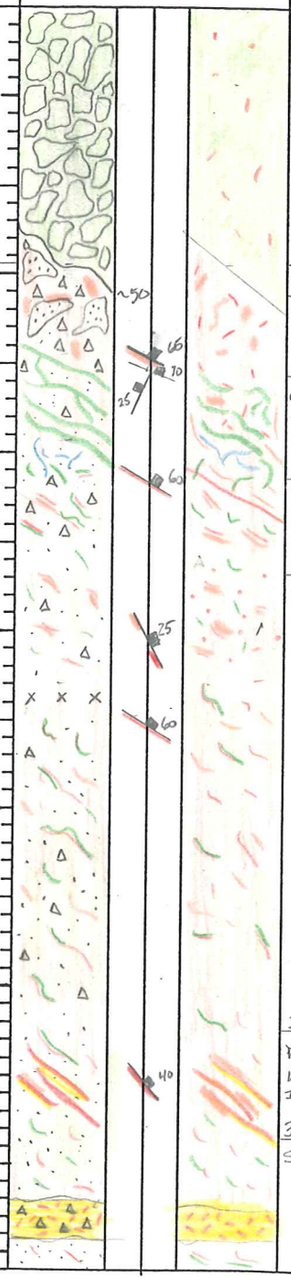
HOLE NUMBER RS-0-369-99 PAGE 3 OF

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
TOS	R	0-274.5 TOS	130, 140, 150, 160, 170, 180, 190		180 Joint with Chloritic Coating	145-274.5 Disseminated V. fine xtalline pyrite 1-2%						

HOLE NUMBER BS-0-369-99 PAGE 4 OF

ITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
TOS	R	0-274.5 TOS	200, 210, 220, 230, 240, 250, 260			232-237 Bleached zone.						

HOLE NUMBER BS-D-369-99 PAGE 5 OF 7

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
TOS	R	0-274.5 TOS Continues	270			260-274.5 Moderately to Strongly Propylitized. Rare dissem. Pyr. xtals
		FGM 274.5 - 356 Pinkish beige to Greenish beige, slightly hard. Some v. faint flow banding.	280 290 300 310 320 330		274.5 - 279.9 Alternately - Crackle and Mosaic Breccia 279.9 - 284.4 Closely fractured with rare Bxa. fract. filled with Green Hrd. altered clay ± w.c. ± marc. 288 - 291.5 less fracturing and inc. Bxa. 291.5 - 298 Decreasing Fractures and Bxa. Dissem. microxtals of Marcasite 2-3%. 1' rubble zone at bottom. 319 - 321.5 Fracture swarm. 2 open (1/4") with w.c. and Marc blades. ± calcite and Silica. 321.5 - 327 Same as 298-319	274.9 - 279.9 Weakly to Mod. argillized Marc Present in Matrix 1-2% Minor w.c. 1-2% dissem. Pyrite xtals 284.4 - 288 Same as 279.9-284.4 298 - 319 Fractured 5-10 / ft. marcasite coated and filled. ± w.c. ± calcite also chlorite coated alternately Bx'iated. ± Hrd altered Clay 327 - 328.7 Silica healed bxa. 5-10% marc Some open space ± w.c. Druser Qtz coating on open vugs

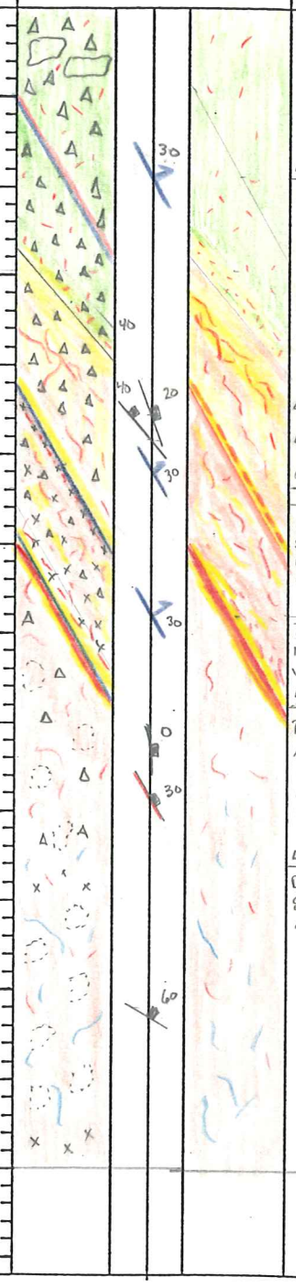
ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
268	274.5		.004	.021	
274.5	279.9		.004	.063	
279.9	284.4		.002	.062	
284.4	288		.002	.053	
288	291.5		.007	.091	
291.5	298		.005	.075	
298	302		.006	.081	
302	307		.009	.102	
307	312		.014	.111	
312	319		.023	.152	
319	321.5		0.100	.236	
321.5	327		.060	.142	
327	328.7		0.342	.460	

HOLE NUMBER _____ PAGE 6 OF 7

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
		FGM Continues 274.5 - 356	340 350	60 60 50	328.7 - 332.7 Closely fractured. Some silica in fracture voids. ‡ marc & w.c. Some hrd. altered Grn. Clay Dk Green chlorite coating on fract. 332.7 - 356 Less closely fractured. ~5-10/ft at 60-70° to ca. fractures are coated with chlorite with marc. ‡ calcite and w.c. Some zones of brecciation Some fract. filled with hrd altered clasts.	
		LST 356 - 376.8 Pinkish beige to Greenish beige. Average hardness. Fine-Grained with spotted texture.	360 370	70 20	356 - 376.8 Fractures with calcite and marc and chlorite ~ 3-5/ft. as described at right → Some zones of mosaic bxa.	357 Joint - (TYP) 1/16 - 1/8 with Chlorite coating and Pyrite/marc filling ‡ Calcite ~ 2-5/ft. Rock is Slightly Propylitized and weakly argillized. Vesicles are filled with Pyrite and have a bleached halo.
		TOS 376.8 - Mottled Light to dark Green. Slightly hard to average epiclastic. volcanics. Conglomerate - clast supported angular to subangular clasts sand to 1".	380 390	55	376.8 - Tos. Mod. to Str. Propylitized. Some marcasite and dissem. Micro-xtalline Pyrite	376.8 - 381.6 Milled bxa. Moderately to Strongly Propylitized. ~5% diss. Pyrite Some marcasite.

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
328.7	332.7		.087	.154	
332.7	338		.200	.32	
338	343		.151	.20	
343	348		.167	.21	
348	353		.083	.154	
353	356		.046	.14	
356	361		.024	.152	
361	366	↑ Submitted 12/1	.013	.093	
366	371		.006	0.08	
371	376.8		0.017	0.09	
376.8	381.6		Ø	.03	
381.6	388		Ø	.03	
388	393		0.003	0.04	
393	398		Ø	.01	
398			Ø	.02	

HOLE NUMBER RS-D369-99 PAGE 7 OF 7

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
			410, 420, 430, 440, 450, 460		409.5 - 434 Fault. Hanging wall is 1/4" Graphitic Clay Gouge with 4" of Green Clay. Milled Bxa TOS to 495.5 then Bx'ated Dozer with weak Silicification to footwall at 434. TOS weakly Silicified 495 to 495.5 with some Open vugs with marc blades. 421.8 - 425.8 Mosaic to milled Dozer Small 1/4" Dk silica/Graphitic Veinlets more Marc blades 1 to 1 rare w.c. Weakly Silicified. 426.8 - 426.5 Dark Grey hyd. Bxa. ending in 1" rubble zone of clasts of Same Vein 1/4" in matrix of w.c. 429.5 - 433 Brecciated dozer cont. less Graphitic /Si. Veins. rubble to milled with moderate to Strong argillization and w.c. in matrix. Some weakly Silicified zones and rare marc. 434 - 439 Dozer. Moderately argillized. Some fractured to rubble. ± marc on fracture sfc.	409.5 - 414.9 Milled TOS. Rock is nearly all Matrix with v. few clasts. Some Marcasite. Zone of moderate Silicification (414.9 - 415.8) with small open vugs with bladed marc. 414.9 - 426 Bx'ated dozer weakly silicified with high angle 0-10° Dark Grey Graphitic sulfide Veins. 415.8 - 418 Milled Dozer wk'ly SiO_2. SO_2 Matrix Partially replaced by Clay 2-5% marc. Some open vugs with Drusy Si. coating 418 - 421.8 Same w high angle (0-10°) Dk Grey Silica/Clay sulfide? vein. less marc on fracture sfc. Rare w.c. on frac. 426.5 - 429.5 Bx'ated dozer cont. with Some rubble with clay coating /matrix Some silica matrix mosaic to milled bxa. Some Dk Grey Graphitic sulfide and Si. Vein at high angle 0-10° up to 1" wide and broken in rubble zone area and Ground to Stain matrix clasts Same w.c. 433 - 434 Milled Dozer w/ mod. argillization less Silicification. 20-25% Graphitic Sulfides. with fault Gouge at bottom with 2 inch zone of Silicification with 40% aphanitic sulfides in blebs - Ptr. and Marc. 439 - 465 Dozer - weakly to mod. argillized Some areas fractured to rubble. ± marc on fract. sfc. Some calcite Veins inc. to bottom of hole.

Dozer

SRF

415.8 - 465

Lt Pinkish Beige to white. average hardness some slightly hard zones. Aphanitic w/ "Ghost" clasts (flow brecciated)

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
398	405				
405	409.5		Ø	.03	
409.5	414.9		Ø	.03	
414.9	415.8		0.012	.09	
415.8	418		0.002	0.09	
418	421.8		0.002	0.09	
421.8	425.3		0.002	0.05	
425.3	426.5		0.005	0.08	
426.5	429.5		0.002	0.06	
429.5	433		0.002	0.06	
433	434		0.005	0.08	
434	439		Ø	0.02	
439	444		Ø	0.02	
444	450		0.001	0.01	
450	458		Ø	0.01	
458	465		Ø	0.03	

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D369-99 DATE: 12/3/99 LOGGED BY: PTC PAGE 1 OF

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
0	10	87	87	87										
10	18	80	80	80										
18	28	100	100	100										
28	38	99	99	99										
38	48	98	98	98										
48	58	99	99	99										
58	68	97	97	97										
68	78	100	100	100										
78	88	98	98	98										
88	98	99	99	97										
98	108	95	97	95										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D 369-99 DATE: LOGGED BY: DK PAGE 2 OF

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
108	118	98	98	98										
118	128	99	99	99										
128	138	99	99	95										
138	148	100	100	100										
148	158	98	98	98										
158	168	100	100	100										
168	178	99	99	99										
178	188	98	98	98										
188	198	102	102	102										
198	208	99	99	99										
208	218	90	104	45										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # _____ DATE: _____ LOGGED BY: _____ PAGE 3 OF _____

DRILL RUN		SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO				DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
218	228	98	98	98										
228	238	90	90	90										
238	248	70	100	70										
248	258	101	101	101										
See nxt sht.														

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D-369-99 DATE: 12/1/99 LOGGED BY: PTR PAGE 4 OF

DRILL RUN		SOLID CORE	TOTAL CORE	RQD	ROCK STRENGTH		FRACTURE DATA				DENSITY DATA			
FROM	TO	RECOVERY (%)	RECOVERY (%)		DOWNHOLE DEPTH	POINT LOAD INDEX (psi)	FRACTURE DENSITY/FT.	AVG. ANGLE TO C.A.	ROUGHNESS	INFILL	DOWNHOLE DEPTH	SAMPLE WEIGHT (g)	DISPLACEMENT (cc)	DENSITY (g/cc)
		6.9	6.9	6.9										
258	268	103	103	107										
268	278	99	99	89										
278	288	90	95	90										
288	298	85	100	79										
298	302	40	100	25										
302	312	75	100	54										
312	318	75	100	25										
318	328	75	92	52										
328	338	95	95	84										
338	348	100	101	72										
348	358	98	98	82										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D-369-99 DATE: 12/1/99 LOGGED BY: PTL PAGE 5 OF

DRILL RUN FROM	DRILL RUN TO	SOLID CORE RECOVERY (%)	TOTAL CORE RECOVERY (%)	RQD	ROCK STRENGTH DOWNHOLE DEPTH	ROCK STRENGTH POINT LOAD INDEX (psi)	FRACTURE DATA FRACTURE DENSITY/FT.	FRACTURE DATA AVG. ANGLE TO C.A.	FRACTURE DATA ROUGHNESS	FRACTURE DATA INFILL	DENSITY DATA DOWNHOLE DEPTH	DENSITY DATA SAMPLE WEIGHT (g)	DENSITY DATA DISPLACEMENT (cc)	DENSITY DATA DENSITY (g/cc)
358	368	99	98	90										
368	378	100	100	40										
378	388	100	100	35										
388	398	100	100	Ø										
398	408	90	98	Ø										
408	418	90	97	19										
418	426.5	90	95	71										
426.5	433	100	100	Ø										
433	443	80	100	10										
443	450	20	100	Ø										
450	458	80	100	62										
458	465	45	80	36										

SAMPLE NO	oz/ton Gold	oz/ton FA/Gold	oz/ton Gold Rerun	oz/ton Silver	oz/ton FA/Silver
RS-D369-99 268'-274.5'	0.004			0.021	
RS-D369-99 274.5'-279.9'	0.004			0.063	
RS-D369-99 279.9'-284.4'	0.002			0.062	
RS-D369-99 284.4'-288'	0.002			0.053	
RS-D369-99 288'-291.5'	0.007			0.091	
RS-D369-99 291.5'-298'	0.005			0.075	
RS-D369-99 298'-302'	0.006			0.081	
RS-D369-99 302'-307'	0.009			0.102	
RS-D369-99 307'-312'	0.014			0.111	
RS-D369-99 312'-319'	0.023			0.152	
RS-D369-99 319'-321.5'	0.100	0.110		0.236	0.318
RS-D369-99 321.5'-327'	0.060	0.062		0.142	0.159
RS-D369-99 327'-328.7'	0.342	0.663	0.749	0.460	0.845
RS-D369-99 328.7'-332.7'	0.087	0.095		0.154	0.170
RS-D369-99 332.7'-338'	0.200	0.176		0.320	0.300
RS-D369-99 338'-343'	0.151	0.134		0.204	0.191
RS-D369-99 343'-348'	0.167	0.160		0.205	0.292
RS-D369-99 348'-353'	0.083	0.100		0.154	0.253
RS-D369-99 353'-356'	0.046	0.046		0.142	0.276
RS-D369-99 356'-361'	0.024			0.152	
RS-D369-99 361'-366'	0.013			0.093	
STD 68647	0.060	0.064		1.020	1.343

SAMPLE NO	oz/ton Silver Rerun
RS-D369-99 268'-274.5'	
RS-D369-99 274.5'-279.9'	
RS-D369-99 279.9'-284.4'	
RS-D369-99 284.4'-288'	
RS-D369-99 288'-291.5'	
RS-D369-99 291.5'-298'	
RS-D369-99 298'-302'	
RS-D369-99 302'-307'	
RS-D369-99 307'-312'	
RS-D369-99 312'-319'	
RS-D369-99 319'-321.5'	
RS-D369-99 321.5'-327'	
RS-D369-99 327'-328.7'	1.29
RS-D369-99 328.7'-332.7'	
RS-D369-99 332.7'-338'	
RS-D369-99 338'-343'	
RS-D369-99 343'-348'	
RS-D369-99 348'-353'	
RS-D369-99 353'-356'	
RS-D369-99 356'-361'	
RS-D369-99 361'-366'	
STD 68647	

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES
840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Brian Morris
Hecla (Rosebud Mine)
P.O. Box 2610
Winnecmucca, NV 89446 US

Invoice No: 33100197
Invoice Date: 12/10/99
JobNo: 99-46-23
Account No: 00007292

Client PO: RS-D369-99

INVOICE

Terms: Net 30 days

Item Description	Qty	Unit Price	Amount
Sample Preparation Core 11-15 Lbs	21	$2.58	$54.18
Gold and Silver FA/AA/AAS	22	$6.50	$143.00
Gold and Silver Fire Assay	10	$7.00	$70.00

PLEASE REMIT TO:

Inspectorate America Corp.
P.O. Box 201901
Houston, TX 77216-1901

Sub Total:	**$267.18**
Discount:	**$0.00**
Discounted Total:	**$267.18**
Add'l Discount:	**$0.00**
Final Total:	**$267.18**

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES

840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Certificate of Analysis

DATE: Tuesday, December 07, 1999

JOB NO: 99-46-23

CLIENT: Hecla (Rosebud Mine)
P.O. Box 2610
Winnecmucca, NV 89446 US

INVOICE NO: 33100197

CLIENT ORDER NO: RS-D369-99

REPORT ON: 22 Core

SUBMITTED BY: Brian Morris

DATE RECIEVED: Wednesday, December 01, 1999

ANALYSES: Gold, FA/Gold, Gold Rerun, Silver, FA/Silver, Silver Rerun

ANALYTICAL METHODS: AA, Fire Assay, Fire/AA

REMARKS:

CC: RMG File

E-MAILED TO:

All values are reported in parts per million unless specified otherwise. A minus sign (–) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND=None Detected 1 ppm=0.0001% Troy oz./ton=34.286 ppm 1 ppm=0.0292 Troy oz./ton

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of rocks or minerals collected by the prospective investor or by a qualified person selected by him.

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES
840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Brian Morris
Hecla (Rosebud Mine)
P.O. Box 2610
Winnecmucca, NV 89446 US

Client PO:

Invoice No: 33100206
Invoice Date: 12/13/99
JobNo: 99-46-35
Account No: 00007292

INVOICE

Terms: Net 30 days

Item Description	Qty	Unit Price	Amount
Sample Preparation Core 11-15 Lbs	22	$2.58	$56.76
Gold and Silver FA/AA	23	$6.50	$149.50
Gold and Silver Fire Assay	1	$7.00	$7.00

PLEASE REMIT TO:

Inspectorate America Corp.
P.O. Box 201901
Houston, TX 77216-1901

Sub Total:	**$213.26**
Discount:	**$0.00**
Discounted Total:	**$213.26**
Add'l Discount:	**$0.00**
Final Total:	**$213.26**

RS-A369-99
366' - 465'

PAID

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES

840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Certificate of Analysis

DATE: Monday, December 13, 1999

JOB NO: 99-46-35

CLIENT: Hecla (Rosebud Mine)
P.O. Box 2610
Winnecmucca, NV 89446 US

INVOICE NO: 33100206

CLIENT ORDER NO:

REPORT ON: 23 Core

SUBMITTED BY: Brian Morris

DATE RECIEVED: Thursday, December 02, 1999

ANALYSES: Gold, Gold, FA/Gold, Silver, Silver, FA/Silver

ANALYTICAL METHODS: Fire Assay, Fire/AA

REMARKS:

CC: RMG File

E-MAILED TO:

All values are reported in parts per million unless specified otherwise. A minus sign (–) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND=None Detected 1 ppm=0.0001% Troy oz./ton=34.286 ppm 1 ppm=0.0292 Troy oz./ton

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of rocks or minerals collected by the prospective investor or by a qualified person selected by him.

SAMPLE NO	ppb Gold	oz/ton Gold	oz/ton FA/Gold	ppm Silver	oz/ton Silver
RS-D369-99 366-371	163	0.005		2.7	0.08
RS-D369-99 371-376.8	582	0.017		3.2	0.09
RS-D369-99 376.8-381.6	4	-0.001		1.0	0.03
RS-D369-99 381.6-388	-2	-0.001		0.9	0.03
RS-D369-99 388-393	112	0.003		1.3	0.04
RS-D369-99 393-398	-2	-0.001		0.4	0.01
RS-D369-99 398-405	7	-0.001		0.7	0.02
RS-D369-99 405-409.5	10	-0.001		0.9	0.03
RS-D369-99 409.5-414.9	4	-0.001		0.9	0.03
RS-D369-99 414.9-415.8	398	0.012		3.2	0.09
RS-D369-99 415.8-418	60	0.002		3.0	0.09
RS-D369-99 418-421.8	57	0.002		2.9	0.09
RS-D369-99 421.8-425.3	67	0.002		1.5	0.05
RS-D369-99 425.3-426.5	162	0.005		2.7	0.08
RS-D369-99 426.5-429.5	69	0.002		2.0	0.06
RS-D369-99 429.5-433	65	0.002		2.2	0.06
RS-D369-99 433-434	160	0.005		2.6	0.08
RS-D369-99 434-439	8	-0.001		0.6	0.02
RS-D369-99 439-444	6	-0.001		0.5	0.02
RS-D369-99 444-450	25	0.001		0.3	0.01
RS-D369-99 450-458	14	-0.001		0.3	0.01
RS-D369-99 458-465	16	-0.001		0.9	0.03
STD 75946	6128	0.179	0.178	60.9	1.78

SAMPLE NO	oz/ton FA/Silver
RS-D369-99 366-371	
RS-D369-99 371-376.8	
RS-D369-99 376.8-381.6	
RS-D369-99 381.6-388	
RS-D369-99 388-393	
RS-D369-99 393-398	
RS-D369-99 398-405	
RS-D369-99 405-409.5	
RS-D369-99 409.5-414.9	
RS-D369-99 414.9-415.8	
RS-D369-99 415.8-418	
RS-D369-99 418-421.8	
RS-D369-99 421.8-425.3	
RS-D369-99 425.3-426.5	
RS-D369-99 426.5-429.5	
RS-D369-99 429.5-433	
RS-D369-99 433-434	
RS-D369-99 434-439	
RS-D369-99 439-444	
RS-D369-99 444-450	
RS-D369-99 450-458	
RS-D369-99 458-465	
STD 75946	1.86

CLIENT: Hecla (Rosebud Mine)

FAXED 12/3 12/4

JOB NO.: 99-46-23

SAMPLE NO			oz/ton Gold	oz/ton FA/Gold		oz/ton Silver	oz/ton ~~FA~~/Ag
RS-D369-99 268'-274.5'			.004			.021	
RS-D369-99 274.5'-279.9'			.004			.063	
RS-D369-99 279.9'-284.4'			.002			.062	
RS-D369-99 284.4'-288'			.002			.053	
RS-D369-99 288'-291.5'			.007			.091	
RS-D369-99 291.5'-298'			.005			.075	
RS-D369-99 298'-302'			.006			.081	
RS-D369-99 302'-307'			.009			.102	
RS-D369-99 307'-312'			.014			.111	
RS-D369-99 312'-319'			.023		2nd FA	.152	
RS-D369-99 319'-321.5'	327'-338' = 11'		.100	.110		.236	.318
RS-D369-99 321.5'-327'	@ 0.214 Au & 0.28 Ag		.060	.062		.142	.159
RS-D369-99 327'-328.7'	1.7	Ave (0.585) *	.342	.663	.749	.460	.845 1.2
RS-D369-99 328.7'-332.7'	4	(0.091)	.087	.095		.154	.170
RS-D369-99 332.7'-338'	5.3	(.188)	.200	.176		.320	.300
RS-D369-99 338'-343'			.151	.134		.204	.191
RS-D369-99 343'-348'			.167	.160		.205	.292
RS-D369-99 348'-353'			.088	.100		.154	.253
RS-D369-99 353'-356'			.046	.046		.142	.276
RS-D369-99 356'-361'			.024			.152	
RS-D369-99 361'-366'			.013			.093	
STD 68647			.060	.064		1.020	1.343

* RUNNING A SECOND GRAV ASSAY.

Thursday, December 02, 1999

By _____

DATE: Thursday, December 02, 1999

JOB NO: 99 46 23

CLIENT: Hecla (Rosebud Mine)
P.O. Box 2610
Winnemucca, NV 89446 US

INVOICE NO:

CLIENT ORDER NO: RS-D369-99

REPORT ON: 22 Core

SUBMITTED BY: Brian Morris

DATE RECIEVED: Wednesday, December 01, 1999

ANALYSES: Gold, FA/Gold, Silver

ANALYTICAL METHODS: Fire Assay, Fire/AA

REMARKS:

CC: RMG File

E-MAILED TO:

CLIENT: Hecla (Rosebud Mine)

JOB NO.: 99-46-23

SAMPLE NO	oz/ton Gold	oz/ton FA/Gold	oz/ton Silver
RS-D369 99 268'-274.5'	.004		.021
RS-D369-99 274.5'-279.9'	.004		.063
RS-D369-99 279.9'-284.4'	.002		.062
RS-D369-99 284.4'-288'	.002		.053
RS-D369-99 288'-291.5'	.007		.091
RS-D369-99 291.5' 298'	.005		.075
RS-D369-99 298' 302'	.006		.081
RS-D369-99 302'-307'	.009		.102
RS-D369-99 307'-312'	.014		.111
RS D369 99 312'-319'	.023		.152
RS-D369-99 319'-321.5'	.100		.236
RS-D369-99 321.5'-327'	.060		.142
RS-D369 99 327' 328.7' 1.7'	.342		.460
RS D369-99 328.7'-332.7' 4.0'	.087		.154
RS-D369-99 332.7'-338' 5.3	.200		.320
RS D369-99 338'-343'	.151		.204
RS D369 99 343'-348'	.167		.205
RS-D369-99 348'-353'	.083		.154
RS-D369 99 353'-356'	.046		.142
RS-D369-99 356'-361'	.024		.152
RS D369 99 361'-366'	.013		.093
STD 68647	.060		1.020

Thursday, December 02, 1999

By _____ _____

INSPECTORATE

ROCKY MOUNTAIN GEOCHEMICAL

A MEMBER OF THE INSPECTORATE GROUP OF COMPANIES
840 GREG STREET • SPARKS, NEVADA 89431 • PHONE (775) 359-6311 • FAX (775) 359-2944

Preliminary Analysis

DATE: Sunday, December 05, 1999

JOB NO: 99-46-35

CLIENT: Hecla (Rosebud Mine)
P.O. Box 2610
Winnemucca, NV 89446 US

INVOICE NO:

CLIENT ORDER NO:

REPORT ON: 23 Core

SUBMITTED BY: Brian Morris

DATE RECIEVED: Thursday, December 02, 1999

ANALYSES: Gold, Gold, Silver, Silver

ANALYTICAL METHODS: Fire/AA

REMARKS:

CC: RMG File

E-MAILED TO:

All values are reported in parts per million unless specified otherwise. A minus sign (–) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.
ND=None Detected 1 ppm=0.0001% Troy oz./ton=34.286 ppm 1 ppm=0.0292 Troy oz./ton

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of rocks or minerals collected by the prospective investor or by a qualified person selected by him.

CLIENT: Hecla (Rosebud Mine)

JOB NO.: 99-46-35

SAMPLE NO	ppb Gold	oz/ton Gold	ppm Silver	oz/ton Silver
RS-D369-99 366-371	209	0.006	2.7	0.08
RS-D369-99 371-376.8	582	0.017	3.2	0.09
RS-D369-99 376.8-381.6	4	-0.001	1.0	0.03
RS-D369-99 381.6-388	-2	-0.001	0.9	0.03
RS-D369-99 388-393	112	0.003	1.3	0.04
RS-D369-99 393-398	-2	-0.001	0.4	0.01
RS-D369-99 398-405	7	-0.001	0.7	0.02
RS-D369-99 405-409.5	10	-0.001	0.9	0.03
RS-D369-99 409.5-414.9	4	-0.001	0.9	0.03
RS-D369-99 414.9-415.8	398	0.012	3.2	0.09
RS-D369-99 415.8-418	60	0.002	3.0	0.09
RS-D369-99 418-421.8	57	0.002	2.9	0.09
RS-D369-99 421.8-425.3	67	0.002	1.5	0.05
RS-D369-99 425.3-426.5	162	0.005	2.7	0.08
RS-D369-99 426.5-429.5	69	0.002	2.0	0.06
RS-D369-99 429.5-433	65	0.002	2.2	0.06
RS-D369-99 433-434	160	0.005	2.6	0.08
RS-D369-99 434-439	8	-0.001	0.6	0.02
RS-D369-99 439-444	6	-0.001	0.5	0.02
RS-D369-99 444-450	25	0.001	0.3	0.01
RS-D369-99 450-458	14	-0.001	0.3	0.01
RS-D369-99 458-465	16	-0.001	0.9	0.03
STD 75946	3064	0.089	30.5	0.89

Sunday, December 05, 1999

By _____

CLIENT: Hecla (Rosebud Mine)

JOB NO.: 99-46-35

SAMPLE NO	ppb Gold	oz/ton Gold	oz/ton FA/Gold	ppm Silver	oz/ton Silver
RS-D369-99 366-371	163	0.005		2.7	0.08
RS-D369-99 371-376.8	582	0.017		3.2	0.09
RS-D369-99 376.8-381.6	4	-0.001		1.0	0.03
RS-D369-99 381.6-388	-2	-0.001		0.9	0.03
RS-D369-99 388-393	112	0.003		1.3	0.04
RS-D369-99 393-398	-2	-0.001		0.4	0.01
RS-D369-99 398-405	7	-0.001		0.7	0.02
RS-D369-99 405-409.5	10	-0.001		0.9	0.03
RS-D369-99 409.5-414.9	4	-0.001		0.9	0.03
RS-D369-99 414.9-415.8	398	0.012		3.2	0.09
RS-D369-99 415.8-418	60	0.002		3.0	0.09
RS-D369-99 418-421.8	57	0.002		2.9	0.09
RS-D369-99 421.8-425.3	67	0.002		1.5	0.05
RS-D369-99 425.3-426.5	162	0.005		2.7	0.08
RS-D369-99 426.5-429.5	69	0.002		2.0	0.06
RS-D369-99 429.5-433	65	0.002		2.2	0.06
RS-D369-99 433-434	160	0.005		2.6	0.08
RS-D369-99 434-439	8	-0.001		0.6	0.02
RS-D369-99 439-444	6	-0.001		0.5	0.02
RS-D369-99 444-450	25	0.001		0.3	0.01
RS-D369-99 450-458	14	-0.001		0.3	0.01
RS-D369-99 458-465	16	-0.001		0.9	0.03
STD 75946	6128	0.179	0.178	60.9	1.78

CLIENT: Hecla (Rosebud Mine)

JOB NO.: 99-46-35

SAMPLE NO	oz/ton FA/Silver
RS-D369-99 366-371	
RS-D369-99 371-376.8	
RS-D369-99 376.8-381.6	
RS-D369-99 381.6-388	
RS-D369-99 388-393	
RS-D369-99 393-398	
RS-D369-99 398-405	
RS-D369-99 405-409.5	
RS-D369-99 409.5-414.9	
RS-D369-99 414.9-415.8	
RS-D369-99 415.8-418	
RS-D369-99 418-421.8	
RS-D369-99 421.8-425.3	
RS-D369-99 425.3-426.5	
RS-D369-99 426.5-429.5	
RS-D369-99 429.5-433	
RS-D369-99 433-434	
RS-D369-99 434-439	
RS-D369-99 439-444	
RS-D369-99 444-450	
RS-D369-99 450-458	
RS-D369-99 458-465	
STD 75946	1.86

Monday, December 13, 1999

By _____

RMGN Job Number:_____

Date Received:_____

Rocky Mountain Geochemical of Nevada

840 GREG STREET

SPARKS, NEVADA 89431

Phone: (702) 359-6311, Fax: (702) 359-2944

SAMPLE SUBMITTAL SHEET

Address Report To: Brian Morris

Phone/Fax: 775 623 6967

Send Invoice To: Brian Morris / Rosebud Mine
P.O. Box 2610
Winnemucca NV 89446

Client's Project No._____

Shipment No._____

Date Shipped: 12/1/99

No. of Cartons:_____

No. of Samples: 21

Copy of Report To:_____

List Sample Numbers	Material Description	List Elements To Be Determined	Indicate Method Fire/Grav.	Fire/AA	Geochem
RS-D-369-99	Core	Au, Ag - Use Rosebud Developement Protocol		X	
/		Rosebud Production std. at end of hole			

NOT RESPONSIBLE FOR LOSS OF SAMPLES DUE TO FIRE OR THEFT.

Pulp & Reject Disposition: Pulps and Rejects will be discarded unless otherwise noted.

	Bulk Rejects	Pulp
Return at Customer's Expense	X	X
via:		
Store at $1.00 per 100 lbs/month		
Discard immediately		

White Copy: Send to RMGN
Yellow Copy: Customer's Copy
Pink Copy: Enclose with Samples

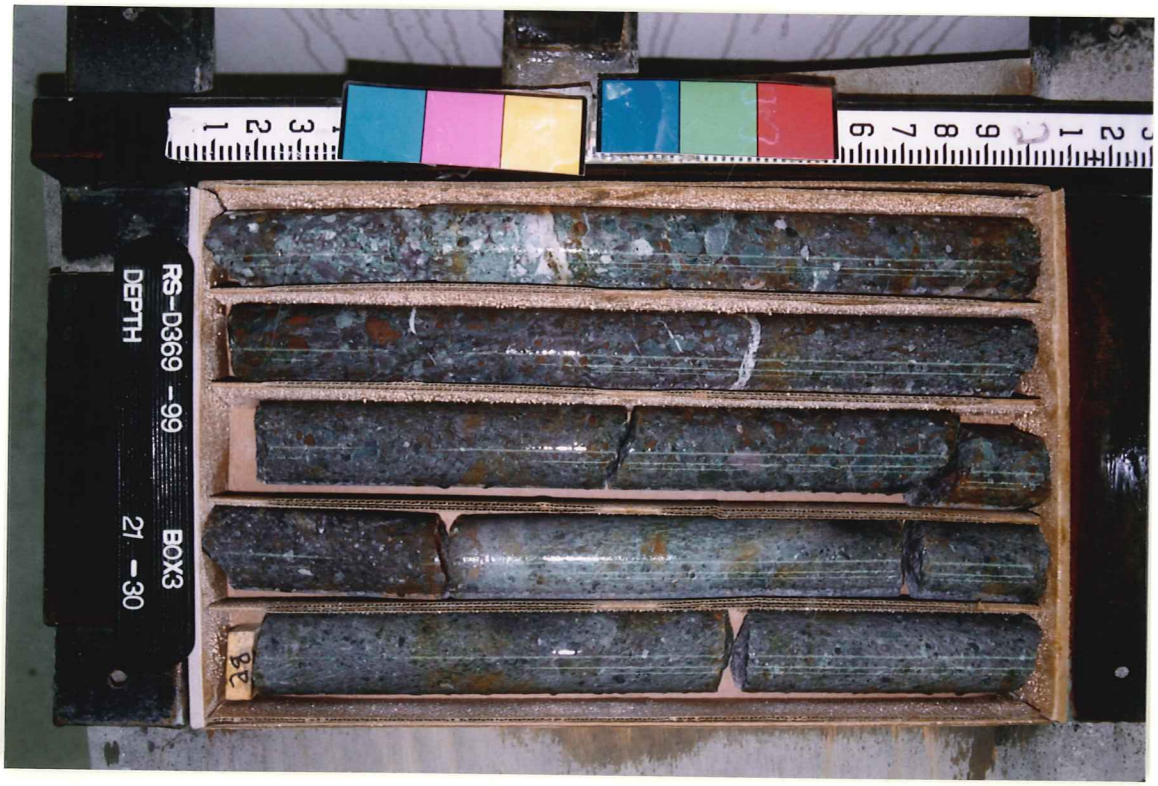
THE ABOVE WORK IS AUTHORIZED BY:_____ DATE: 12/1/99

RS-D469-99

Depth From	To	Interval	Au	Ag	Sample Number
366	371	5	X	X	1
371	376.8	5.8	X	X	2
376.8	381.6	4.8	X	X	3
381.6	388	6.4	X	X	4
388	393	5	X	X	5
393	398	5	X	X	6
398	405	7	X	X	7
405	409.5	4.5	X	X	8
409.5	414.9	5.4	X	X	9
414.9	415.8	0.9	X	X	10
415.8	418	2.2	X	X	11
418	421.8	3.8	X	X	12
421.8	425.3	3.5	X	X	13
425.3	426.5	1.2	X	X	14
426.5	429.5	3	X	X	15
429.5	433	3.5	X	X	16
433	434	1	X	X	17
434	439	5	X	X	18
439	444	5	X	X	19
444	450	6	X	X	20
450	458	8	X	X	21
458	465	7	X	X	22

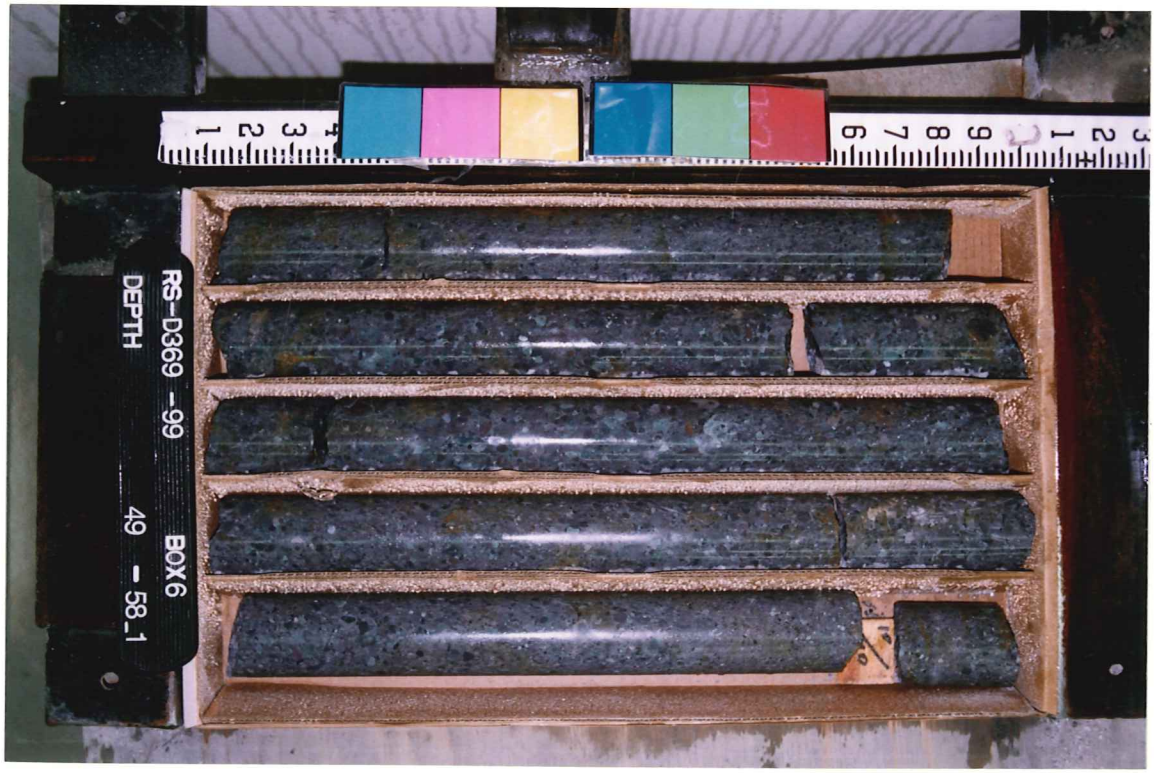
RS-D369 -99 BOX2
DEPTH 10.4-21

RS-D369 -99 BOX1
DEPTH 0 - 10.4


RS-D369 -99 BOX3
DEPTH 21 -30

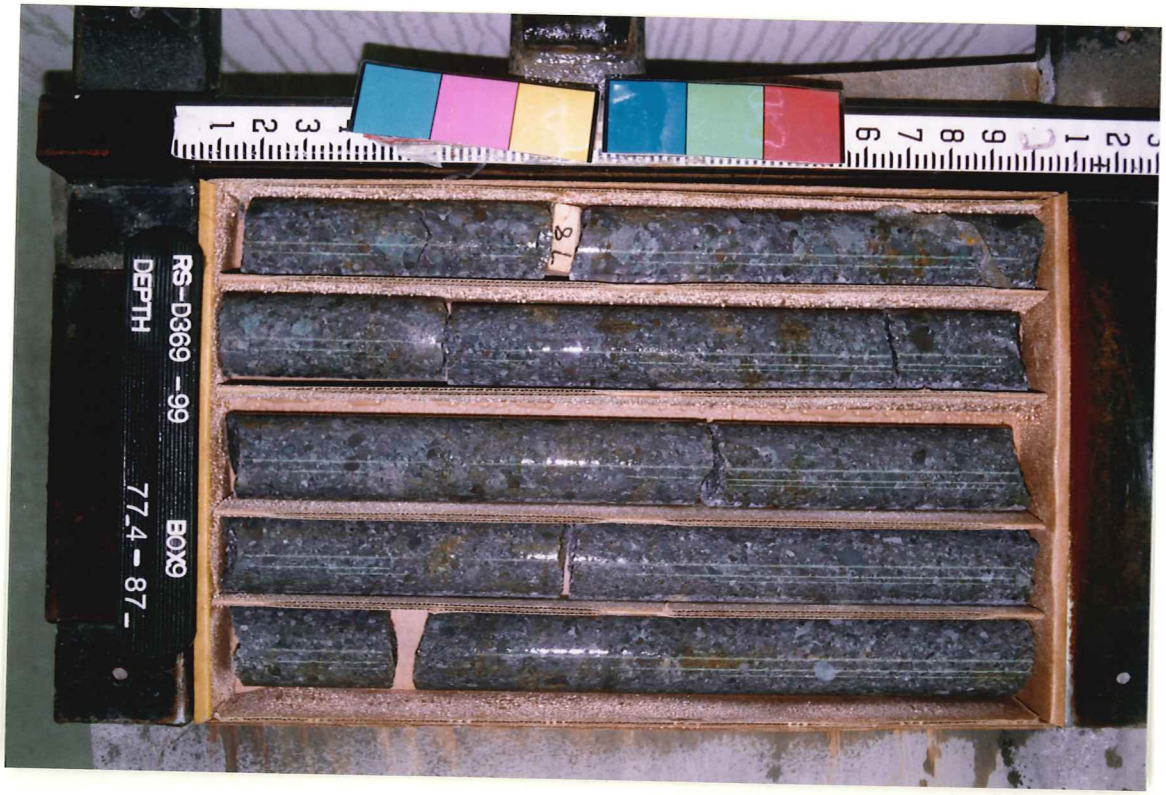
RS-D369 -99
BOX5
DEPTH
39_5 - 49

RS-D369 -99
BOX4
DEPTH
30 - 39_5


RS-D369 -99
BOX6
DEPTH
49 - 58_1

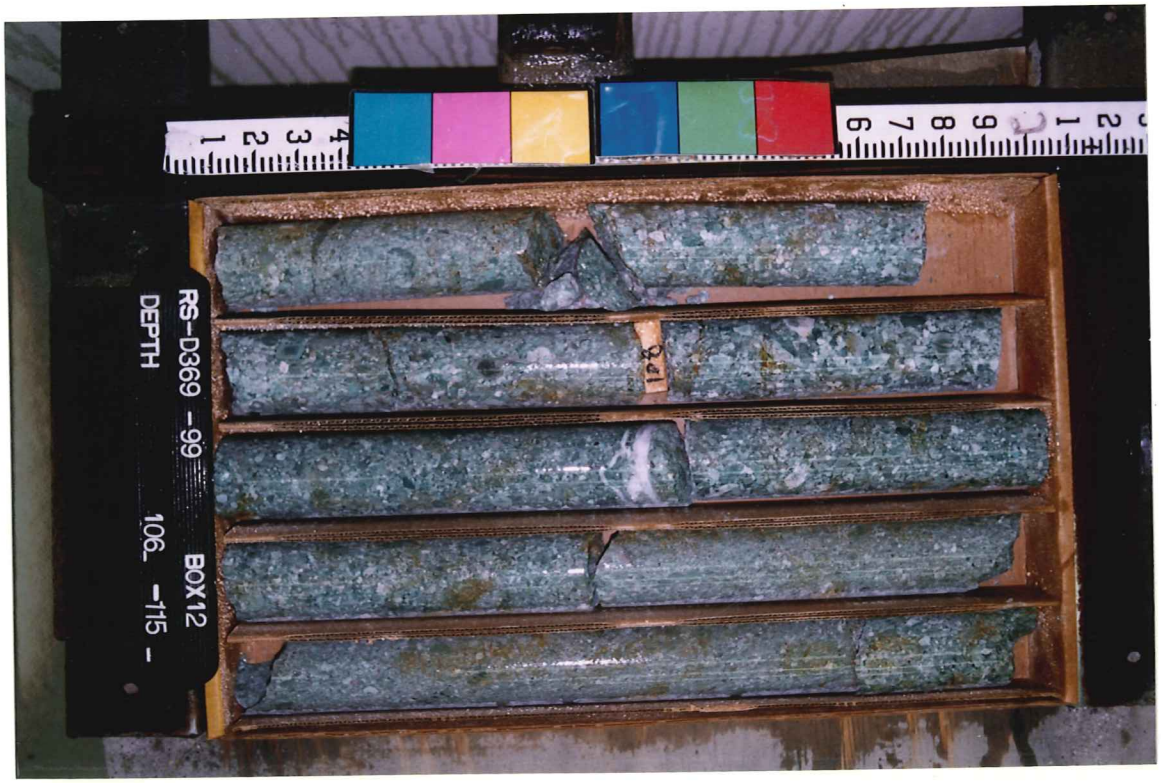
RS-D369 -99
BOX8
DEPTH
67_9 - 77_4

RS-D369 -99
BOX7
DEPTH
58_1 - 67_9


RS-D369 -99
BOX9
DEPTH
77_4 - 87_

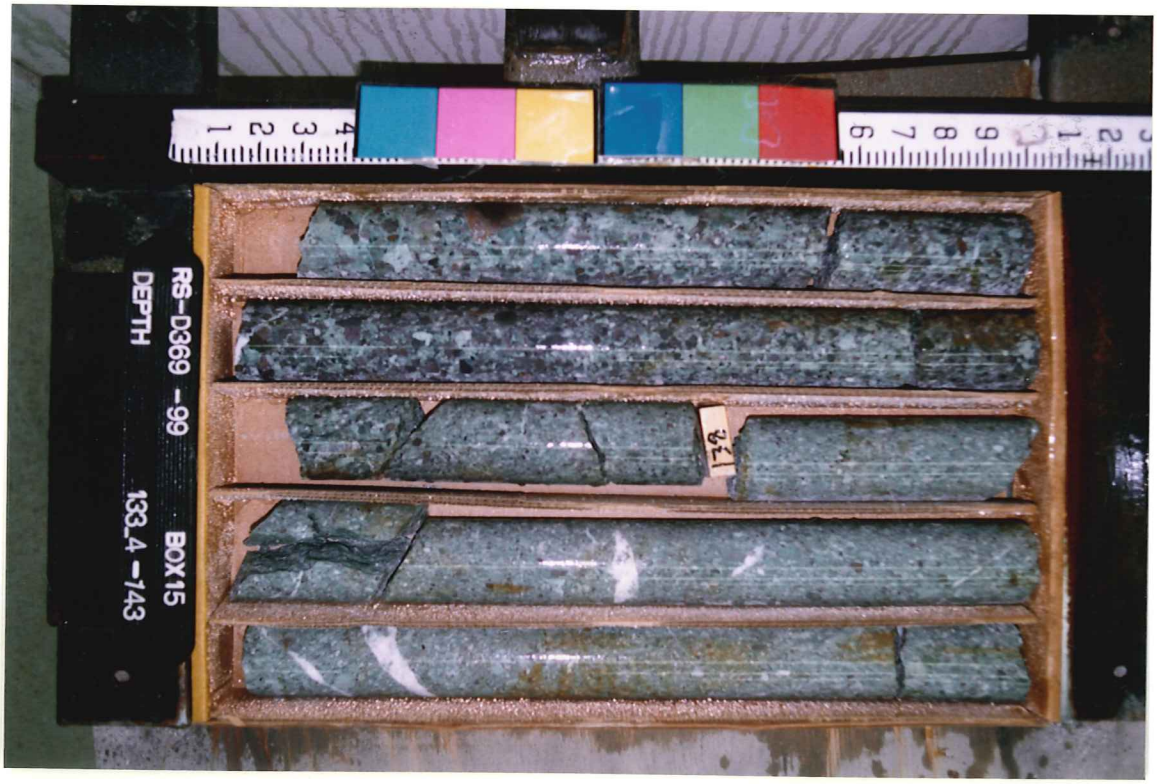
RS-D369 -99
BOX 11
DEPTH
96_5 - 106_

RS-D369 -99
BOX 10
DEPTH
87_ - 96_5


RS-D369 -99
BOX 12
DEPTH
106_ -115_

RS-D369 -99
BOX14
DEPTH
124_1 -133_4

RS-D369 -99
BOX13
DEPTH
115_ -124_1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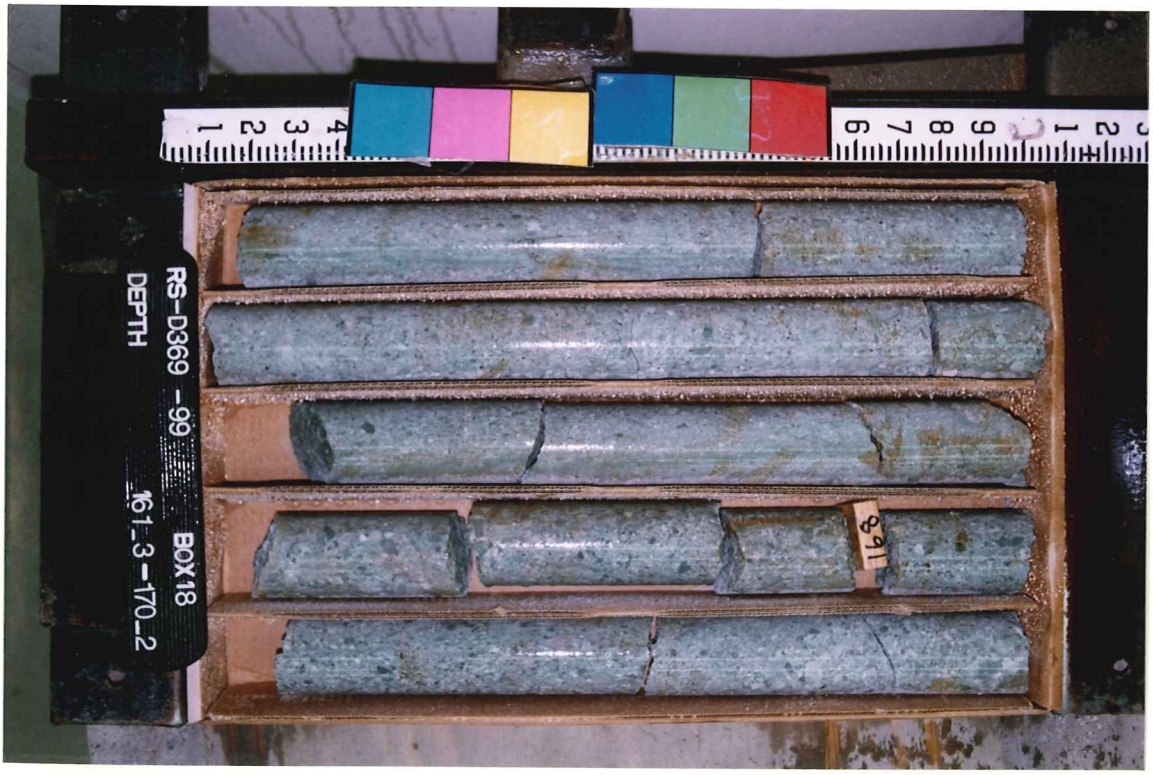
BOX15
DEPTH
133_4 -143

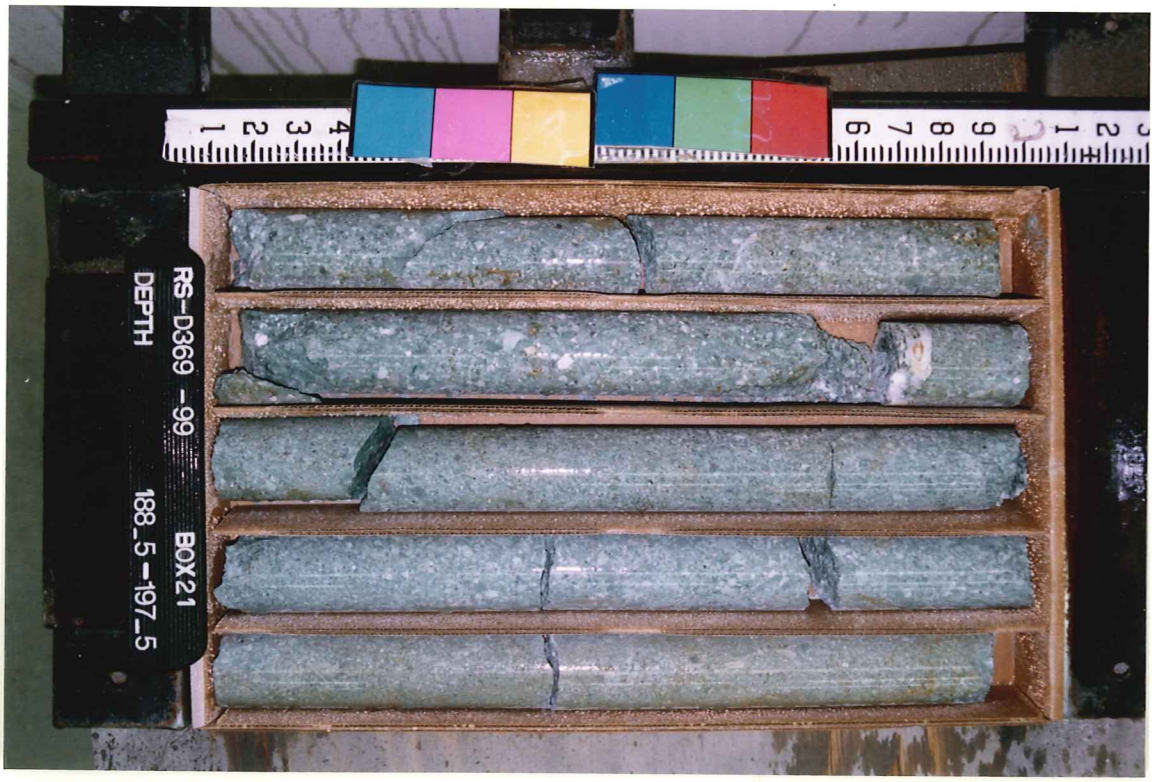
RS-D369 -99
BOX17
DEPTH
152_ -161_3

RS-D369 -99
BOX16
DEPTH
143_ -152


RS-D369 -99
BOX18
DEPTH
161_3 -170_2

188
RS-D369 -99
BOX20
DEPTH
179_1 -188_5

RS-D369 -99
BOX19
DEPTH
170_2 -179_1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BOX21
DEPTH
188_5 -197_5

RS-D369 -99
BOX 23
DEPTH
206_5 -216_5

RS-D369 -99
BOX 22
DEPTH
197_5 -206_5

RS-D369 -99
BOX 24
DEPTH
216_5 -225

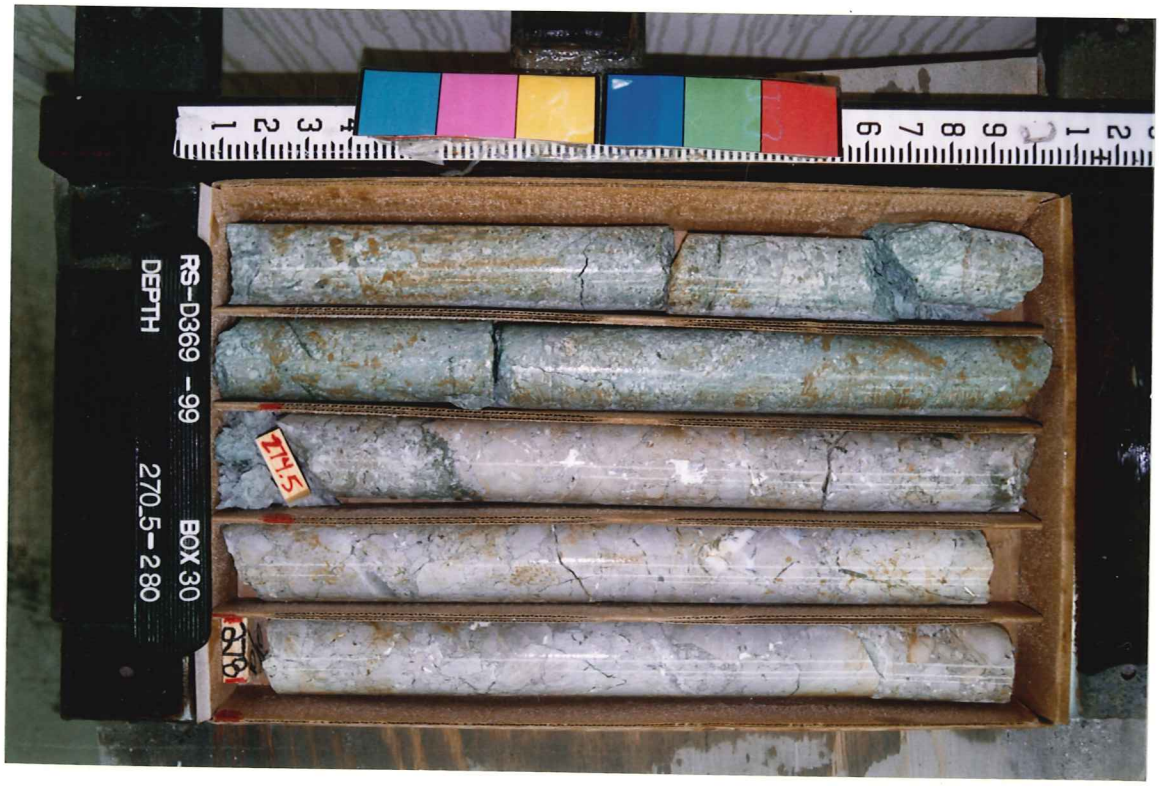
RS-D369 -99
BOX 26
DEPTH
234 _ -244

RS-D369 -99
BOX 25
DEPTH
225 _ -234

RS-D369 -99
BOX 27
DEPTH
244 _ -253

RS-D369 -99
BOX 29
DEPTH
262 - 270_5
268

RS-D369 -99
BOX 28
DEPTH
253 _ -262
258


RS-D369 -99
BOX 30
DEPTH
270_5 - 280
274.5
278

RS-D369 -99
BOX 32
DEPTH
289 - 298

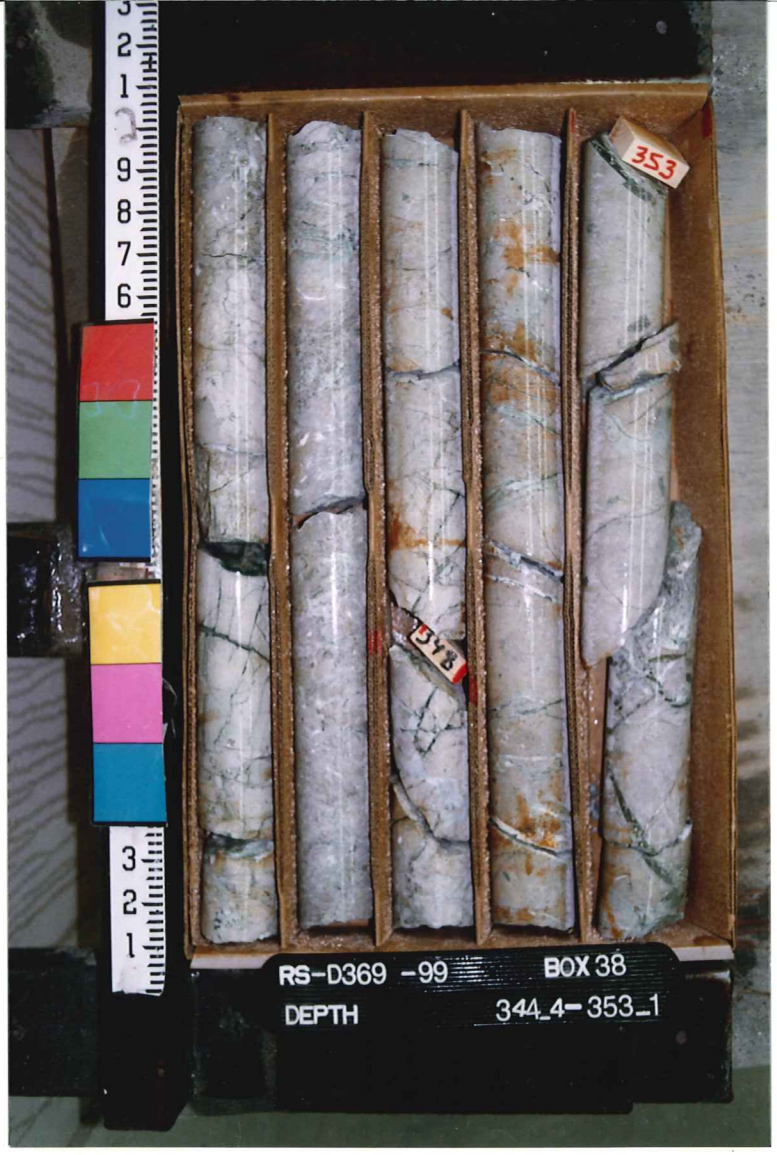
RS-D369 -99
BOX 31
DEPTH
280 - 289

RS-D369 -99
BOX 33
DEPTH
298 - 307.5

RS-D369 -99
BOX 35
DEPTH 316 - 325.5
319
321.5

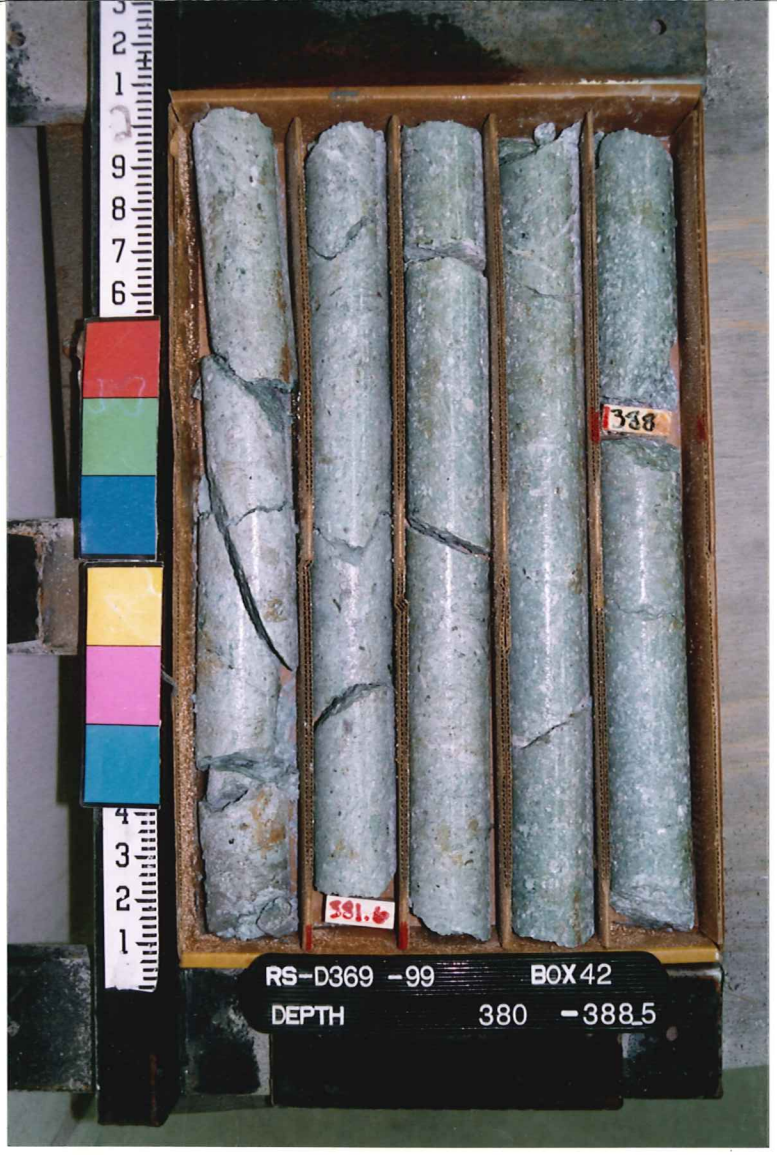
RS-D369 -99
BOX 34
DEPTH 307.5 - 316
312

RS-D369 -99
BOX 36
DEPTH 325.5 - 334.4
327
328
328.7
332.7


RS-D369 -99
BOX 38
DEPTH
344_4-353_1

RS-D369 -99
BOX 37
DEPTH
334_4-344_2

RS-D369 -99
BOX 39
DEPTH
362_2-371_


RS-D369 -99
BOX 42
DEPTH 380 -388.5
388
381.6

RS-D369 -99
BOX 41
DEPTH 371 - -380
378
374.8

RS-D369 -99
BOX 43
DEPTH 388.5 - 398
393

415.8
414.9
RS-D369 -99
BOX 45
DEPTH
407 -416_5

398
405
RS-D369 -99
BOX 44
DEPTH
398 -407

418
419.8
425.3
RS-D369 -99
BOX 46
DEPTH
416_5-425

434
439
443
RS-D369 -99
BOX 48
DEPTH
434 -443

425.5
426.5
433
RS-D369 -99
BOX 47
DEPTH
425 -434

444
450
RS-D369 -99
BOX 49
DEPTH
443 -452.5

RS-D369 -99
BOX 51
DEPTH
461 -465

RS-D369 -99
BOX 50
DEPTH
452_5-461