60001147

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-D350-99
AUTHOR	D. Macharrow; L. Machedon; G Ballew; R. Vance; K. Allen
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; Rosebud Mining Co. LLC Hecla Mining Co.; Newmont Gold Co.
COMMODITY If not obvious	gold; silver
NOTES	Drill log; geology; assay; photographs; total depth 824' receipt; hand written notes; downhole camera images geochemistry; down hole survey 91p. 3 down hole camera images

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	5/13/08
DB:	mah	
SCANNED:	NB	

Revised: 1/22/08

RS-D350-99

350

60001147 4010

6000 1147

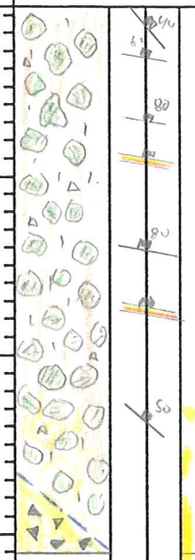
- ☐ quartz, chalcedony, silicification
- ☐ faults, fractures
- ☐ FeOx
- ☐ sulfide
- ☐ calcite, carbonate
- ☐ argillization, white clays
- ☐ propylitization
- ☐ potassic alteration
- ☐ chlorite, chloritic clays

Hecla MINING COMPANY

ROSEBUD PROJECT DIAMOND DRILL LOG

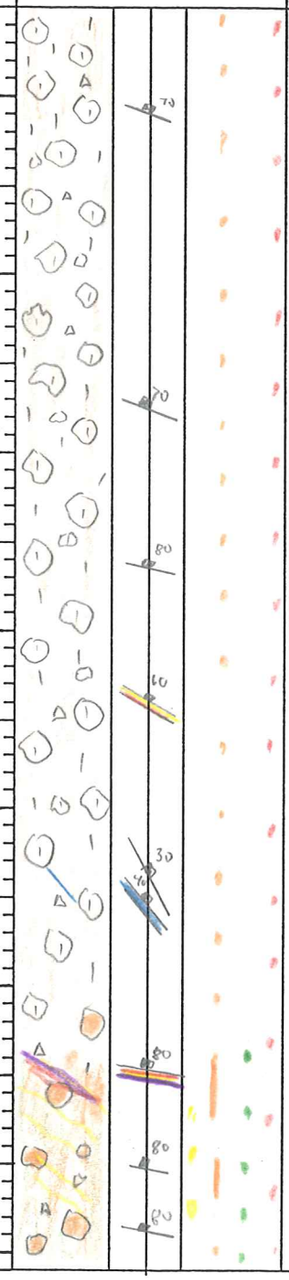
HOLE NUMBER	RS-D350-99	LOCATION	41 Much Buy
PAGE 1 OF 13		NORTHING	
DATE	5-7-99	EASTING	
LOGGED BY	D.G. Muckerra	ELEVATION	
SCALE	1" = 10'	AZIMUTH	S 5°E
TOTAL DEPTH	824	INCLINATION	-30

REMARKS: Shark Fin target

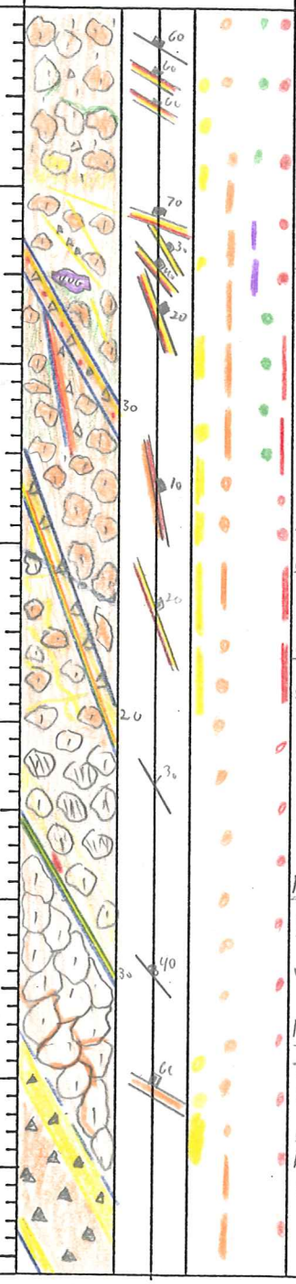
LITH	OX/RE	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td		0-824 DOZER Fine grained rhyolite flow Auto brecciated texture Pale greenish gray white clast w brownish matrix of volcanic clay. Clast contain weak laminations Drilling loss of 1' between 29-31	10 20 30		Low angle fractures with sulfide and qtz. 28.7-31 Fault zone with silica healed milled breccia foot wall surface lost during drilling	Pyrite and marcasite veinlets following the 80° to fractures 0-14 calcite on fracture 28.7-31 silica healed breccia with druzy qtz vug with bladed marcasite 34-39 Highly argillized footwall with sulfide on fracture 34 Chlorite decrease to trace levels or less 46-69 Pyrite agglomeration and pyrite after marcasite ≤ 1%
		CORE LOSS		CORE LOSS		
			40 50			

ANALYTICAL DATA						
FROM	TO	W	Au	Ag	Au2	A
0	4					
4	9					
9	14					
14	19					
19	24					
24	28.7					
28.7	31					
31	34	NO	SAMPLE			
34	39					
39	44					
44	49					
49	54					

HOLE NUMBER RS-D350-99 PAGE 2 OF 13

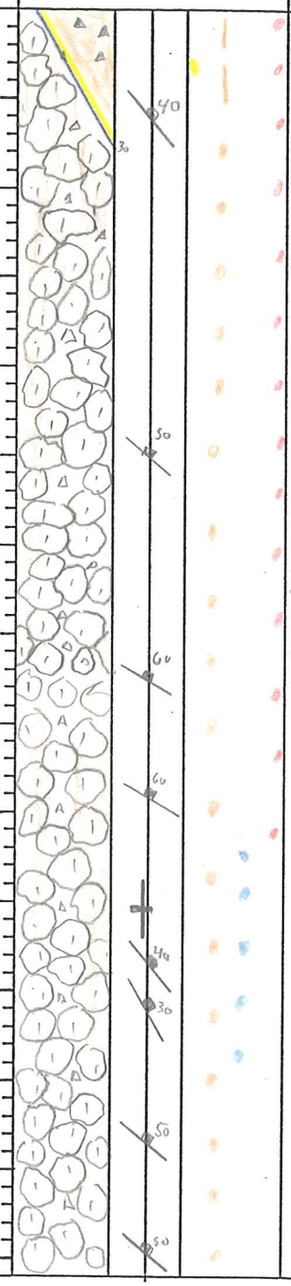
LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
Td	R	0-82.4 DOZER Fine grain Rhyolite flow Auto breccia texture. Pale grayish white clast in brown Volcanic clay matrix 109-119 Alteration related to low angle 70° tan fracture at 116-117 that contains white clay and qtz vein fracture	50 60 70 80 90 100 110 120		Low frequency of Fracturing From 41 to 104! 54 Course pyrite on low angle fracture 104-119 Slight increase in fracturing 116-117 Broken vuggy Shear zone	Argillization continues with bleaching of breccias. Py/marcasite veinlets are present in a low frequency. 46-69 Disseminated Py after bleded marcasite ≤1% 82-99 pyrite after bleded marcasite is disseminated for 2-3% 104-119 QTZ VEINING Increase in hanging wall of shear. 109 chloritic alteration at low levels returns 100 calcite on veins 110 - QTZ/Py/marc vein 1" wide with Barite 116-117 INCREASED Argillization to moderate level in fracture zone	49	54				
							54	59				
							59	64				
							64	69				
							69	74				
							74	79				
							79	84				
							84	89				
							89	94				
							94	99				
							99	104				
							104	109				
							109	114				
							114	119				

HOLE NUMBER RS-D350-99 PAGE 3 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	0-82.4 DOZER Fine grained Ryolite with Auto brecciated texture continues. 129-136.8 Argillization increases in intensity of hanging wall of fault Pimo 147 white clay 161-164 Foliation present with 30° tca lamination 165.5-167.5 Vitrophere like texture in hanging wall of shere zone. Pimo 183.6 white clay more/ryolite	120 130 140 150 160 170 180 190		133-70° tca fracture with bleded more and qtz 135-Open Vugs with 1/2" barite crystals 136.8-137.8 20° tca Py/more/qtz vein Parrallel to Shear of Fault begining at 137.8 137.8-139.5 High angle fault at 20° tca. Pyrite masses in gouge. 143.1-145.9 Narrow Shear at 10° tca 152-154.5 High angle shear with with clay and silicified footwall 179.5-183.6 Fractures increases in hanging wall of fault 182.1-192.5 Fault zone with milled breccia, silicified breccia 182.1-184 Hanging wall contact lost to drilling	119-129 Drozer quartz veinlets with bleded marcasite 60° tca. Pyrite crystal forming small aggregates at 1-2% 138-145.9 Partial Silicified fault and gouge 145.9-149.5 QTZ VEIN Stockwork 152-154.5 QTZ/Py/more footwall surface 154.5-159.5 30° tca qtz/py/more veins with surrounding silicification 177-192.5 silicified milled breccia with argillized footwall

ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
119	124				
124	129				
129	134				
134	136.8				
136.8	139.5				
139.5	143.1				
143.1	145.9				
145.9	149.5				
149.5	152.0				
152.0	154.5				
154.5	159.5				
159.5	164.6				
164.6	168.2				
168.2	169.8				
169.8	174.4				
174.4	179.5				
179.5	182.1				
182.1	184				
184	189.5				
189.5	192.5				

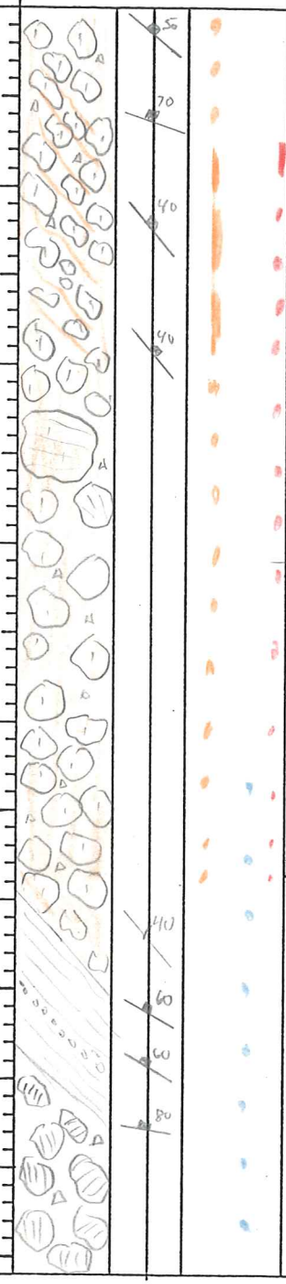
HOLE NUMBER RS-D350-99 PAGE 4 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	0-82.4 DOZER Fine grained volcanic flow Autobrecciated texture 238-258 Hematite stained Dozer with dark reddish brown fractures Pine 254 Green clay	190 200 210 220 230 240 250 260		Fault end 192.5 Autobrecciated Dozer continue 238-287 Fracture zone with altered clay and local highly argillized zones	192.5 Pyrite/mare mineralization decreases with depth 233 Darkening of Autobreccia matrix from Hematite 236-289 Hydrothermally altered clay Coats fractures. Green in color and slightly waxy 238 Calcite in fractures and forming veinlets to 248

ANALYTICAL DATA

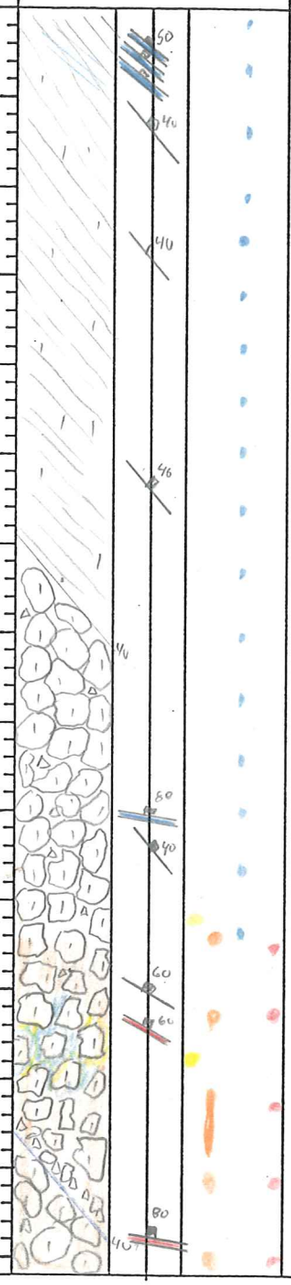
FROM	TO	W	Au	Ag	Au2
189.5	192.5				
192.5	196.5				
196.5	201.5				
201.5	206.5				
206.5	211.5				
211.5	215				
215	218				
218	222.7				
222.7	224.7				
224.7	228				
228	233				
233	238				
238	243				
243	248				
248	253				
253	258				
258	263				

HOLE NUMBER RS-D350-99 PAGE 5 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	0-824 DOZER Auto brecciated Rhyolite Flow 289 Matrix of breccia is light Pink and increasing in intensity to hematite deep red brown by 309 309-386.5 Hematite "brickred" Dozer. 312 Foliation in clast begin and non auto brecciated Dozer Begins, Vesicul present in Doze Just after Auto breccia end 312-318.5 Planar laminated Doze 318.5-333.2 DOZER AUTOBRECCIA	260 270 280 290 300 310 320 330		268.3-279 Highest Fracture frequency of larger Fracture Zone 286-309 Non Fractured core 309 - Very weak Fractures all coated by hematite	268.3-269 Highly Argillized zone 289.5 Calcite veinlets and on Fractures. this increased in the hematitic rock 309 - Sulfide decreases at hematite dominated alteration

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
258	263				
263	268.3				
268.3	271				
271	274				
274	279				
279	284				
284	289				
289	294				
294	299				
299	304				
304	309				
309	314				
314	319				
319	324				
324	329				

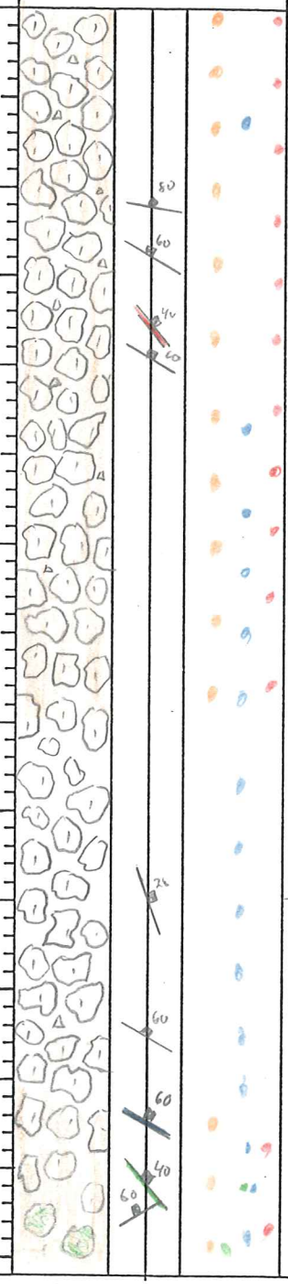
HOLE NUMBER RS-D350-99 PAGE 6 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	0-82' DOZER Fine grained rhyolite flow. Hematite staining is become dominate characteristic Flow banded present along with some auto breccia. 383- Rhyolite is gray white clast with light pink breccia matrix	330, 340, 350, 360, 370, 380, 390, 400		Hematite stain Fractures Fracture in laminated Dozer parrallel the foliation 396- 2" Thick Sheared Dozer	333.5 Calcite veinlets 50° tca 381- Hematite decreases when argillization increases 388- white clay on fractures and traces of silica in the matrix of breccia along with more calcit

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
329	334				
334	339				
339	344				
344	349				
349	354				
354	359				
359	364				
364	369				
369	374				
374	379				
379	384				
384	389				
389	394				
394	399				

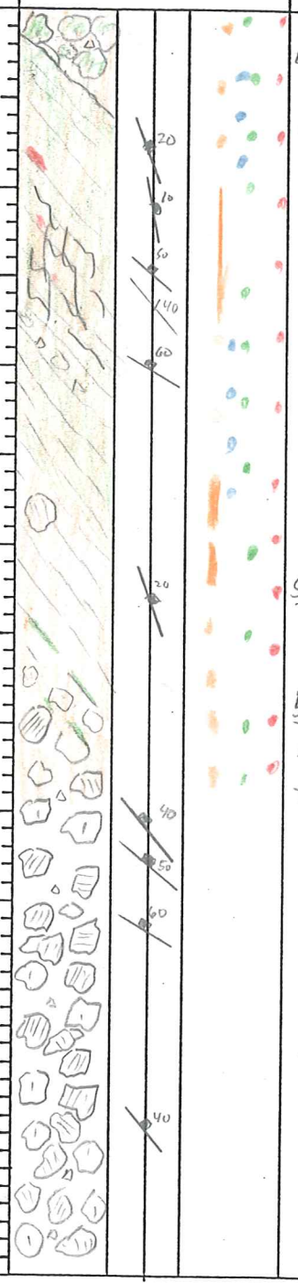
HOLE NUMBER RS-D350-99 PAGE 7 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
TJ	R	DOZER Gray white rhyolite flow Variable texture from autobreccia to planar laminated. 439-463 Hematite stained Dozer with dark brick red matrix and red gray clast	400 410 420 430 440 450 460 470		390-474 very low fracture frequency 450.5 20° to a fracture with 40° to fa oblique slip	

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
399	404				
404	409				
409	414				
414	419				
419	424				
424	429				
429	434				
434	439				
439	442.1				
442.1	445.5				
445.5	450.5				
450.5	455.5				
455.5	460				
460	464				
464	469				

HOLE NUMBER _____ PAGE 8 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	DOZER Pina 484.5 463-473 Dozer is stained along fractures by hematite at 474 Hematite is gone Pina 484.5 whitecly 486.7 - 496.1 Blue gray Dozer from chloritic alteration 514 - 560 Hematite stained Dozer ± intensity gradual fades to a pink matrix from 553 to 560 560 - 615 pinkish white Dozer	470 480 490 500 510 520 530 540		480 - 486.7 Fracture zone with white clay 503 20° tcu fracture 508 Autobreccia becomes dominate texture	477 - Pyrite agglomeration 480 - 486.7 white clay in fracture zone 473 - 479 chloritic alteration 514 Hematite leave no fresh sulide until 553

ANALYTICAL DATA

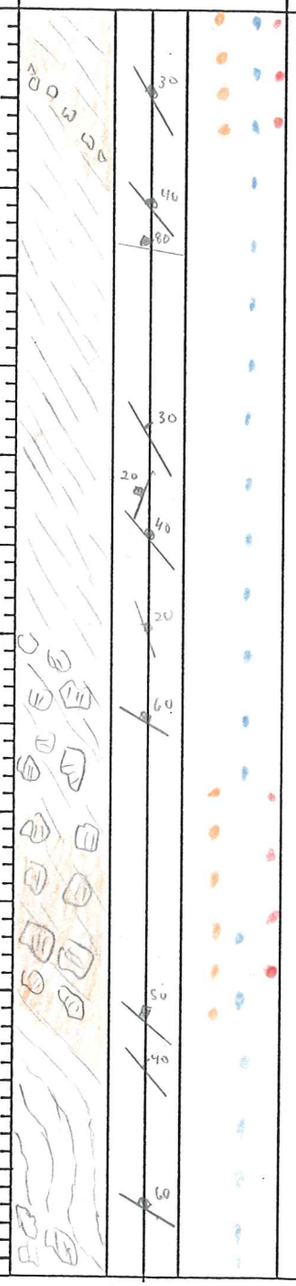
FROM	TO	W	Au	Ag	Au2
469	474				
474	477				
477	480				
480	484				
484	486.7				
486.7	490				
490	494				
494	496.1				
496.1	498.1				
498.1	500.9				
500.9	504				
504	509				
509	514				
514	517.9				
517.9	523				
523	528				
528	533				
533	538				
538	543				

HOLE NUMBER RS-D350-99 PAGE 9 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	DOZER Fine grained rhyolite with Auto breccia or planner laminated texture. Variable levels of hematitic staining 597.9 – 606 Fracture zone with white clay up to 1/8" thick. Pyrite/marcasite forms veins and masses. Barite is present in the fractures 575 – 616 Auto brecciated Pinc 601 white clay	540 550 560 570 580 590 600 610		540 – 543 0-10° tca fracture with very heavy hematite. 555 calcite has replaced volcanic clay matrix 597.9-606 Fracture zone with low angle orientations 80° tca. High angle and low angle sulfide veins.	542 – high angle fracture has trace of Hydrothermally altered clay 553-564 Traces of chloritic alteration 566-574 Tarnished pyrite after marcasite 597.9-606 qtz/py/marc veins

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
538	543				
543	548				
548	553				
553	558				
558	564				
564	569				
569	574				
574	579				
579	584				
584	589				
589	594				
594	597.9				
597.9	601				
601	604				
604	606				
606	609				

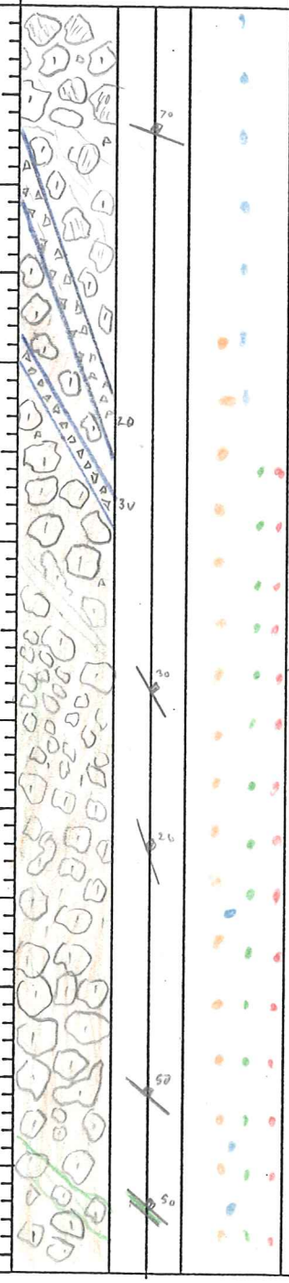
HOLE NUMBER RS-D350-99 PAGE 10 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	DOZER Fine grained rhyolite flow. Auto breccia texture or planar laminated flow. Hematitic stained unaltered rock dominates drill hole. 617-654 Brick Red Flow Hematite stain on fracture and through the flow 654-669 Cream colored flow with light pink matrix 617-644 Planar laminated flow 644-666 Auto brecciated flow 678.5-711 Auto brecciated flow 669-707 Hematite stain rhyolite	610 620 630 640 650 660 670 680			659.2-664 Pyrite aggregation and one white clay veinlet. Sulfide is dark so it may have traces of marcasite

ANALYTICAL DATA

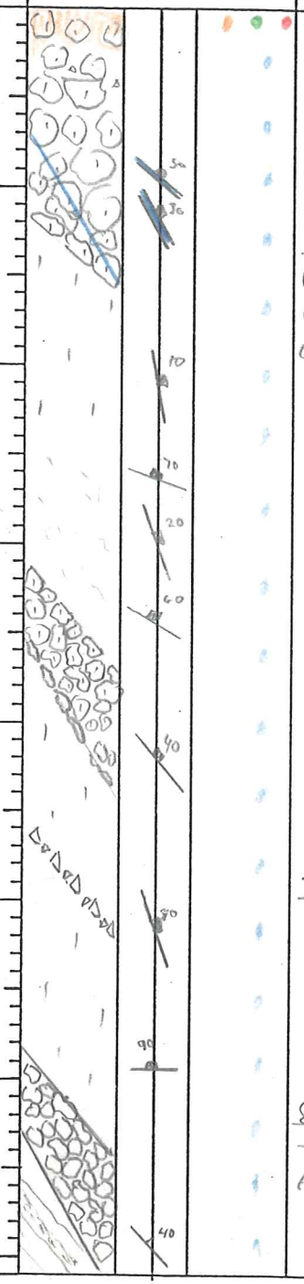
FROM	TO	W	Au	Ag	Au2
609	614				
614	619				
619	624				
624	629				
629	634				
634	639.1				
639.1	644				
644	649				
649	654				
654	659.2				
659.2	664				
664	669				
669	674				
674	679				

HOLE NUMBER RS-D350-99 PAGE 11 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	DOZER Fine grained rhyolite with auto brecciated and planar laminated textures. Predominantly Hematite stained on surfaces and fractures 711 - 714 massive fine grained flow. 714 - 738 Auto breccia 741 - 764 Auto breccia 764 - 824 Auto breccia intensity is variable and includes only fractured rock. 751.5 - 824 Hematite stained rhyolite no alteration	680 690 700 710 720 730 740 750		694 - 697 Milled breccia in Dozer auto breccia at 20° tca possible tectonic reactivation 702.8 - 704 milled breccia in Dozer auto breccia 30° tca. 716 - 721 Very milled section of breccia 718 - Increased fracture but still very low level	707 - 750 Slight chloritic alteration stains core pale greenish grey, only breccia matrix contains a trace level of hematite 714 - 726 Pyrite forms relatively large crystals of 2mm

ANALYTICAL DATA					
FROM	TO	W	Au	Ag	Au2
679	684				
684	689				
689	694				
694	699.2				
699.2	704				
704	708.9				
708.9	714				
714	719				
719	724				
724	729				
729	734				
734	739				
739	744				
744	748.5				

HOLE NUMBER RS-D350-99 PAGE 12 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION
Td	R	0-824 DOZER Fine grained rhyolite flow with auto brecciated and planner laminated textures Rock is hematite stained when fresh. Alteration consist of bleach/argillization over printing hematite 752 - 756 Autobreccia clast may have small vesicles on them 751.5 - 752 Gradational increase of hematite that continues to the "td" of the hole 777 - 784 Core has small specks of very small phenocrysts? these phenos have been seen as small chloritized this specks 817 - 824 Planar laminated Dozer at 40° tca. Core surface texture weak spotted (leopard) texture for 6". Note hematite on log	750 760 770 780 790 800 810 820		763.5 - 798 variable Fracture intensity locally approaching crackle breccia 798 - 799 narrow auto breccia 811-817 Auto brecciated texture will milled footwall	751.5-824 Calcite on fractures with hematite 761.5 - 1" wide Calcite vein 30° tca

ANALYTICAL DATA

FROM	TO	W	Au	Ag	Au2
748.8	754				
754	759				
759	764				
764	769				
769	774				
774	779				
779	784				
784	789				
789	794				
794	799				
799	804				
804	809				
809	814				
814	819				

HOLE NUMBER RS-D350-99 PAGE 13 OF 13

LITH.	OX/RED.	LITHOLOGY	FT	GRAPHIC LOG	STRUCTURE	ALTERATION AND MINERALIZATION	ANALYTICAL DATA FROM	TO	W	Au	Ag	Au2
Td	R	0-824 DOZER TD 824	820 830	40		Hematite stain Rhyolite Flow	819	824				

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D350-99 DATE: 05/03/99 LOGGED BY: [illegible] PAGE 1 OF 9

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)
0	4	96	90	10.0										
4	9	94	104	46										
9	14	100	96	70.8										
14	19	84	100	20										
19	29	82	99	50										
29	31	40	45	40										
31	34	0	0	0										
34	39	0	80	0										
39	49	96	100	73										
49	59	92	101	65										
59	69	80	100	88										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D350-99 DATE: 05/03 LOGGED BY: Don PAGE 2 OF 9

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)
69	79	70	97	75										
79	89	89	102	87										
89	99	98	100	80										
99	109	78	92	62										
109	119	48	100	41										
119	129	93	96	82										
129	139.5	65	91	65										
139.5	149.5	86	105	51										
149.5	159.5	93	106	78										
159.5	169.5	70	101	96										
169.5	179.5	87	101	70										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D350-99 DATE: 05/03/99 LOGGED BY: Dun PAGE 3 OF 9

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)
179.5	189.5	86	103	27										
189.5	192.5	0	77	0										
192.5	201.5	75	90	80										
201.5	211.5	97	106	86										
211.5	218	95	100	75										
218	228	85	106	62										
228	238	93	101	77										
238	248	99	99	16										
248	258	85	104	15										
258	269	68	91	32										
269	279	81	104	4										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RSD-350-99 DATE: LOGGED BY: Don PAGE 4 OF 9

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)
279	289	92	98	34										
289	299	100	102	100										
299	309	77	99	80										
309	319	100	102	92										
319	329	100	101	91										
329	339	100	101	87										
339	349	99	99	88										
349	359	100	99	80										
359	369	97	100	71										
369	379	96	100	67										
379	389	97	100	82										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RSD-350-99 DATE: LOGGED BY: Dan PAGE 5 OF 9

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)
389	399	98	100	68										
399	409	100	98	60										
409	419	93	100	55										
419	424	46	46	30										
424	429	44	44	30										
429	434	38	68	18										
434	439	98	108	88										
439	445.5	100	100	98										
445.5	455.5	84	102	68										
455.5	464	100	94	75										
464	474	95	95	84										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RSD-350-99 DATE: LOGGED BY: Don PAGE 6 OF 9

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)
474	484	56	83	40										
484	494	78	92	41										
494	504	80	96	44										
504	514	98	101	92										
514	523	100	99	89										
523	533	100	100	87										
533	543	78	97	78										
543	553	98	100	90										
553	564	100	104	75										
564	574	100	103	88										
574	584	100	99	95										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D350-99 DATE: 5-5-99 LOGGED BY: NBC PAGE 7 OF 9

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)
584	594	100	100	93										
594	604	98	98	78										
604	614	98	101	75										
614	624	100	100	84										
624	634	97	102	89										
634	644	98	100	80										
644	654	100	97	82										
654	664	100	99	95										
664	674	91	99	99										
674	684	99	99	78										
684	694	100	102	83										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-0350-99 DATE: 5-5-99 LOGGED BY: NGC PAGE 8 OF 9

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)
694	704	100	103	93										
704	714	100	99	99										
714	724	93	98	85										
724	734	78	101	70										
734	744	94	103	73										
744	754	92	101	78										
754	764	98	100	81										
764	774	98	96	87										
774	784	98	94	64										
784	794	100	100	71										
794	804	100	101	63										

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D350-99 DATE: 5-10-99 LOGGED BY: D.G. Muchellow PAGE 9 OF 9

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)
804	814	100	101	41										
814	824	95	100	73										

Newmont Gold Core Form

Hole# RS-D350-99
Logged by DG. Mackerron
Date 5-8-99
Area Vent Raise
Coords
Az/Incl S 5 E / -30
Total Depth 824
Contractor Longyear
Page 1 of 5

Footage	% Rec	RQD	Litho: Formation	Litho: Rock type	Litho: Color	Au oz/st	Ag oz/st	Graphic	Structure: Attitudes	Structure: fault	Structure: breccia	Structure: vein	Structure: gouge	Comments	Alteration: Silic	Alteration: argillic	Alteration: clay	Alteration: prop	Alteration: Sericite	Alteration: Chlorite	Alteration:	Met.: FeOX/Hem	Met.: CO3	Met.: Sulfide	Mineralogy: Pyrite	Mineralogy: Marcasite	Mineralogy: Calc/Dolo	Mineralogy: Clay	Mineralogy: BaSO4
			Td	Ryho	Tan White									0-824 DOZER Auto breccia texture	0	1	0	0	0	1		0	0	0	0	1	1	0	-
																											0		
20																													
															1														
															0														
																2				0									
40									30							1													
60																													
80																													
100																											1		
																											0		
															1														
															0	2													
120																1													
																				1								1	2
															1										2	2		1	0
140															0	2													
									30											0									
														143.1 - 145.9 Shear is ≈ 2" wide going down core axis											1	1			
															1														
															0	1													
160																													
									20																				
															1	0													
															0	1													
180																													
																2													
															2	0													
									30						0	2													
																1												0	
200									30																				

Newmont Gold Core Form

Hole# RS-D350-99 | **Az/Incl** S 5 E / -30 | **Page** 2 of 5

Logged by D.G. MacKerron | **Area** Vent Raise | **Total Depth** 824

Date 5-8-99 | **Coords** | **Contractor** Longyear

Footage	% Rec	RQD	Litho: Formation	Litho: Rock type	Litho: Color	Au oz/st	Ag oz/st	Graphic	Structure: Attitudes	Structure: fault	Structure: breccia	Structure: vein	Structure: gouge	Comments	Alteration: Silic	Alteration: argillic	Alteration: clay	Alteration: prop	Alteration: Sericite	Alteration: Chlorite	Alteration:	Met.: FeOX/Hem	Met.: CO3	Met.: Sulfide	Mineralogy: Pyrite	Mineralogy: Marcasite	Mineralogy: Calc/Dolo	Mineralogy: Clay	Mineralogy: BaSO4
200			Td	Rhyo	Gray wh'sh									0 -824 DOZER	0	1	0	0	0	0		0	0	0	1	1	0	0	0
														Auto brecciated and planner laminated Rhyolite															
220																													
240					Red brn																	1			0	0	1	1	
					Gry wh'sh																				1	1	0		
260																													
280																												1	
300														312 vesicals at base of auto breccia in planner laminated Dozer indicating a top of flow													1		
					Red Brown				⇑N							0						2			0	0			
320																													
340																													
360																													
380					Gray wh'sh																	0			1	1			
																											0	1	
																												0	
400																													

Newmont Gold Core Form

Hole# RS-D350-99 **Az/Incl** SSE/-30 **Page** 3 of 5

Logged by D.G. MacKerron **Area** Vent Raise **Total Depth** 824

Date **Coords** **Contractor** Longyear

Footage	% Rec	RQD	Litho: Formation	Litho: Rock type	Litho: Color	Au oz/st	Ag oz/st	Graphic	Structure: Attitudes	Structure: fault	Structure: breccia	Structure: vein	Structure: gouge	Comments	Alteration: Silic	Alteration: argillic	Alteration: clay	Alteration: prop	Alteration: Sericite	Alteration: Chlorite		Met.: FeOX/Hem	Met.: CO3	Met.: Sulfide	Mineralogy: Pyrite	Mineralogy: Marcasite	Mineralogy: Calc/Dolo	Mineralogy: Clay	Mineralogy: Br Sph
400			Td	Rhy	Grey white									0-824 DOZER	0	1	0	0	0	0		0	0	0	1	1	0	0	0
																											1		
																											0		
420																											1		
440					Brick Red											0						2			0	0			
460					Pink white											1													
					Grey white																				1				
480																										1	0	1	
																Tr												0	
																											1		
																1													
500																												1	
																											0	0	
																0													
					Brick Red																				0	0			
520																													
														540-545 very heavy hematite staining															
540																						3					1		
																						2							
																Tr													
					Pink white											1						Tr							
560																													
580																													
600																									2	2		1	1

Newmont Gold Core Form

Hole# RS-D350-99 **Logged by** D.G. MacKeiran **Date** _____

Area Vent Raise **Coords** _____

Az/Incl S 5 E / -30 **Total Depth** 824 **Contractor** Longyear

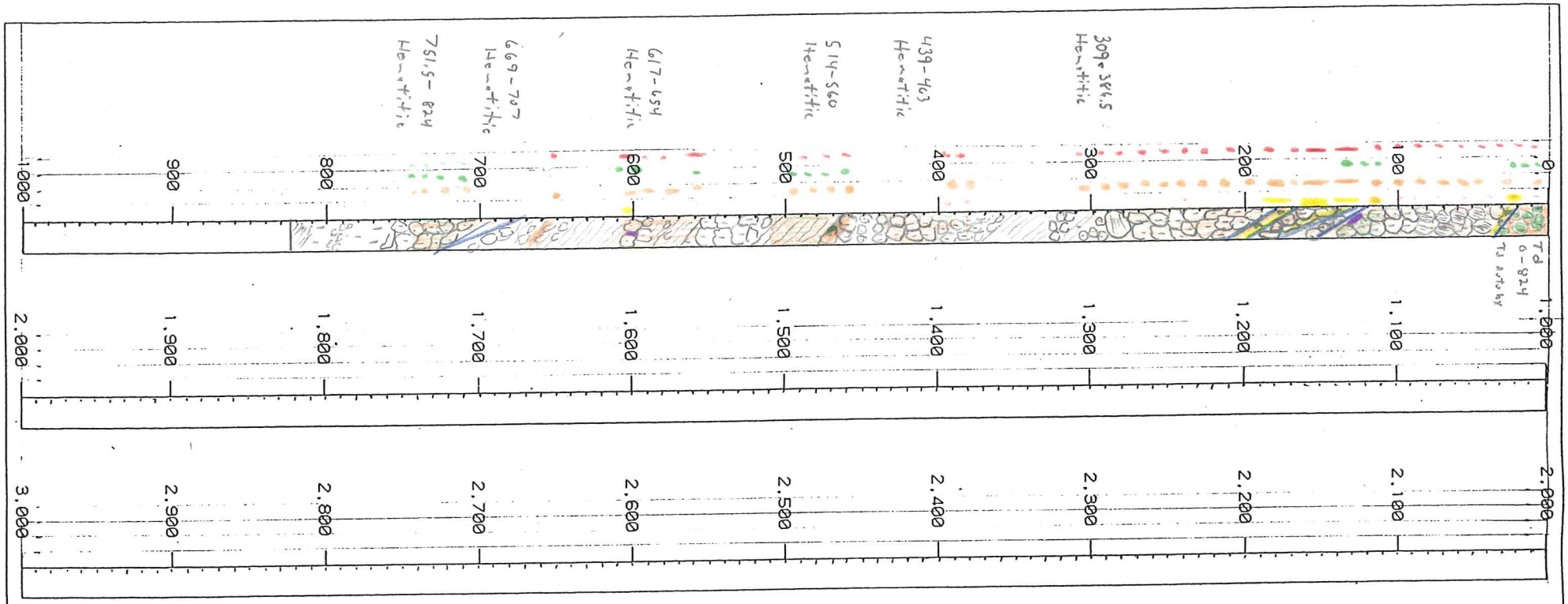
Footage	% Rec	RQD	Litho: Formation	Litho: Rock type	Litho: Color	Au oz/st	Ag oz/st	Graphic	Structure: Attitudes	Structure: fault	Structure: breccia	Structure: vein	Structure: gouge	Comments	Alteration: Silic	Alteration: argillic	Alteration: clay	Alteration: prop	Alteration: Sericite	Alteration: Chlorite		Met.: FEOX/H_2	Met.: CO3	Met.: Sulfide	Mineralogy: Pyrite	Mineralogy: Marcasite	Mineralogy: Calc/Dolo	Mineralogy: Clay	Mineralogy: Gn.Sph
600			Td	Rhy	Pink white									0-824 DOZER	0	1	0	0	0	0			0	0	1	0		0	0
					Brick Red											0						1			0		1		
620																													
640																						2							
																1						Tr			1				
660																											0		
																									0		1		
					Pinkish white											0						1							
680																													
700					Red brown											1											0		
																						0							
					Pink white															1									
					Grn Grey															0								I	
720																				1									
740																													
					Brick Red											0				0		1							
760																													
780																													
800																													

Newmont Gold Core Form

Hole# RS-D350-99
Logged by D.G. MacKeirnan
Date
Area Vent Raise
Coords
Az/Incl S 5 E / -30
Total Depth 824
Contractor Longyear
Page 5 of 5

Footage	% Rec	RQD	Litho: Formation	Litho: Rock type	Litho: Color	Au oz/st	Ag oz/st	Graphic	Structure: Attitudes	Structure: fault	Structure: breccia	Structure: vein	Structure: gouge	Comments	Alteration: Silic	Alteration: argillic	Alteration: clay	Alteration: prop	Alteration: Sericite	Alteration: Chlorite	Met.: FeO3/Fe	Met.: CO3	Met.: Sulfide	Mineralogy: Pyrite	Mineralogy: Marcasite	Mineralogy: Calc/Dolo	Mineralogy: Clay	Mineralogy: Russet
800			Td	Rhy	Brick Red									0-824 DOZER	0	0	0	0	0	0	1	0	0	0	0	1	0	0
820														TD 824														
830																												

RECORDFIELD.DWG Revised 3/17/98



LITHOLOGY

- PLAT/FLOW
- MASSIVE AT/FLOW
- LST-
- PMBX -
- TOS/BUD Epiclastics
- BMB - Rhyolitic Porphyry
- RHYOLITE - DOZER
- ALS - PHYLLITES

TEXTURES

- LITHIC FRAGMENTS
- CRYSTALS
- LAPILLI
- AMYGDULES
- SPHERULITE
- SHARDS

STRUCTURES

- BRECCIA
- FAULT
- CLAY OR GOUGE
- FRACTURE ZONE
- VEINS Qtz
- VEINLETS
- VEINS CALC

CONTACTS

- LOST, GRADATIONAL OR INFERRED
- 80 SHARP (WITH ANGLE TO CORE)
- WAVY
- ROUGH OR JAGGED

PYRITIZATION
CHLORITIZATION
ARGILLIZATION
SILICIFICATION
GRAPHIC LOG

Intensity: . . . . -- —

LOCATION ON GRID:	FINAL COLLAR COORDINATES	START 4/29/99	FINISH 5/1/99	LOGGED BY D.G. Mutterrow
Vent Raise	NORTH	HOLE TYPE Core	SURVEYED TO 400	
LAB American	EAST			
JOB #	ELEV	BEARING S 05 E	ANGLE -30	T. D. 824
DRILLING COMPANY Longyear	DRILLER Pat Bumford			

The Rosebud Mining Company LLC

PAGE 1 OF 1

HOLE #RS-D350-99

xAMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

PO BOX 11530
RENO NV,USA
Ph.(775) 356-0606, Fax.(775) 356-1413

NEWMONT GOLD COMPANY

COPIES TO : C. BALLEW
: R. VANCE
: K. ALLEN
:

CLIENT REFERENCE No: RS-D350-99
No. SAMPLES : 184
MAIN SAMPLE TYPE : DRILL CORE

RECEIVED : 17 MAY 1999
REPORTED : 7 JUN 1999

NEVADA LEGISLATIVE DISCLAIMER :-
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 geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
Ag	D210	10%	ppm	0.5
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 0-4	20		<0.001		0.5	<0.02
RS-D350-99 4-9	43		0.001		0.8	0.02
RS-D350-99 9-14	20		<0.001		0.5	<0.02
RS-D350-99 14-19	15		<0.001		<0.5	<0.02
RS-D350-99 19-24	92		0.003		1.2	0.04
RS-D350-99 24.0-28.7	50	56	0.001	0.002	0.9	0.03
RS-D350-99 28.7-31.0	110		0.003		3.6	0.11
RS-D350-99 31-34		SAMPLE NOT RECEIVED				
RS-D350-99 34-39	<5		<0.001		<0.5	<0.02
RS-D350-99 39-44	<5		<0.001		<0.5	<0.02
RS-D350-99 44-49	8		<0.001		<0.5	<0.02
RS-D350-99 49-54	<5		<0.001		<0.5	<0.02
RS-D350-99 54-59	43		0.001		0.7	0.02
RS-D350-99 59-64	59		0.002		1.1	0.03
RS-D350-99 64-69	60		0.002		1.6	0.05
RS-D350-99 69-74	32		<0.001		0.5	<0.02
RS-D350-99 74-79	34		<0.001		0.5	<0.02
RS-D350-99 79-84	47	44	0.001	0.001	0.8	0.02
RS-D350-99 84-89	207		0.006		1.9	0.06
RS-D350-99 89-94	848		0.025		2.0	0.06
RS-D350-99 94-99	73		0.002		1.2	0.04
RS-D350-99 99-104	81		0.002		1.4	0.04
RS-D350-99 104-109	44		0.001		1.0	0.03
RS-D350-99 109-114	186		0.005		1.7	0.05
RS-D350-99 114-119	168		0.005		1.4	0.04

AMERICAN ASSAY LABORATORIES

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PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 119-124	104		0.003		1.2	0.04
RS-D350-99 124-129	99		0.003		1.3	0.04
RS-D350-99 129-134	126		0.004		0.9	0.03
RS-D350-99 134.0-136.8	161		0.005		0.8	0.02
RS-D350-99 136.8-139.5	1118		0.033		3.4	0.10
RS-D350-99 139.5-143.1	44	52	0.001	0.002	0.8	0.02
RS-D350-99 143.1-145.9	104		0.003		2.6	0.08
RS-D350-99 145.9-149.5	62	70	0.002	0.002	1.4	0.04
RS-D350-99 149.5-152.0	55		0.002		0.8	0.02
RS-D350-99 149.5-152.0B	1026		0.030		1.2	0.04
RS-D350-99 152.0-154.5	392		0.011		13.6	0.40
RS-D350-99 154.5-159.5	202		0.006		1.6	0.05
RS-D350-99 159.5-164.6	10		<0.001		0.6	<0.02
RS-D350-99 164.6-168.2	6		<0.001		<0.5	<0.02
RS-D350-99 168.2-169.8	10		<0.001		<0.5	<0.02
RS-D350-99 169.8-174.4	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 174.4-179.5	20		<0.001		<0.5	<0.02
RS-D350-99 179.5-182.1	86		0.003		1.1	0.03
RS-D350-99 182.1-184.0	54		0.002		0.5	<0.02
RS-D350-99 184.0-189.5	50		0.001		0.8	0.02
RS-D350-99 189.5-192.5	58		0.002		0.6	<0.02
RS-D350-99 192.5-196.5	<5		<0.001		<0.5	<0.02
RS-D350-99 196.5-201.5	<5		<0.001		<0.5	<0.02
RS-D350-99 201.5-206.5	<5		<0.001		<0.5	<0.02
RS-D350-99 206.5-211.5	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 211.5-215.0	10		<0.001		<0.5	<0.02
RS-D350-99 215-218	5		<0.001		0.6	<0.02
RS-D350-99 218.0-222.7	29		<0.001		0.8	0.02
RS-D350-99 222.7-224.7	106		0.003		1.6	0.05
RS-D350-99 224.7-228.0	44		0.001		<0.5	<0.02
RS-D350-99 228-233	<5		<0.001		<0.5	<0.02
RS-D350-99 233-238	<5		<0.001		<0.5	<0.02
RS-D350-99 238-243	24		<0.001		<0.5	<0.02
RS-D350-99 243-248	<5		<0.001		<0.5	<0.02
RS-D350-99 248-253	<5		<0.001		<0.5	<0.02
RS-D350-99 253-258	5		<0.001		<0.5	<0.02
RS-D350-99 258-263	<5		<0.001		<0.5	<0.02
RS-D350-99 263.0-268.3	<5		<0.001		<0.5	<0.02
RS-D350-99 268.3-271.0	<5		<0.001		0.5	<0.02
RS-D350-99 271-274	20	22	<0.001	<0.001	0.5	<0.02
RS-D350-99 274-279	379	312	0.011	0.009	<0.5	<0.02
RS-D350-99 279-284	202		0.006		0.7	0.02
RS-D350-99 284-289	21		<0.001		<0.5	<0.02
RS-D350-99 289-294	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 294-299	<5		<0.001		<0.5	<0.02
RS-D350-99 299-304	12		<0.001		<0.5	<0.02
RS-D350-99 304-309	<5		<0.001		<0.5	<0.02
RS-D350-99 309-314	<5		<0.001		<0.5	<0.02
RS-D350-99 314-319	<5		<0.001		<0.5	<0.02
RS-D350-99 319-324	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 324-329	<5		<0.001		<0.5	<0.02
RS-D350-99 329-334	<5		<0.001		<0.5	<0.02
RS-D350-99 334-339	<5		<0.001		<0.5	<0.02
RS-D350-99 339-344	<5		<0.001		<0.5	<0.02
RS-D350-99 344-349	<5		<0.001		<0.5	<0.02
RS-D350-99 349-354	<5		<0.001		<0.5	<0.02
RS-D350-99 354-359	<5		<0.001		<0.5	<0.02
RS-D350-99 359-364	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 359-364B	1041		0.030		0.6	<0.02
RS-D350-99 364-369	25		<0.001		<0.5	<0.02
RS-D350-99 369-374	26		<0.001		<0.5	<0.02
RS-D350-99 374-379	<5		<0.001		<0.5	<0.02
RS-D350-99 379-384	<5		<0.001		<0.5	<0.02
RS-D350-99 384-389	<5		<0.001		<0.5	<0.02
RS-D350-99 389-394	12		<0.001		1.2	0.04
RS-D350-99 394-399	32		<0.001		0.5	<0.02
RS-D350-99 399-404	<5		<0.001		<0.5	<0.02
RS-D350-99 404-409	<5	<5	<0.001	<0.001	0.5	<0.02
RS-D350-99 409-414	<5		<0.001		<0.5	<0.02
RS-D350-99 414-419	<5		<0.001		0.9	0.03
RS-D350-99 419-424	<5		<0.001		<0.5	<0.02
RS-D350-99 424-429	<5		<0.001		<0.5	<0.02
RS-D350-99 429-434	<5		<0.001		<0.5	<0.02
RS-D350-99 434-439	30		<0.001		<0.5	<0.02
RS-D350-99 439.0-442.1	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 442.1-445.5	<5		<0.001		<0.5	<0.02
RS-D350-99 445.5-450.5	<5		<0.001		<0.5	<0.02
RS-D350-99 450.5-455.5	<5		<0.001		<0.5	<0.02
RS-D350-99 455.5-460.0	<5		<0.001		<0.5	<0.02
RS-D350-99 460-464	<5		<0.001		<0.5	<0.02
RS-D350-99 464-469	<5		<0.001		<0.5	<0.02
RS-D350-99 469-474	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 474-477	<5		<0.001		<0.5	<0.02
RS-D350-99 477-480	8		<0.001		0.8	0.02
RS-D350-99 480-484	62	60	0.002	0.002	1.9	0.06
RS-D350-99 484.0-486.7	54		0.002		1.1	0.03
RS-D350-99 486.7-490.0	<5		<0.001		0.6	<0.02
RS-D350-99 490-494	<5		<0.001		<0.5	<0.02
RS-D350-99 494.0-496.1	<5		<0.001		<0.5	<0.02
RS-D350-99 496.1-498.1	14		<0.001		0.5	<0.02
RS-D350-99 498.1-500.9	52		0.002		1.2	0.04
RS-D350-99 500.9-504.0	<5		<0.001		0.6	<0.02
RS-D350-99 504-509	8	10	<0.001	<0.001	0.6	<0.02
RS-D350-99 509-514	<5		<0.001		<0.5	<0.02
RS-D350-99 514.0-517.9	<5		<0.001		<0.5	<0.02
RS-D350-99 517.9-523.0	<5		<0.001		<0.5	<0.02
RS-D350-99 523-528	<5		<0.001		<0.5	<0.02
RS-D350-99 528-533	<5		<0.001		<0.5	<0.02
RS-D350-99 533-538	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 538-543	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 543-548	<5		<0.001		<0.5	<0.02
RS-D350-99 548-553	<5		<0.001		<0.5	<0.02
RS-D350-99 553-558	<5		<0.001		<0.5	<0.02
RS-D350-99 558-564	<5		<0.001		<0.5	<0.02
RS-D350-99 564-569	<5		<0.001		<0.5	<0.02
RS-D350-99 569-574	<5		<0.001		<0.5	<0.02
RS-D350-99 574-579	<5		<0.001		<0.5	<0.02
RS-D350-99 579-584	<5		<0.001		<0.5	<0.02
RS-D350-99 584-589	<5		<0.001		<0.5	<0.02
RS-D350-99 589-594	<5		<0.001		<0.5	<0.02
RS-D350-99 594.0-597.9	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 597.9-601.0	<5		<0.001		<0.5	<0.02
RS-D350-99 601-604	28	30	<0.001	<0.001	1.3	0.04
RS-D350-99 601-604B	1056		0.031		0.6	<0.02
RS-D350-99 604-606	<5		<0.001		<0.5	<0.02
RS-D350-99 606-609	<5		<0.001		<0.5	<0.02
RS-D350-99 609-614	<5		<0.001		<0.5	<0.02
RS-D350-99 614-619	<5		<0.001		<0.5	<0.02
RS-D350-99 619-624	<5		<0.001		<0.5	<0.02
RS-D350-99 624-629	<5		<0.001		<0.5	<0.02
RS-D350-99 629-634	<5		<0.001		<0.5	<0.02
RS-D350-99 634.0-639.1	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 639.1-644.0	<5		<0.001		<0.5	<0.02
RS-D350-99 644-649	<5		<0.001		<0.5	<0.02
RS-D350-99 649-654	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 654.0-659.2	<5		<0.001		<0.5	<0.02
RS-D350-99 659.2-664.0	22		<0.001		0.8	0.02
RS-D350-99 664-669	<5		<0.001		<0.5	<0.02
RS-D350-99 669-674	<5		<0.001		<0.5	<0.02
RS-D350-99 674-679	<5		<0.001		<0.5	<0.02
RS-D350-99 679-684	<5		<0.001		<0.5	<0.02
RS-D350-99 684-689	<5		<0.001		<0.5	<0.02
RS-D350-99 689-694	<5		<0.001		<0.5	<0.02
RS-D350-99 694.0-699.2	<5		<0.001		<0.5	<0.02
RS-D350-99 699.2-704.0	<5		<0.001		<0.5	<0.02
RS-D350-99 704.0-708.9	<5		<0.001		<0.5	<0.02
RS-D350-99 708.9-714.0	<5		<0.001		<0.5	<0.02
RS-D350-99 714-719	<5		<0.001		<0.5	<0.02
RS-D350-99 719-724	<5		<0.001		0.6	<0.02
RS-D350-99 724-729	<5		<0.001		0.6	<0.02
RS-D350-99 729-734	<5		<0.001		0.6	<0.02
RS-D350-99 734-739	<5		<0.001		<0.5	<0.02
RS-D350-99 739-744	<5		<0.001		<0.5	<0.02
RS-D350-99 744.0-748.8	<5		<0.001		<0.5	<0.02
RS-D350-99 748.8-754.0	<5		<0.001		<0.5	<0.02
RS-D350-99 748.8-754.0B	144		0.004		<0.5	<0.02
RS-D350-99 754-759	<5		<0.001		<0.5	<0.02
RS-D350-99 759-764	<5		<0.001		<0.5	<0.02
RS-D350-99 764-769	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 769-774	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

ANALYSIS REPORT SP053478

American Assay Laboratories

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 7 JUN 1999

SAMPLES	Au FA30 ppb	Au(R) FA30 ppb	Au(OZ) FA30 OPT	Au(RZ) FA30 OPT	Ag D210 ppm	Ag(OZ) D210 OPT
RS-D350-99 774-779	<5		<0.001		<0.5	<0.02
RS-D350-99 779-784	<5		<0.001		<0.5	<0.02
RS-D350-99 784-789	<5		<0.001		<0.5	<0.02
RS-D350-99 789-794	<5		<0.001		<0.5	<0.02
RS-D350-99 794-799	<5		<0.001		<0.5	<0.02
RS-D350-99 799-804	<5		<0.001		<0.5	<0.02
RS-D350-99 804-809	<5		<0.001		<0.5	<0.02
RS-D350-99 809-814	<5		<0.001		<0.5	<0.02
RS-D350-99 814-819	<5		<0.001		<0.5	<0.02
RS-D350-99 819-824	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

AAL 01-2 ICP PACKAGE DETECTION LIMITS

ELEMENT	Ag	Al	As	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Sr	Th	Ti	U	V	W	Zn
SAMPLES	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	0.3	0.01	2	3	1	3	0.01	0.2	1	1	1	0.01	10	0.01	1	0.01	2	1	0.01	1	0.001	3	3	0.1	1	2	0.01	8	1	2	1

0.500 GRAMS OF PULP IS DIGESTED WITH HYDROCHLORIC AND NITRIC ACID AT 95 DEGREE CENTIGRADE FOR ONE HOUR.
DIGEST IS PARTIAL FOR B, Ba, Ca, Cr, Fe, La, Mg, Mn, Sr, Ti AND W.
DIGEST IS LIMITED FOR Al, K AND Na.

CLIENT:	*NEWMONT GOLD COMPANY*
CLIENT REF:	ROSEBUD EXPLORATION
AAL REF:	SP053478
METHOD:	AAL 01-2 + Se

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

ELEMENT SAMPLES	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Se ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
RS-D350-99 00-19	0.7	0.4	18	< 3	24	< 3	0.34	< .2	1	10	7	1.36	23	0.27	50	0.03	500	1	0.02	3	0.006	20	< 3	3.58	23	11	< .01	< 8	1	< 2	63
RS-D350-99 19-31	1.8	0.37	75	< 3	17	< 3	0.13	< .2	1	14	8	1.62	76	0.23	45	0.02	279	3	0.01	4	0.005	23	3	11.84	13	10	< .01	< 8	1	< 2	59
RS-D350-99 34-54	0.4	0.39	15	< 3	17	< 3	0.69	0.2	1	14	8	1.9	6	0.26	46	0.02	954	3	0.02	5	0.007	24	< 3	0.83	31	10	< .01	< 8	1	< 2	54
RS-D350-99 54-74	0.9	0.35	34	< 3	22	< 3	0.66	< .2	1	16	9	1.92	51	0.24	41	0.02	806	3	0.02	4	0.005	24	< 3	7.7	31	9	< .01	< 8	1	< 2	60
RS-D350-99 74-94	1.3	0.36	47	< 3	42	< 3	0.4	< .2	1	19	10	2.14	< 5	0.23	38	0.02	523	4	0.03	6	0.005	24	4	8.33	20	9	< .01	< 8	1	< 2	44
RS-D350-99 94-114	1.1	0.4	41	< 3	127	< 3	0.29	0.2	1	19	10	1.63	98	0.26	42	0.02	335	3	0.02	7	0.006	19	< 3	8.85	26	10	< .01	< 8	1	< 2	46
RS-D350-99 114-134	0.9	0.46	65	< 3	161	< 3	0.16	< .2	1	12	8	1.43	224	0.31	47	0.02	117	3	0.01	4	0.005	22	< 3	10.21	22	11	< .01	< 8	< 1	< 2	71
RS-D350-99 134-152	1.4	0.41	81	< 3	113	< 3	0.15	0.5	1	13	8	1.56	587	0.27	42	0.02	113	7	0.01	4	0.005	24	3	11.28	23	10	< .01	< 8	< 1	< 2	113
RS-D350-99 152.0-169.8	4.3	0.35	186	< 3	41	< 3	0.94	< .2	1	17	5	3.66	645	0.12	26	0.02	1180	14	0.02	10	0.005	32	27	28.55	41	12	< .01	< 8	< 1	< 2	101
RS-D350-99 169.8-192.5	0.6	0.41	11	< 3	97	< 3	0.35	0.3	1	13	7	1.49	19	0.28	48	0.02	388	2	0.02	3	0.006	25	3	3.73	27	10	< .01	< 8	1	< 2	37
RS-D350-99 192.5-211.5	< .3	0.6	2	< 3	20	< 3	1.08	0.4	< 1	7	5	1.22	5	0.31	58	0.03	1643	1	0.03	2	0.008	20	< 3	0.03	59	12	< .01	< 8	1	< 2	35
RS-D350-99 211.5-233.0	0.6	0.5	16	< 3	21	< 3	0.68	0.3	1	11	6	1.61	< 5	0.29	58	0.02	1164	2	0.03	3	0.009	24	4	3.28	43	12	< .01	< 8	1	< 2	39
RS-D350-99 233-253	< .3	0.54	< 2	< 3	108	< 3	0.96	0.2	1	8	4	1.2	5	0.33	67	0.02	1411	1	0.03	2	0.007	18	< 3	0.02	66	14	< .01	< 8	< 1	< 2	19
RS-D350-99 253-274	0.3	0.56	37	< 3	19	< 3	0.17	< .2	< 1	5	4	1.7	60	0.38	60	0.02	124	< 1	0.02	1	0.007	24	< 3	1.26	40	13	< .01	< 8	1	< 2	28
RS-D350-99 274-294	0.8	0.49	32	3	18	4	0.49	0.3	3	7	5	1.62	13	0.32	64	0.03	478	2	0.02	2	0.007	35	< 3	2.36	51	14	< .01	< 8	1	< 2	22
RS-D350-99 294-314	0.3	0.44	11	< 3	19	< 3	0.99	< .2	1	13	7	1.93	72	0.29	65	0.02	867	2	0.04	3	0.008	20	< 3	0.45	67	13	< .01	< 8	1	< 2	23
RS-D350-99 314-339	0.3	0.41	5	3	35	< 3	0.97	0.2	1	12	7	1.62	5	0.28	83	0.01	811	2	0.06	4	0.01	21	< 3	0.02	69	17	0.01	< 8	1	< 2	17
RS-D350-99 339-364	< .3	0.37	5	< 3	43	< 3	0.72	0.2	1	15	9	1.91	< 5	0.26	76	0.01	722	2	0.06	4	0.012	20	< 3	< .01	59	17	0.01	< 8	1	< 2	18
RS-D350-99 364-384	< .3	0.46	12	< 3	54	< 3	0.94	< .2	1	10	8	1.99	14	0.3	74	0.02	1278	2	0.06	3	0.011	20	< 3	< .01	79	16	0.01	< 8	1	< 2	20
RS-D350-99 384-404	0.5	0.48	11	< 3	16	< 3	0.34	0.2	< 1	3	3	0.95	11	0.31	74	0.02	397	1	0.02	1	0.008	24	< 3	3.36	93	16	< .01	< 8	< 1	< 2	22
RS-D350-99 404-424	< .3	0.5	2	< 3	36	< 3	0.28	< .2	< 1	4	3	0.76	6	0.31	76	0.02	258	1	0.02	1	0.009	22	< 3	1.8	86	16	< .01	< 8	1	< 2	21
RS-D350-99 424.0-442.1	< .3	0.58	3	< 3	23	< 3	0.84	< .2	< 1	6	5	1.26	< 5	0.3	73	0.03	731	2	0.05	1	0.009	24	< 3	0.07	78	16	< .01	< 8	1	< 2	26
RS-D350-99 442.1-464.0	< .3	0.46	2	< 3	51	< 3	1.3	< .2	1	8	5	1.43	< 5	0.32	72	0.02	843	2	0.06	2	0.008	21	< 3	< .01	108	16	0.01	< 8	1	< 2	17
RS-D350-99 464-484	0.4	0.63	20	< 3	83	< 3	0.59	< .2	1	4	4	2.13	148	0.39	55	0.03	538	2	0.02	2	0.007	21	< 3	3.66	119	13	< .01	< 8	1	< 2	40
RS-D350-99 484-504	0.6	0.57	28	3	51	< 3	0.34	0.2	1	6	3	1.27	220	0.39	65	0.02	424	3	0.02	1	0.007	27	3	2.47	132	15	< .01	< 8	1	< 2	54
RS-D350-99 504-523	0.4	0.55	4	< 3	26	< 3	1.16	< .2	1	9	6	1.88	10	0.37	57	0.02	807	2	0.04	2	0.008	21	< 3	0.45	126	14	< .01	< 8	1	< 2	22
RS-D350-99 523-543	< .3	0.44	6	< 3	150	< 3	1.22	0.3	1	8	4	1.66	< 5	0.29	72	0.01	648	1	0.05	2	0.02	23	< 3	< .01	144	16	0.01	< 8	1	< 2	16
RS-D350-99 543-564	< .3	0.56	6	< 3	158	< 3	1.23	0.8	1	7	5	1.47	11	0.31	69	0.03	945	1	0.04	2	0.013	24	< 3	< .01	140	15	< .01	< 8	1	< 2	17
RS-D350-99 564-584	< .3	0.53	7	< 3	45	< 3	0.94	0.4	1	6	4	1.15	8	0.29	76	0.03	747	< 1	0.04	2	0.009	22	< 3	0.56	144	16	< .01	< 8	< 1	< 2	17
RS-D350-99 584-604	0.3	0.56	14	< 3	161	< 3	0.86	0.7	1	6	5	1.42	6	0.3	65	0.03	779	1	0.03	1	0.008	19	< 3	5.07	160	14	< .01	< 8	< 1	< 2	20
RS-D350-99 604-624	< .3	0.5	7	< 3	117	< 3	0.88	1.6	1	7	6	1.36	8	0.3	74	0.03	787	1	0.04	3	0.008	19	< 3	1.75	145	16	< .01	< 8	1	< 2	16
RS-D350-99 624-649	< .3	0.43	4	< 3	67	< 3	0.98	0.4	1	14	8	1.91	< 5	0.32	76	0.01	755	2	0.06	4	0.009	20	< 3	< .01	125	17	0.01	< 8	1	< 2	18
RS-D350-99 649-674	< .3	0.62	6	< 3	50	< 3	0.82	0.3	1	8	4	1.63	9	0.35	68	0.02	774	< 1	0.06	2	0.008	20	< 3	0.59	125	15	< .01	< 8	< 1	< 2	20
RS-D350-99 674-694	< .3	0.41	4	< 3	79	< 3	1.11	< .2	1	5	4	1.49	< 5	0.3	75	0.01	982	< 1	0.06	2	0.009	20	< 3	< .01	139	16	0.01	< 8	1	< 2	16
STANDARD C3/DS2	5.2	1.78	59	19	146	18	0.53	22.5	12	163	62	3.23	281	0.15	18	0.56	762	24	0.03	33	0.083	33	14	2.56	27	19	0.08	23	75	15	165

CLIENT:	*NEWMONT GOLD COMPANY*
CLIENT REF:	ROSEBUD EXPLORATION
AAL REF:	SP053478
METHOD:	AAL 01-2 + Se

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
SPARKS, NV 89431
PHONE: (775) 356-0606
FAX: (775) 356-1413

ELEMENT SAMPLES	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Se ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm
STANDARD G-2	< .3	0.88	< 2	< 3	216	< 3	0.61	< .2	4	73	3	1.84	< 5	0.45	8	0.54	524	1	0.06	7	0.087	3	< 3	0.07	65	4	0.12	< 8	37	2	40
RS-D350-99 694.0-708.9	< .3	0.58	5	< 3	154	< 3	1.33	0.2	< 1	6	3	1.21	13	0.31	69	0.02	1508	1	0.04	1	0.008	21	< 3	< .01	172	14	< .01	< 8	< 1	< 2	20
RS-D350-99 708.9-729.0	0.3	0.59	17	< 3	54	< 3	0.4	< .2	< 1	4	3	1.46	19	0.37	69	0.02	510	1	0.03	1	0.01	24	< 3	2.01	148	15	< .01	< 8	< 1	< 2	32
RS-D350-99 729-754	0.4	0.52	8	< 3	27	< 3	0.49	0.2	< 1	4	3	1.15	17	0.27	78	0.03	497	1	0.03	1	0.009	23	< 3	2.08	164	16	< .01	< 8	< 1	< 2	24
RS-D350-99 754-779	< .3	0.38	2	< 3	52	< 3	1.37	0.4	1	6	2	1.64	19	0.22	66	0.02	1197	1	0.05	1	0.009	24	< 3	< .01	193	17	0.01	< 8	1	< 2	19
RS-D350-99 779-804	< .3	0.36	< 2	< 3	51	< 3	0.74	< .2	< 1	8	4	1.37	15	0.21	79	0.02	622	1	0.05	2	0.009	21	< 3	< .01	131	17	0.01	< 8	1	< 2	14
RS-D350-99 804-824	0.3	0.42	3	< 3	54	< 3	0.91	< .2	1	7	4	1.61	11	0.24	75	0.03	872	2	0.05	2	0.011	19	< 3	< .01	157	17	0.01	< 8	1	< 2	18

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP053478

PO BOX 11530
RENO NV,USA
Ph.(775) 356-0606. Fax.(775) 356-1413

NEWMONT GOLD COMPANY

COPIES TO : C. BAILEW
: R. VANCE
: K. ALLEN
:

NSI

CLIENT REFERENCE No: RS-D350-99 RECEIVED : 17 MAY 1999

No. SAMPLES : 184 REPORTED : 27 MAY 1999

MAIN SAMPLE TYPE : DRILL CORE

NEVADA LEGISLATIVE DISCLAIMER :-
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 geological materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project.

ANALYSIS	ANALYTICAL METHOD	QUALITY PARAMETER	UNIT	DETECTION
Au	FA30	15%	ppb	5
Au(R)	FA30	15%	ppb	5
Au(OZ)	FA30	15%	OPT	0.001
Au(RZ)	FA30	15%	OPT	0.001
Ag	D210	10%	ppm	0.5
Ag(OZ)	D210	10%	OPT	0.02

SIGNATORY : Leonard E. Mackedon B.S.

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP053478

CLIENT : NEWMONT GOLD COMPANY
PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 27 MAY 1999

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 0-4	20		<0.001		0.5	<0.02
RS-D350-99 4-9	43		0.001		0.8	0.02
RS-D350-99 9-14	20		<0.001		0.5	<0.02
RS-D350-99 14-19	15		<0.001		<0.5	<0.02
RS-D350-99 19-24	92		0.003		1.2	0.04
RS-D350-99 24.0-28.7	50	56	0.001	0.002	0.9	0.03
RS-D350-99 28.7-31.0	110		0.003		3.6	0.11
RS-D350-99 31-34	SAMPLE NOT RECEIVED					
RS-D350-99 34-39	<5		<0.001		<0.5	<0.02
RS-D350-99 39-44	<5		<0.001		<0.5	<0.02
RS-D350-99 44-49	8		<0.001		<0.5	<0.02
RS-D350-99 49-54	<5		<0.001		<0.5	<0.02
RS-D350-99 54-59	43		0.001		0.7	0.02
RS-D350-99 59-64	59		0.002		1.1	0.03
RS-D350-99 64-69	60		0.002		1.6	0.05
RS-D350-99 69-74	32		<0.001		0.5	<0.02
RS-D350-99 74-79	34		<0.001		0.5	<0.02
RS-D350-99 79-84	47	44	0.001	0.001	0.8	0.02
RS-D350-99 84-89	207		0.006		1.9	0.06
RS-D350-99 89-94	848		0.025		2.0	0.06
RS-D350-99 94-99	73		0.002		1.2	0.04
RS-D350-99 99-104	81		0.002		1.4	0.04
RS-D350-99 104-109	44		0.001		1.0	0.03
RS-D350-99 109-114	186		0.005		1.7	0.05
RS-D350-99 114-119	168		0.005		1.4	0.04

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP053478

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 119-124	104		0.003		1.2	0.04
RS-D350-99 124-129	99		0.003		1.3	0.04
RS-D350-99 129-134	126		0.004		0.9	0.03
RS-D350-99 134.0-136.8	161		0.005		0.8	0.02
RS-D350-99 136.8-139.5	1118		0.033		3.4	0.10
RS-D350-99 139.5-143.1	44	52	0.001	0.002	0.8	0.02
RS-D350-99 143.1-145.9	104		0.003		2.6	0.08
RS-D350-99 145.9-149.5	62	70	0.002	0.002	1.4	0.04
RS-D350-99 149.5-152.0	55		0.002		0.8	0.02
RS-D350-99 149.5-152.0B	1026		0.030		1.2	0.04
RS-D350-99 152.0-154.5	392		0.011		13.6	0.40
RS-D350-99 154.5-159.5	202		0.006		1.6	0.05
RS-D350-99 159.5-164.6	10		<0.001		0.6	<0.02
RS-D350-99 164.6-168.2	6		<0.001		<0.5	<0.02
RS-D350-99 168.2-169.8	10		<0.001		<0.5	<0.02
RS-D350-99 169.8-174.4	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 174.4-179.5	20		<0.001		<0.5	<0.02
RS-D350-99 179.5-182.1	86		0.003		1.1	0.03
RS-D350-99 182.1-184.0	54		0.002		0.5	<0.02
RS-D350-99 184.0-189.5	50		0.001		0.8	0.02
RS-D350-99 189.5-192.5	58		0.002		0.6	<0.02
RS-D350-99 192.5-196.5	<5		<0.001		<0.5	<0.02
RS-D350-99 196.5-201.5	<5		<0.001		<0.5	<0.02
RS-D350-99 201.5-206.5	<5		<0.001		<0.5	<0.02
RS-D350-99 206.5-211.5	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP053478

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REPORTED : 27 MAY 1999

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 211.5-215.0	10		<0.001		<0.5	<0.02
RS-D350-99 215-218	5		<0.001		0.6	<0.02
RS-D350-99 218.0-222.7	29		<0.001		0.8	0.02
RS-D350-99 222.7-224.7	106		0.003		1.6	0.05
RS-D350-99 224.7-228.0	44		0.001		<0.5	<0.02
RS-D350-99 228-233	<5		<0.001		<0.5	<0.02
RS-D350-99 233-238	<5		<0.001		<0.5	<0.02
RS-D350-99 238-243	24		<0.001		<0.5	<0.02
RS-D350-99 243-248	<5		<0.001		<0.5	<0.02
RS-D350-99 248-253	<5		<0.001		<0.5	<0.02
RS-D350-99 253-258	5		<0.001		<0.5	<0.02
RS-D350-99 258-263	<5		<0.001		<0.5	<0.02
RS-D350-99 263.0-268.3	<5		<0.001		<0.5	<0.02
RS-D350-99 268.3-271.0	<5		<0.001		0.5	<0.02
RS-D350-99 271-274	20	22	<0.001	<0.001	0.5	<0.02
RS-D350-99 274-279	379	312	0.011	0.009	<0.5	<0.02
RS-D350-99 279-284	202		0.006		0.7	0.02
RS-D350-99 284-289	21		<0.001		<0.5	<0.02
RS-D350-99 289-294	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 294-299	<5		<0.001		<0.5	<0.02
RS-D350-99 299-304	12		<0.001		<0.5	<0.02
RS-D350-99 304-309	<5		<0.001		<0.5	<0.02
RS-D350-99 309-314	<5		<0.001		<0.5	<0.02
RS-D350-99 314-319	<5		<0.001		<0.5	<0.02
RS-D350-99 319-324	<5		<0.001		<0.5	<0.02

06/27/1999 16:50 7023661413 AMERICAN ASSAY LABS PAGE 01

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP053478

CLIENT : NEWMONT GOLD COMPANY
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REFERENCE : RS-D350-99

REPORTED : 27 MAY 1999

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 324-329	<5		<0.001		<0.5	<0.02
RS-D350-99 329-334	<5		<0.001		<0.5	<0.02
RS-D350-99 334-339	<5		<0.001		<0.5	<0.02
RS-D350-99 339-344	<5		<0.001		<0.5	<0.02
RS-D350-99 344-349	<5		<0.001		<0.5	<0.02
RS-D350-99 349-354	<5		<0.001		<0.5	<0.02
RS-D350-99 354-359	<5		<0.001		<0.5	<0.02
RS-D350-99 359-364	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 359-364B	1041		0.030		0.6	<0.02
RS-D350-99 364-369	25		<0.001		<0.5	<0.02
RS-D350-99 369-374	26		<0.001		<0.5	<0.02
RS-D350-99 374-379	<5		<0.001		<0.5	<0.02
RS-D350-99 379-384	<5		<0.001		<0.5	<0.02
RS-D350-99 384-389	<5		<0.001		<0.5	<0.02
RS-D350-99 389-394	12		<0.001		1.2	0.04
RS-D350-99 394-399	32		<0.001		0.5	<0.02
RS-D350-99 399-404	<5		<0.001		<0.5	<0.02
RS-D350-99 404-409	<5	<5	<0.001	<0.001	0.5	<0.02
RS-D350-99 409-414	<5		<0.001		<0.5	<0.02
RS-D350-99 414-419	<5		<0.001		0.9	0.03
RS-D350-99 419-424	<5		<0.001		<0.5	<0.02
RS-D350-99 424-429	<5		<0.001		<0.5	<0.02
RS-D350-99 429-434	<5		<0.001		<0.5	<0.02
RS-D350-99 434-439	30		<0.001		<0.5	<0.02
RS-D350-99 439.0-442.1	<5		<0.001		<0.5	<0.02

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 442.1-445.5	<5		<0.001		<0.5	<0.02
RS-D350-99 445.5-450.5	<5		<0.001		<0.5	<0.02
RS-D350-99 450.5-455.5	<5		<0.001		<0.5	<0.02
RS-D350-99 455.5-460.0	<5		<0.001		<0.5	<0.02
RS-D350-99 460-464	<5		<0.001		<0.5	<0.02
RS-D350-99 464-469	<5		<0.001		<0.5	<0.02
RS-D350-99 469-474	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 474-477	<5		<0.001		<0.5	<0.02
RS-D350-99 477-480	8		<0.001		0.8	0.02
RS-D350-99 480-484	62	60	0.002	0.002	1.9	0.06
RS-D350-99 484.0-486.7	54		0.002		1.1	0.03
RS-D350-99 486.7-490.0	<5		<0.001		0.6	<0.02
RS-D350-99 490-494	<5		<0.001		<0.5	<0.02
RS-D350-99 494.0-496.1	<5		<0.001		<0.5	<0.02
RS-D350-99 496.1-498.1	14		<0.001		0.5	<0.02
RS-D350-99 498.1-500.9	52		0.002		1.2	0.04
RS-D350-99 500.9-504.0	<5		<0.001		0.6	<0.02
RS-D350-99 504-509	8	10	<0.001	<0.001	0.6	<0.02
RS-D350-99 509-514	<5		<0.001		<0.5	<0.02
RS-D350-99 514.0-517.9	<5		<0.001		<0.5	<0.02
RS-D350-99 517.9-523.0	<5		<0.001		<0.5	<0.02
RS-D350-99 523-528	<5		<0.001		<0.5	<0.02
RS-D350-99 528-533	<5		<0.001		<0.5	<0.02
RS-D350-99 533-538	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 538-543	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

PROVISIONAL REPORT SP053478

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PROJECT : ROSEBUD
REFERENCE : RS-D350-99

REPORTED : 27 MAY 1999

SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 543-548	<5		<0.001		<0.5	<0.02
RS-D350-99 548-553	<5		<0.001		<0.5	<0.02
RS-D350-99 553-558	<5		<0.001		<0.5	<0.02
RS-D350-99 558-564	<5		<0.001		<0.5	<0.02
RS-D350-99 564-569	<5		<0.001		<0.5	<0.02
RS-D350-99 569-574	<5		<0.001		<0.5	<0.02
RS-D350-99 574-579	<5		<0.001		<0.5	<0.02
RS-D350-99 579-584	<5		<0.001		<0.5	<0.02
RS-D350-99 584-589	<5		<0.001		<0.5	<0.02
RS-D350-99 589-594	<5		<0.001		<0.5	<0.02
RS-D350-99 594.0-597.9	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 597.9-601.0	<5		<0.001		<0.5	<0.02
RS-D350-99 601-604	28	30	<0.001	<0.001	1.3	0.04
RS-D350-99 601-604B	1056		0.031		0.6	<0.02
RS-D350-99 604-606	<5		<0.001		<0.5	<0.02
RS-D350-99 606-609	<5		<0.001		<0.5	<0.02
RS-D350-99 609-614	<5		<0.001		<0.5	<0.02
RS-D350-99 614-619	<5		<0.001		<0.5	<0.02
RS-D350-99 619-624	<5		<0.001		<0.5	<0.02
RS-D350-99 624-629	<5		<0.001		<0.5	<0.02
RS-D350-99 629-634	<5		<0.001		<0.5	<0.02
RS-D350-99 634.0-639.1	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 639.1-644.0	<5		<0.001		<0.5	<0.02
RS-D350-99 644-649	<5		<0.001		<0.5	<0.02
RS-D350-99 649-654	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

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REFERENCE : RS-D350-99

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 654.0-659.2	<5		<0.001		<0.5	<0.02
RS-D350-99 659.2-664.0	22		<0.001		0.8	0.02
RS-D350-99 664-669	<5		<0.001		<0.5	<0.02
RS-D350-99 669-674	<5		<0.001		<0.5	<0.02
RS-D350-99 674-679	<5		<0.001		<0.5	<0.02
RS-D350-99 679-684	<5		<0.001		<0.5	<0.02
RS-D350-99 684-689	<5		<0.001		<0.5	<0.02
RS-D350-99 689-694	<5		<0.001		<0.5	<0.02
RS-D350-99 694.0-699.2	<5		<0.001		<0.5	<0.02
RS-D350-99 699.2-704.0	<5		<0.001		<0.5	<0.02
RS-D350-99 704.0-708.9	<5		<0.001		<0.5	<0.02
RS-D350-99 708.9-714.0	<5		<0.001		<0.5	<0.02
RS-D350-99 714-719	<5		<0.001		<0.5	<0.02
RS-D350-99 719-724	<5		<0.001		0.6	<0.02
RS-D350-99 724-729	<5		<0.001		0.6	<0.02
RS-D350-99 729-734	<5		<0.001		0.6	<0.02
RS-D350-99 734-739	<5		<0.001		<0.5	<0.02
RS-D350-99 739-744	<5		<0.001		<0.5	<0.02
RS-D350-99 744.0-748.8	<5		<0.001		<0.5	<0.02
RS-D350-99 748.8-754.0	<5		<0.001		<0.5	<0.02
RS-D350-99 748.8-754.0R	144		0.004		<0.5	<0.02
RS-D350-99 754-759	<5		<0.001		<0.5	<0.02
RS-D350-99 759-764	<5		<0.001		<0.5	<0.02
RS-D350-99 764-769	<5	<5	<0.001	<0.001	<0.5	<0.02
RS-D350-99 769-774	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES

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REFERENCE : RS-D350-99

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SAMPLES	Au	Au(R)	Au(OZ)	Au(RZ)	Ag	Ag(OZ)
RS-D350-99 774-779	<5		<0.001		<0.5	<0.02
RS-D350-99 779-784	<5		<0.001		<0.5	<0.02
RS-D350-99 784-789	<5		<0.001		<0.5	<0.02
RS-D350-99 789-794	<5		<0.001		<0.5	<0.02
RS-D350-99 794-799	<5		<0.001		<0.5	<0.02
RS-D350-99 799-804	<5		<0.001		<0.5	<0.02
RS-D350-99 804-809	<5		<0.001		<0.5	<0.02
RS-D350-99 809-814	<5		<0.001		<0.5	<0.02
RS-D350-99 814-819	<5		<0.001		<0.5	<0.02
RS-D350-99 819-824	<5		<0.001		<0.5	<0.02

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE.
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CLIENT: *NEWMONT GOLD COMPANY*
CLIENT REF: ROSEBUD EXPLORATION
AAL REF: SP053478
METHOD: AAL 01-2 + Se

AMERICAN ASSAY LABORATORIES
1500 GLENDALE AVE
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PHONE: (775) 356-0606
FAX: (775) 356-1413

ELEMENT SAMPLES	Ag	Al	As	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Sr	Th	Ti	U	V	W	Zn
	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RS-D350-99 00-19	0.7	0.4	18	<3	24	<3	0.34	<.2	1	10	7	1.36	23	0.27	50	0.03	500	1	0.02	3	0.006	20	<3	3.58	23	11	<.01	<8	1	<2	63
RS-D350-99 19-31	1.8	0.37	75	<3	17	<3	0.13	<.2	1	14	8	1.62	76	0.23	45	0.02	279	3	0.01	4	0.005	23	3	11.84	13	10	<.01	<8	1	<2	59
RS-D350-99 34-54	0.4	0.39	15	<3	17	<3	0.69	0.2	1	14	8	1.9	6	0.26	46	0.02	954	3	0.02	5	0.007	24	<3	0.83	31	10	<.01	<8	1	<2	54
RS-D350-99 54-74	0.9	0.35	34	<3	22	<3	0.66	<.2	1	16	9	1.92	51	0.24	41	0.02	806	3	0.02	4	0.005	24	<3	7.7	31	9	<.01	<8	1	<2	60
RS-D350-99 74-94	1.3	0.36	47	<3	42	<3	0.4	<.2	1	19	10	2.14	<5	0.23	38	0.02	523	4	0.03	6	0.005	24	4	8.33	20	9	<.01	<8	1	<2	44
RS-D350-99 94-114	1.1	0.4	41	<3	127	<3	0.29	0.2	1	19	10	1.63	98	0.26	42	0.02	335	3	0.02	7	0.006	19	<3	8.85	26	10	<.01	<8	1	<2	46
RS-D350-99 114-134	0.9	0.46	65	<3	161	<3	0.16	<.2	1	12	8	1.43	224	0.31	47	0.02	117	3	0.01	4	0.005	22	<3	10.21	22	11	<.01	<8	<1	<2	71
RS-D350-99 134-152	1.4	0.41	81	<3	113	<3	0.15	0.5	1	13	8	1.56	587	0.27	42	0.02	113	7	0.01	4	0.005	24	3	11.28	23	10	<.01	<8	<1	<2	113
RS-D350-99 152.0-169.8	4.3	0.35	186	<3	41	<3	0.94	<.2	1	17	5	3.66	645	0.12	26	0.02	1180	14	0.02	10	0.005	32	27	28.55	41	12	<.01	<8	<1	<2	101
RS-D350-99 169.8-192.5	0.6	0.41	11	<3	97	<3	0.35	0.3	1	13	7	1.49	19	0.28	48	0.02	388	2	0.02	3	0.006	25	3	3.73	27	10	<.01	<8	1	<2	37
RS-D350-99 192.5-211.5	<.3	0.6	2	<3	20	<3	1.08	0.4	<1	7	5	1.22	5	0.31	58	0.03	1643	1	0.03	2	0.008	20	<3	0.03	59	12	<.01	<8	1	<2	35
RS-D350-99 211.5-233.0	0.6	0.5	16	<3	21	<3	0.68	0.3	1	11	6	1.61	<5	0.29	58	0.02	1164	2	0.03	3	0.009	24	4	3.28	43	12	<.01	<8	1	<2	39
RS-D350-99 233-253	<.3	0.54	<2	<3	108	<3	0.96	0.2	1	8	4	1.2	5	0.33	67	0.02	1411	1	0.03	2	0.007	18	<3	0.02	66	14	<.01	<8	<1	<2	19
RS-D350-99 253-274	0.3	0.56	37	<3	19	<3	0.17	<.2	<1	5	4	1.7	60	0.38	60	0.02	124	<1	0.02	1	0.007	24	<3	1.26	40	13	<.01	<8	1	<2	28
RS-D350-99 274-294	0.8	0.49	32	3	18	4	0.49	0.3	3	7	5	1.62	13	0.32	64	0.03	478	2	0.02	2	0.007	35	<3	2.36	51	14	<.01	<8	1	<2	22
RS-D350-99 294-314	0.3	0.44	11	<3	19	<3	0.99	<.2	1	13	7	1.93	72	0.29	65	0.02	867	2	0.04	3	0.008	20	<3	0.45	67	13	<.01	<8	1	<2	23
RS-D350-99 314-339	0.3	0.41	5	3	35	<3	0.97	0.2	1	12	7	1.62	5	0.28	83	0.01	811	2	0.06	4	0.01	21	<3	0.02	69	17	0.01	<8	1	<2	17
RS-D350-99 339-364	<.3	0.37	5	<3	43	<3	0.72	0.2	1	15	9	1.91	<5	0.26	76	0.01	722	2	0.06	4	0.012	20	<3	<.01	59	17	0.01	<8	1	<2	18
RS-D350-99 364-384	<.3	0.46	12	<3	54	<3	0.94	<.2	1	10	8	1.99	14	0.3	74	0.02	1278	2	0.06	3	0.011	20	<3	<.01	79	16	0.01	<8	1	<2	20
RS-D350-99 384-404	0.5	0.48	11	<3	16	<3	0.34	0.2	<1	3	3	0.95	11	0.31	74	0.02	397	1	0.02	1	0.008	24	<3	3.36	93	16	<.01	<8	<1	<2	22
RS-D350-99 404-424	<.3	0.5	2	<3	36	<3	0.28	<.2	<1	4	3	0.76	6	0.31	76	0.02	258	1	0.02	1	0.009	22	<3	1.8	86	16	<.01	<8	1	<2	21
RS-D350-99 424.0-442.1	<.3	0.58	3	<3	23	<3	0.84	<.2	<1	6	5	1.26	<5	0.3	73	0.03	731	2	0.05	1	0.009	24	<3	0.07	78	16	<.01	<8	1	<2	26
RS-D350-99 442.1-464.0	<.3	0.46	2	<3	51	<3	1.3	<.2	1	8	5	1.43	<5	0.32	72	0.02	843	2	0.06	2	0.008	21	<3	<.01	108	16	0.01	<8	1	<2	17
RS-D350-99 464-484	0.4	0.63	20	<3	83	<3	0.59	<.2	1	4	4	2.13	148	0.39	55	0.03	538	2	0.02	2	0.007	21	<3	3.86	119	13	<.01	<8	1	<2	40
RS-D350-99 484-504	0.6	0.57	28	3	51	<3	0.34	0.2	1	6	3	1.27	220	0.39	65	0.02	424	3	0.02	1	0.007	27	3	2.47	132	15	<.01	<8	1	<2	54
RS-D350-99 504-523	0.4	0.55	4	<3	26	<3	1.16	<.2	1	9	6	1.88	10	0.37	57	0.02	807	2	0.04	2	0.008	21	<3	0.45	126	14	<.01	<8	1	<2	22
RS-D350-99 523-543	<.3	0.44	6	<3	150	<3	1.22	0.3	1	8	4	1.66	<5	0.29	72	0.01	648	1	0.05	2	0.02	23	<3	<.01	144	16	0.01	<8	1	<2	16
RS-D350-99 543-564	<.3	0.56	6	<3	158	<3	1.23	0.8	1	7	5	1.47	11	0.31	69	0.03	945	1	0.04	2	0.013	24	<3	<.01	140	15	<.01	<8	1	<2	17
RS-D350-99 564-584	<.3	0.53	7	<3	45	<3	0.94	0.4	1	6	4	1.15	8	0.29	76	0.03	747	<1	0.04	2	0.009	22	<3	0.56	144	16	<.01	<8	<1	<2	17
RS-D350-99 584-604	0.3	0.56	14	<3	161	<3	0.86	0.7	1	6	5	1.42	6	0.3	65	0.03	779	1	0.03	1	0.008	19	<3	5.07	160	14	<.01	<8	<1	<2	20
RS-D350-99 604-624	<.3	0.5	7	<3	117	<3	0.88	1.6	1	7	6	1.36	8	0.3	74	0.03	787	1	0.04	3	0.008	19	<3	1.75	145	16	<.01	<8	1	<2	16
RS-D350-99 624-649	<.3	0.43	4	<3	67	<3	0.98	0.4	1	14	8	1.91	<5	0.32	76	0.01	755	2	0.06	4	0.009	20	<3	<.01	125	17	0.01	<8	1	<2	18
RS-D350-99 649-674	<.3	0.62	6	<3	50	<3	0.82	0.3	1	8	4	1.63	9	0.35	68	0.02	774	<1	0.06	2	0.008	20	<3	0.59	125	15	<.01	<8	<1	<2	20
RS-D350-99 674-694	<.3	0.41	4	<3	79	<3	1.11	<.2	1	5	4	1.49	<5	0.3	75	0.01	982	<1	0.06	2	0.009	20	<3	<.01	139	16	0.01	<8	1	<2	16
STANDARD C3/DS2	5.2	1.78	59	19	146	18	0.53	22.5	12	163	62	3.23	281	0.15	18	0.56	762	24	0.03	33	0.083	33	14	2.56	27	19	0.08	23	75	15	165

P	Pb	Sb	Se	Sr	Th	Ti	U	V	W	Zn
%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
0.087	3	<3	0.07	65	4	0.12	<8	37	2	40
0.008	21	<3	<.01	172	14	<.01	<8	<1	<2	20
0.01	24	<3	2.01	148	15	<.01	<8	<1	<2	32
0.009	23	<3	2.08	164	16	<.01	<8	<1	<2	24
0.009	24	<3	<.01	193	17	0.01	<8	1	<2	19
0.009	21	<3	<.01	131	17	0.01	<8	1	<2	14
0.011	19	<3	<.01	157	17	0.01	<8	1	<2	18

SP

SUBMITTAL FORM

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Mendoza, Argentina

Company: Newmont Gold

Address: Winnemucca Office

City Winnemucca State NV Zip 89445

Telephone Number: ( ) Fax Number: ( )

Project Name: Rosebud Exploration Purchase Order Number:

Date Submitted: 5-15-99 Number of Samples: 180 + 4 Pulps

RESULTS REPORTED IN: ppm [ ] ppb [ ] opt [ ]

SAMPLE IDENTIFICATION	TYPE	ELEMENTS REQUIRED
RS-D350-99	core	FA 30 Au Ag D210
		AA 1-2 ICP + Se
		composite as shown on attachment
STANDARDS: 152.0B, 364.0B	Pulps	Au Ag Only
604.0B, 754.0B (No ICP)		
RS-D350-99 MS-3 (RMG1) 152.0 B / RS-D-350-99 MS-3 (RMG1) 364.0 B		
RS-D350-99 MS-3 (RMG1) 604.0B / PEEL HERE / RS-D 350-99 MS-2 (RMG1) 754.0B		

COARSE REJECTS (Normally Discarded After 60 Days)

[ ] Return COD after analysis complete

PULPS (Normally Stored Free For One Month)

[ ] Discard after one month

[X] Return COD after one month

RESULTS AND INVOICES TO BE SENT TO:

Invoice to:

Charlotte Bullen
Winnemucca Office

Results to:

Randy Vance: Newmont Winnemucca

Kurt Allen: Rosebud Mine

Comments:

Newmont Rosebud Standard Prep

CLIENT FILE COPY

LAB COPY

RS-D350-99

Depth From	To	Interval	Au	Ag	ICP	Composite Interval	Sample Number	Pulp
0	4	4	x	x			1	
4	9	5	x	x			2	
9	14	5	x	x			3	
14	19	5	x	x	x	19	4	
19	24	5	x	x			5	
24	28.7	4.7	x	x			6	
28.7	31	2.3	x	x	x	12	7	
31	34	3			NO SAMPLE			
34	39	5	x	x			8	
39	44	5	x	x			9	
44	49	5	x	x			10	
49	54	5	x	x	x	20	11	
54	59	5	x	x			12	
59	64	5	x	x			13	
64	69	5	x	x			14	
69	74	5	x	x	x	20	15	
74	79	5	x	x			16	
79	84	5	x	x			17	
84	89	5	x	x			18	
89	94	5	x	x	x	20	19	
94	99	5	x	x			20	
99	104	5	x	x			21	
104	109	5	x	x			22	
109	114	5	x	x	x	20	23	
114	119	5	x	x			24	
119	124	5	x	x			25	
124	129	5	x	x			26	
129	134	5	x	x	x	20	27	
134	136.8	2.8	x	x			28	
136.8	139.5	2.7	x	x			29	
139.5	143.1	3.6	x	x			30	
143.1	145.9	2.8	x	x			31	
145.9	149.5	3.6	x	x			32	
149.5	152	2.5	x	x	x	18	33	152.0B
152	154.5	2.5	x	x			34	
154.5	159.5	5	x	x			35	
159.5	164.6	5.1	x	x			36	
164.6	168.2	3.6	x	x			37	
168.2	169.8	1.6	x	x	x	17.8	38	

169.8	174.4	4.6	x	x			39	
174.4	179.5	5.1	x	x			40	
179.5	182.1	2.6	x	x			41	
182.1	184	1.9	x	x			42	
184	189.5	5.5	x	x			43	
189.5	192.5	3	x	x	x	22.7	44	
192.5	196.5	4	x	x			45	
196.5	201.5	5	x	x			46	
201.5	206.5	5	x	x			47	
206.5	211.5	5	x	x	x	19	48	
211.5	215	3.5	x	x			49	
215	218	3	x	x			50	
218	222.7	4.7	x	x			51	
222.7	224.7	2	x	x			52	
224.7	228	3.3	x	x			53	
228	233	5	x	x	x	21.5	54	
233	238	5	x	x			55	
238	243	5	x	x			56	
243	248	5	x	x			57	
248	253	5	x	x	x	20	58	
253	258	5	x	x			59	
258	263	5	x	x			60	
263	268.3	5.3	x	x			61	
268.3	271	2.7	x	x			62	
271	274	3	x	x	x	21	63	
274	279	5	x	x			64	
279	284	5	x	x			65	
284	289	5	x	x			66	
289	294	5	x	x	x	20	67	
294	299	5	x	x			68	
299	304	5	x	x			69	
304	309	5	x	x			70	
309	314	5	x	x	x	20	71	
314	319	5	x	x			72	
319	324	5	x	x			73	
324	329	5	x	x			74	
329	334	5	x	x			75	
334	339	5	x	x	x	25	76	
339	344	5	x	x			77	
344	349	5	x	x			78	
349	354	5	x	x			79	
354	359	5	x	x			80	
359	364	5	x	x	x	25	81	364.0B

364	369	5	x	x			82
369	374	5	x	x			83
374	379	5	x	x			84
379	384	5	x	x	x	20	85
384	389	5	x	x			86
389	394	5	x	x			87
394	399	5	x	x			88
399	404	5	x	x	x	20	89
404	409	5	x	x			90
409	414	5	x	x			91
414	419	5	x	x			92
419	424	5	x	x	x	20	93
424	429	5	x	x			94
429	434	5	x	x			95
434	439	5	x	x			96
439	442.1	3.1	x	x	x	18.1	97
442.1	445.5	3.4	x	x			98
445.5	450.5	5	x	x			99
450.5	455.5	5	x	x			100
455.5	460	4.5	x	x			101
460	464	4	x	x	x	21.9	102
464	469	5	x	x			103
469	474	5	x	x			104
474	477	3	x	x			105
477	480	3	x	x			106
480	484	4	x	x	x	20	107
484	486.7	2.7	x	x			108
486.7	490	3.3	x	x			109
490	494	4	x	x			110
494	496.1	2.1	x	x			111
496.1	498.1	2	x	x			112
498.1	500.9	2.8	x	x			113
500.9	504	3.1	x	x	x	20	114
504	509	5	x	x			115
509	514	5	x	x			116
514	517.9	3.9	x	x			117
517.9	523	5.1	x	x	x	19	118
523	528	5	x	x			119
528	533	5	x	x			120
533	538	5	x	x			121
538	543	5	x	x	x	20	122

543	548	5	x	x			123	
548	553	5	x	x			124	
553	558	5	x	x			125	
558	564	6	x	x	x	21	126	
564	569	5	x	x			127	
569	574	5	x	x			128	
574	579	5	x	x			129	
579	584	5	x	x	x	20	130	
584	589	5	x	x			131	
589	594	5	x	x			132	
594	597.9	3.9	x	x			133	
597.9	601	3.1	x	x			134	
601	604	3	x	x	x	20	135	604.0B
604	606	2	x	x			136	
606	609	3	x	x			137	
609	614	5	x	x			138	
614	619	5	x	x			139	
619	624	5	x	x	x	20	140	
624	629	5	x	x			141	
629	634	5	x	x			142	
634	639.1	5.1	x	x			143	
639.1	644	4.9	x	x			144	
644	649	5	x	x	x	25	145	
649	654	5	x	x			146	
654	659.2	5.2	x	x			147	
659.2	664	4.8	x	x			148	
664	669	5	x	x			149	
669	674	5	x	x	x	25	150	
674	679	5	x	x			151	
679	684	5	x	x			152	
684	689	5	x	x			153	
689	694	5	x	x	x	20	154	
694	699.2	5.2	x	x			155	
699.2	704	4.8	x	x			156	
704	708.9	4.9	x	x	x	14.9	157	
708.9	714	5.1	x	x			158	
714	719	5	x	x			159	
719	724	5	x	x			160	
724	729	5	x	x	x	20.1	161	
729	734	5	x	x			162	
734	739	5	x	x			163	
739	744	5	x	x			164	
744	748.8	4.8	x	x			165	
748.8	754	5.2	x	x	x	25	166	754.0B

754	759	5	x	x			167
759	764	5	x	x			168
764	769	5	x	x			169
769	774	5	x	x			170
774	779	5	x	x	x	25	171
779	784	5	x	x			172
784	789	5	x	x			173
789	794	5	x	x			174
794	799	5	x	x			175
799	804	5	x	x	x	25	176
804	809	5	x	x			177
809	814	5	x	x			178
814	819	5	x	x			179
819	824	5	x	x	x	20	180

RS-D350-99

Depth From	To	Interval	Au	Ag	ICP	Composite Interval	Sample Number	Pulp
0	4	4	x	x			1	
4	9	5	x	x			2	
9	14	5	x	x			3	
14	19	5	x	x	x	19	4	
19	24	5	x	x			5	
24	28.7	4.7	x	x			6	
28.7	31	2.3	x	x	x	12	7	
31	34	3		NO SAMPLE				
34	39	5	x	x			8	
39	44	5	x	x			9	
44	49	5	x	x			10	
49	54	5	x	x	x	20	11	
54	59	5	x	x			12	
59	64	5	x	x			13	
64	69	5	x	x			14	
69	74	5	x	x	x	20	15	
74	79	5	x	x			16	
79	84	5	x	x			17	
84	89	5	x	x			18	
89	94	5	x	x	x	20	19	
94	99	5	x	x			20	
99	104	5	x	x			21	
104	109	5	x	x			22	
109	114	5	x	x	x	20	23	
114	119	5	x	x			24	
119	124	5	x	x			25	
124	129	5	x	x			26	
129	134	5	x	x	x	20	27	
134	136.8	2.8	x	x			28	
136.8	139.5	2.7	x	x			29	
139.5	143.1	3.6	x	x			30	
143.1	145.9	2.8	x	x			31	
145.9	149.5	3.6	x	x			32	
149.5	152	2.5	x	x	x	18	33	152.0B
152	154.5	2.5	x	x			34	
154.5	159.5	5	x	x			35	
159.5	164.6	5.1	x	x			36	
164.6	168.2	3.6	x	x			37	
168.2	169.8	1.6	x	x	x	17.8	38	

169.8	174.4	4.6	x	x			39	
174.4	179.5	5.1	x	x			40	
179.5	182.1	2.6	x	x			41	
182.1	184	1.9	x	x			42	
184	189.5	5.5	x	x			43	
189.5	192.5	3	x	x	x	22.7	44	
192.5	196.5	4	x	x			45	
196.5	201.5	5	x	x			46	
201.5	206.5	5	x	x			47	
206.5	211.5	5	x	x	x	19	48	
211.5	215	3.5	x	x			49	
215	218	3	x	x			50	
218	222.7	4.7	x	x			51	
222.7	224.7	2	x	x			52	
224.7	228	3.3	x	x			53	
228	233	5	x	x	x	21.5	54	
233	238	5	x	x			55	
238	243	5	x	x			56	
243	248	5	x	x			57	
248	253	5	x	x	x	20	58	
253	258	5	x	x			59	
258	263	5	x	x			60	
263	268.3	5.3	x	x			61	
268.3	271	2.7	x	x			62	
271	274	3	x	x	x	21	63	
274	279	5	x	x			64	
279	284	5	x	x			65	
284	289	5	x	x			66	
289	294	5	x	x	x	20	67	
294	299	5	x	x			68	
299	304	5	x	x			69	
304	309	5	x	x			70	
309	314	5	x	x	x	20	71	
314	319	5	x	x			72	
319	324	5	x	x			73	
324	329	5	x	x			74	
329	334	5	x	x			75	
334	339	5	x	x	x	25	76	
339	344	5	x	x			77	
344	349	5	x	x			78	
349	354	5	x	x			79	
354	359	5	x	x			80	
359	364	5	x	x	x	25	81	364.0B

364	369	5	x	x			82
369	374	5	x	x			83
374	379	5	x	x			84
379	384	5	x	x	x	20	85
384	389	5	x	x			86
389	394	5	x	x			87
394	399	5	x	x			88
399	404	5	x	x	x	20	89
404	409	5	x	x			90
409	414	5	x	x			91
414	419	5	x	x			92
419	424	5	x	x	x	20	93
424	429	5	x	x			94
429	434	5	x	x			95
434	439	5	x	x			96
439	442.1	3.1	x	x	x	18.1	97
442.1	445.5	3.4	x	x			98
445.5	450.5	5	x	x			99
450.5	455.5	5	x	x			100
455.5	460	4.5	x	x			101
460	464	4	x	x	x	21.9	102
464	469	5	x	x			103
469	474	5	x	x			104
474	477	3	x	x			105
477	480	3	x	x			106
480	484	4	x	x	x	20	107
484	486.7	2.7	x	x			108
486.7	490	3.3	x	x			109
490	494	4	x	x			110
494	496.1	2.1	x	x			111
496.1	498.1	2	x	x			112
498.1	500.9	2.8	x	x			113
500.9	504	3.1	x	x	x	20	114
504	509	5	x	x			115
509	514	5	x	x			116
514	517.9	3.9	x	x			117
517.9	523	5.1	x	x	x	19	118
523	528	5	x	x			119
528	533	5	x	x			120
533	538	5	x	x			121
538	543	5	x	x	x	20	122

543	548	5	x	x			123	
548	553	5	x	x			124	
553	558	5	x	x			125	
558	564	6	x	x	x	21	126	
564	569	5	x	x			127	
569	574	5	x	x			128	
574	579	5	x	x			129	
579	584	5	x	x	x	20	130	
584	589	5	x	x			131	
589	594	5	x	x			132	
594	597.9	3.9	x	x			133	
597.9	601	3.1	x	x			134	
601	604	3	x	x	x	20	135	604.0B
604	606	2	x	x			136	
606	609	3	x	x			137	
609	614	5	x	x			138	
614	619	5	x	x			139	
619	624	5	x	x	x	20	140	
624	629	5	x	x			141	
629	634	5	x	x			142	
634	639.1	5.1	x	x			143	
639.1	644	4.9	x	x			144	
644	649	5	x	x	x	25	145	
649	654	5	x	x			146	
654	659.2	5.2	x	x			147	
659.2	664	4.8	x	x			148	
664	669	5	x	x			149	
669	674	5	x	x	x	25	150	
674	679	5	x	x			151	
679	684	5	x	x			152	
684	689	5	x	x			153	
689	694	5	x	x	x	20	154	
694	699.2	5.2	x	x			155	
699.2	704	4.8	x	x			156	
704	708.9	4.9	x	x	x	14.9	157	
708.9	714	5.1	x	x			158	
714	719	5	x	x			159	
719	724	5	x	x			160	
724	729	5	x	x	x	20.1	161	
729	734	5	x	x			162	
734	739	5	x	x			163	
739	744	5	x	x			164	
744	748.8	4.8	x	x			165	
748.8	754	5.2	x	x	x	25	166	754.0B

754	759	5	x	x			167
759	764	5	x	x			168
764	769	5	x	x			169
769	774	5	x	x			170
774	779	5	x	x	x	25	171
779	784	5	x	x			172
784	789	5	x	x			173
789	794	5	x	x			174
794	799	5	x	x			175
799	804	5	x	x	x	25	176
804	809	5	x	x			177
809	814	5	x	x			178
814	819	5	x	x			179
819	824	5	x	x	x	20	180

Down Hole Survey Data
RS-D350-99

Footage	Measured Bearing	Corrected Azimuth -15.66	Measured Inclination	Calculated Dip
50	21	174.7	57.8	-32.2
400	22.5	173.2	57	-33.0
600*	38.5	54.2	57.2	-32.8
820*	73	302.7	57	-33.0

*Bad camera shots dips are good

STP41DHS.CR5 05/04/99 11:51:20

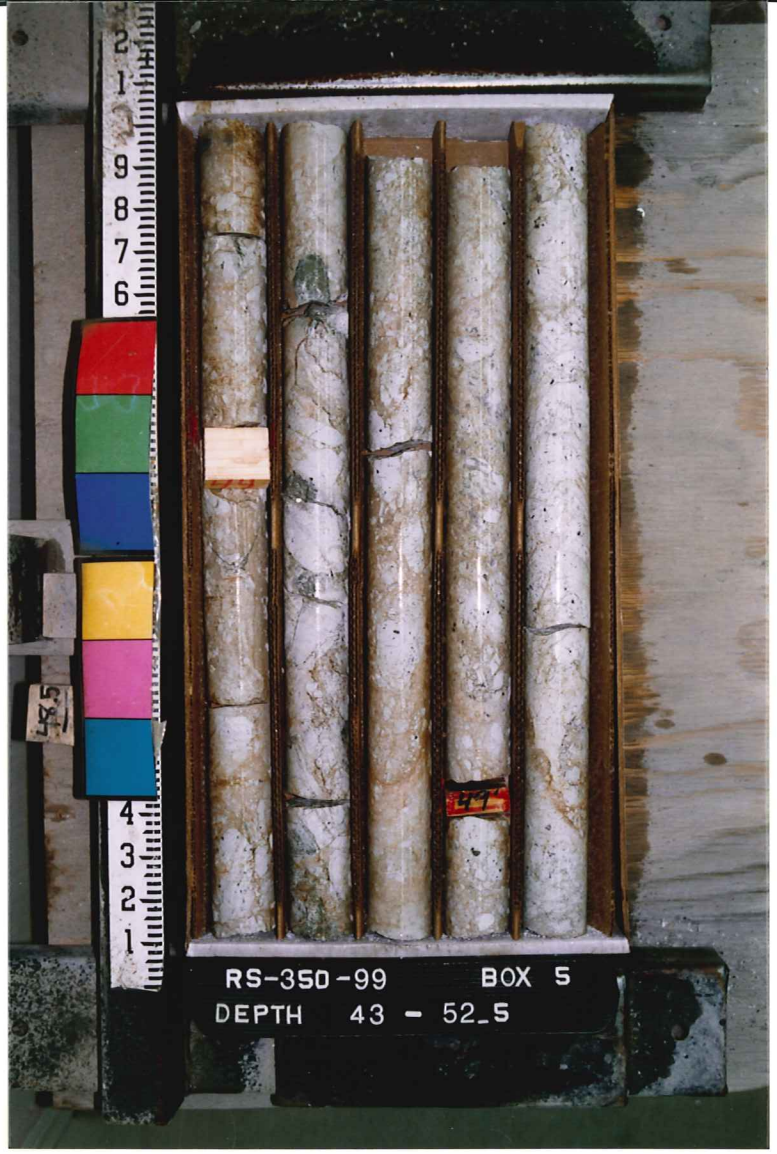
Point	Northing	Easting	Elevation	Description
1	2,203,651.1210	483,267.4530	4,756.37	D347
23	2,203,651.7966	483,272.3170	4,753.37	D348
24	2,203,652.5251	483,273.4820	4,750.38	D349
25	2,203,648.1846	483,267.4532	4,743.57	D350

Boxes 46, 48,

RS-350-99 BOX 2
DEPTH 9_5 - 19

RS-350-99 BOX 1
DEPTH 0 - 9_5

RS-350-99 BOX 3
DEPTH 19 - 28_5

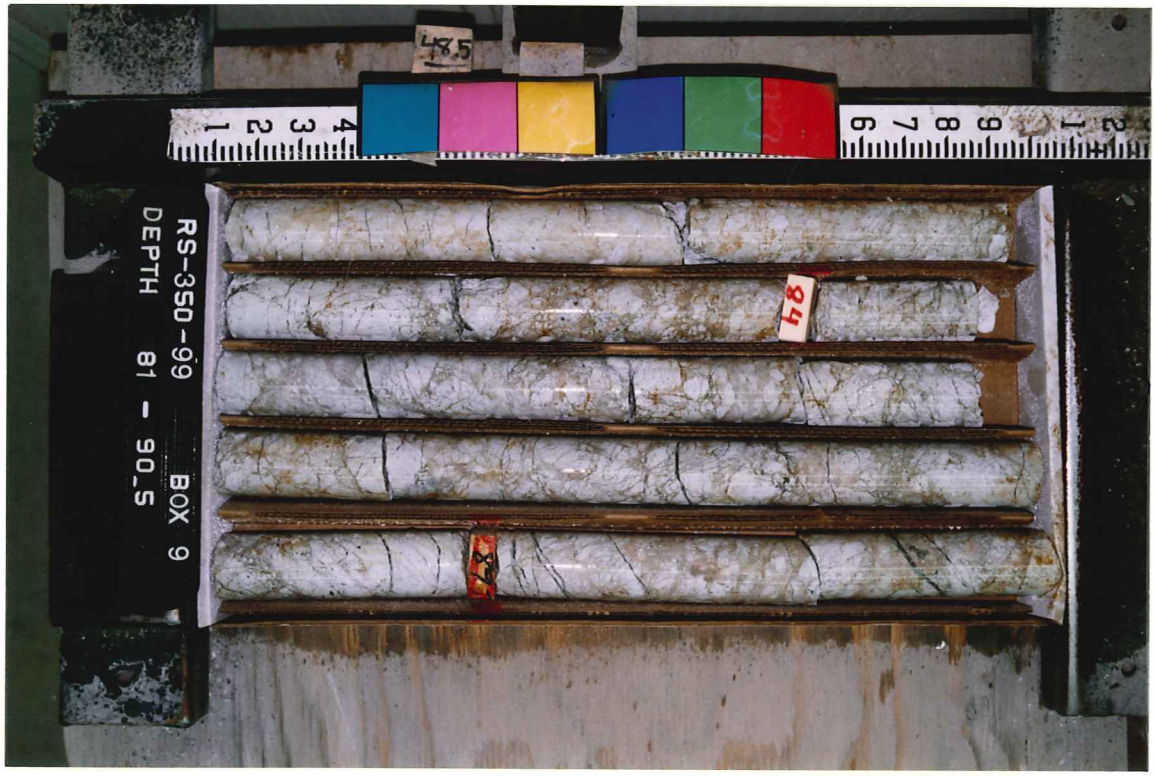

RS-350-99 BOX 5
DEPTH 43 - 52_5

RS-350-99 BOX 4
DEPTH 28_5 - 43

RS-350-99 BOX 6
DEPTH 52_5 - 62

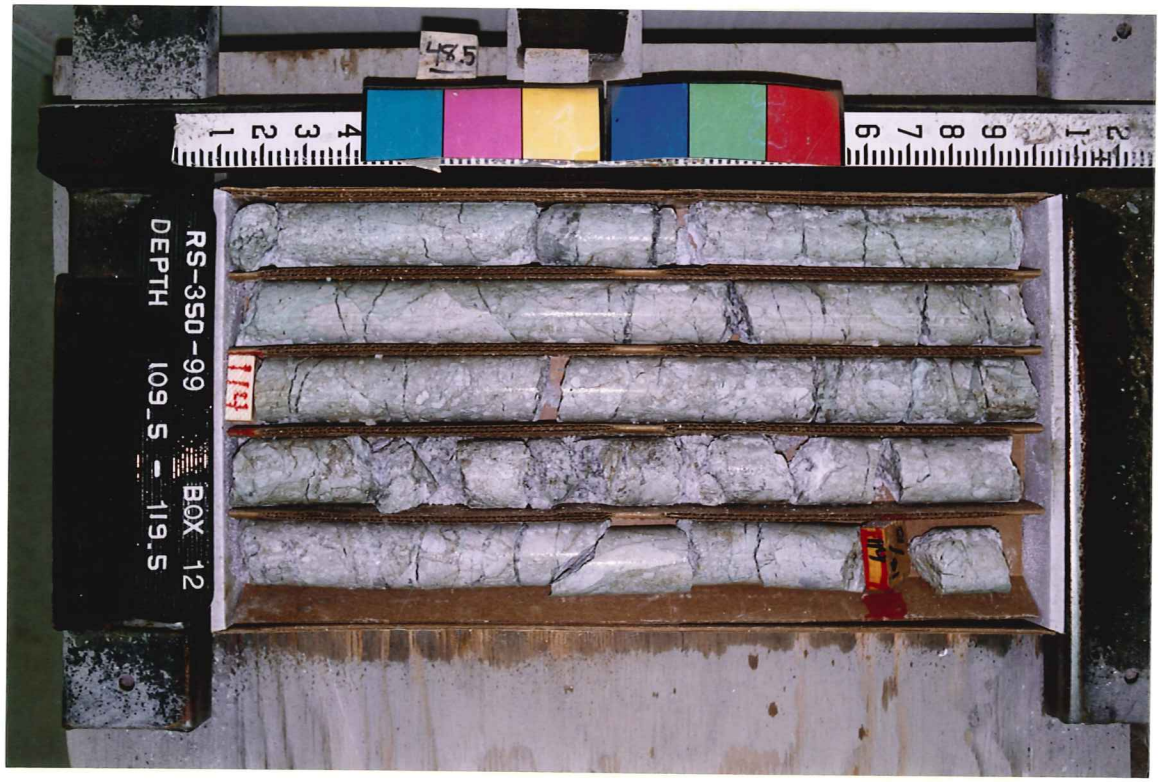
RS-350-99 BOX 8
DEPTH 71_5 - 81
79
74
48.5

RS-350-99 BOX 7
DEPTH 62 - 71_5
69
64
48.5


RS-350-99 BOX 9
DEPTH 81 - 90_5
84
87
48.5

RS-350-99 BOX 11
DEPTH 99.5 - 109_5
104
109

RS-350-99 BOX 10
DEPTH 90_5 - 99.5
94
97


RS-350-99 BOX 12
DEPTH 109_5 - 119.5
114

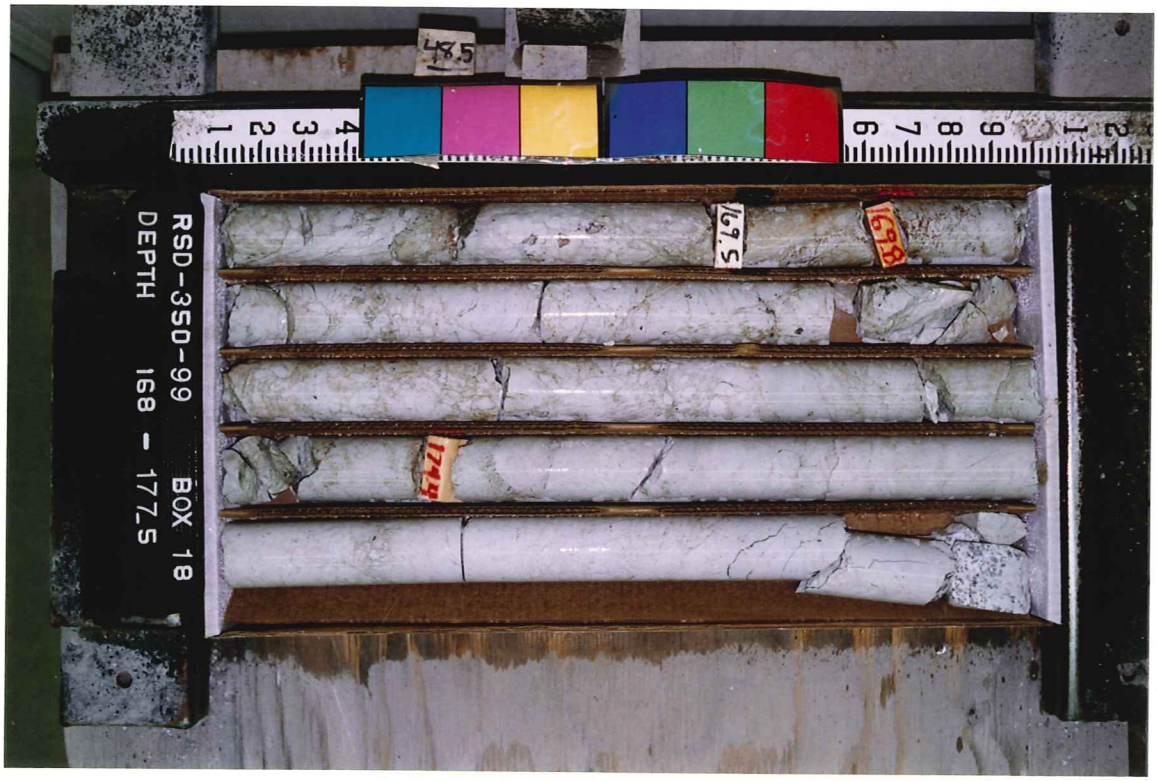
134
139
136
48.5
RSD-350-99 BOX 14
DEPTH 129_5 - 140

124
48.5
RS-350-99 BOX 13
DEPTH 119.5 - 129_5

48.5
143.1
145.9
RSD-350-99 BOX 15
DEPTH 140 - 149_5

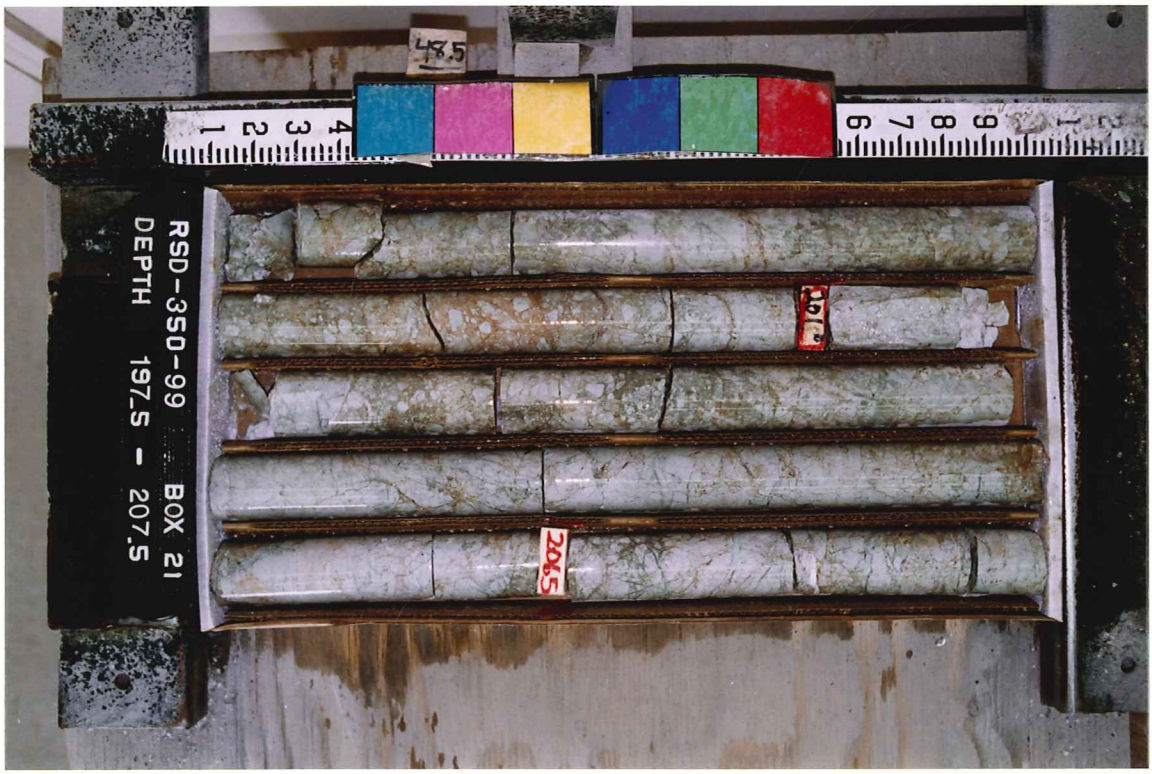
164.6
168.2
RSD-350-99 BOX 17
DEPTH 159.5 - 168

154.5
152
RSD-350-99 BOX 16
DEPTH 149.5 - 159.5


48.5
167.5
169.8
174.4
RSD-350-99 BOX 18
DEPTH 168 - 177.5

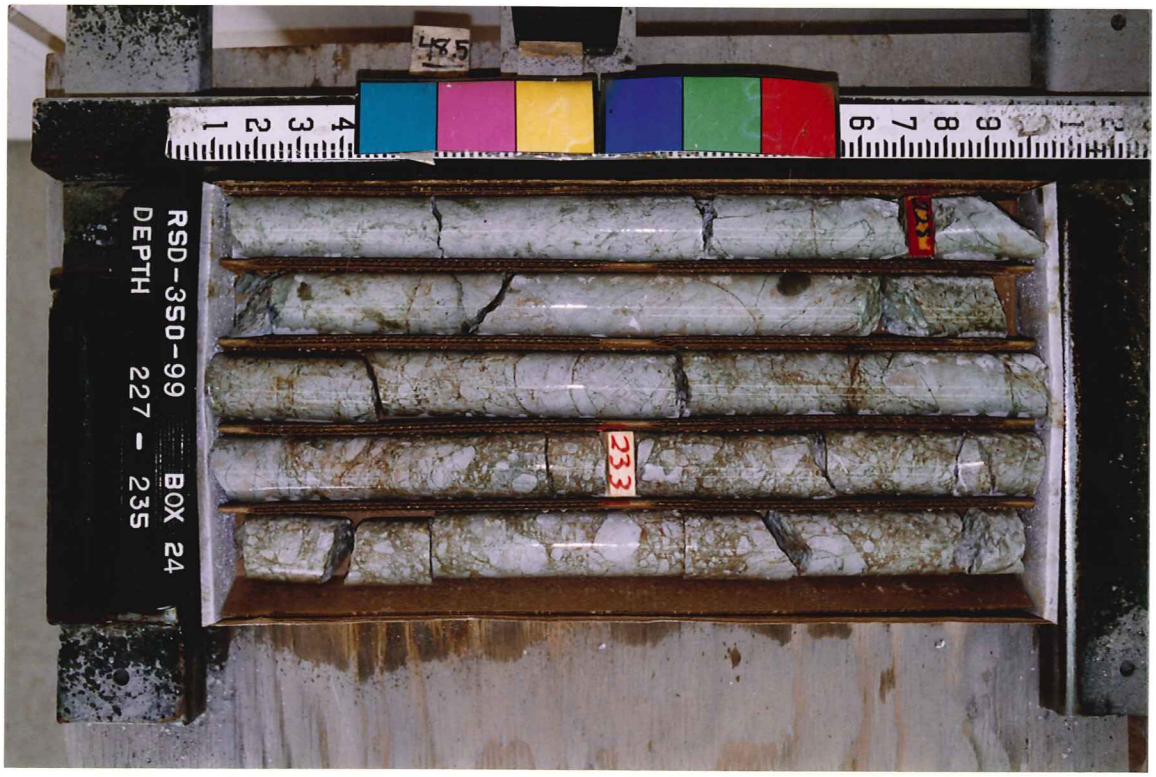
RSD-350-99 BOX
DEPTH 187.5 - 197.5
196.5
194.7
193.5
48.5

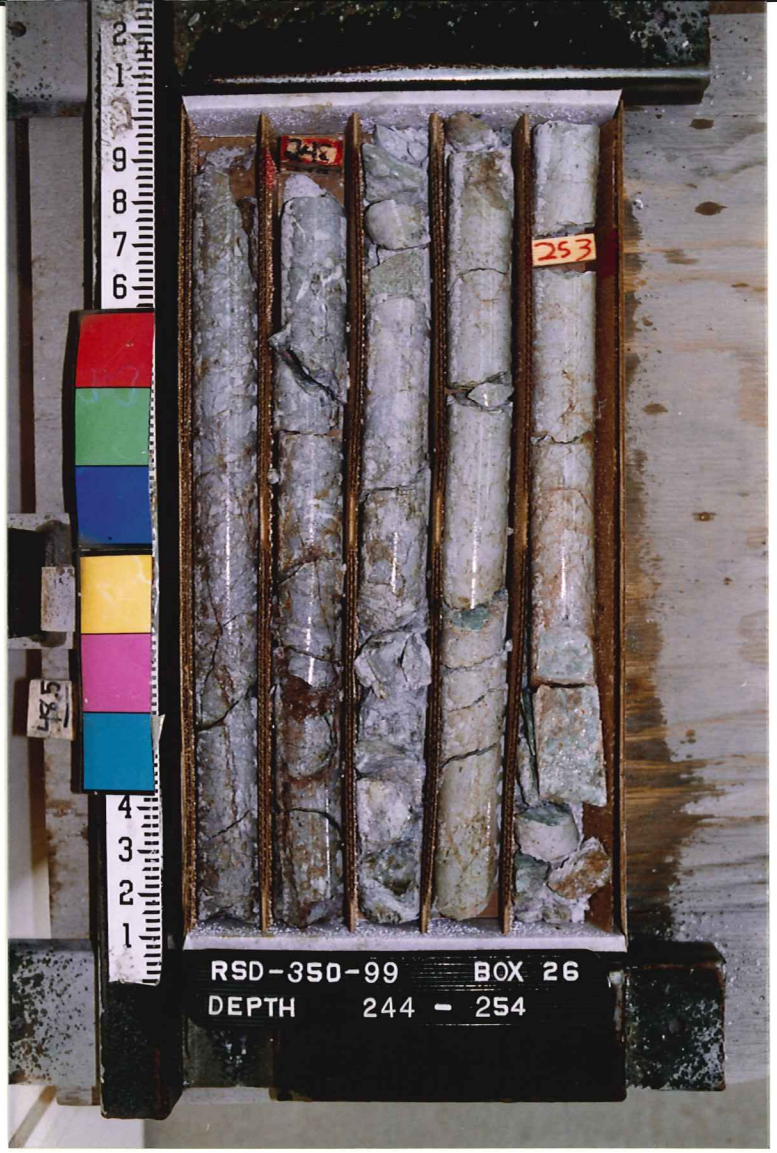
RSD-350-99 BOX 19
DEPTH 177.5 - 187.5
184
182.1
48.5


RSD-350-99 BOX 21
DEPTH 197.5 - 207.5
197.6
206.5
48.5

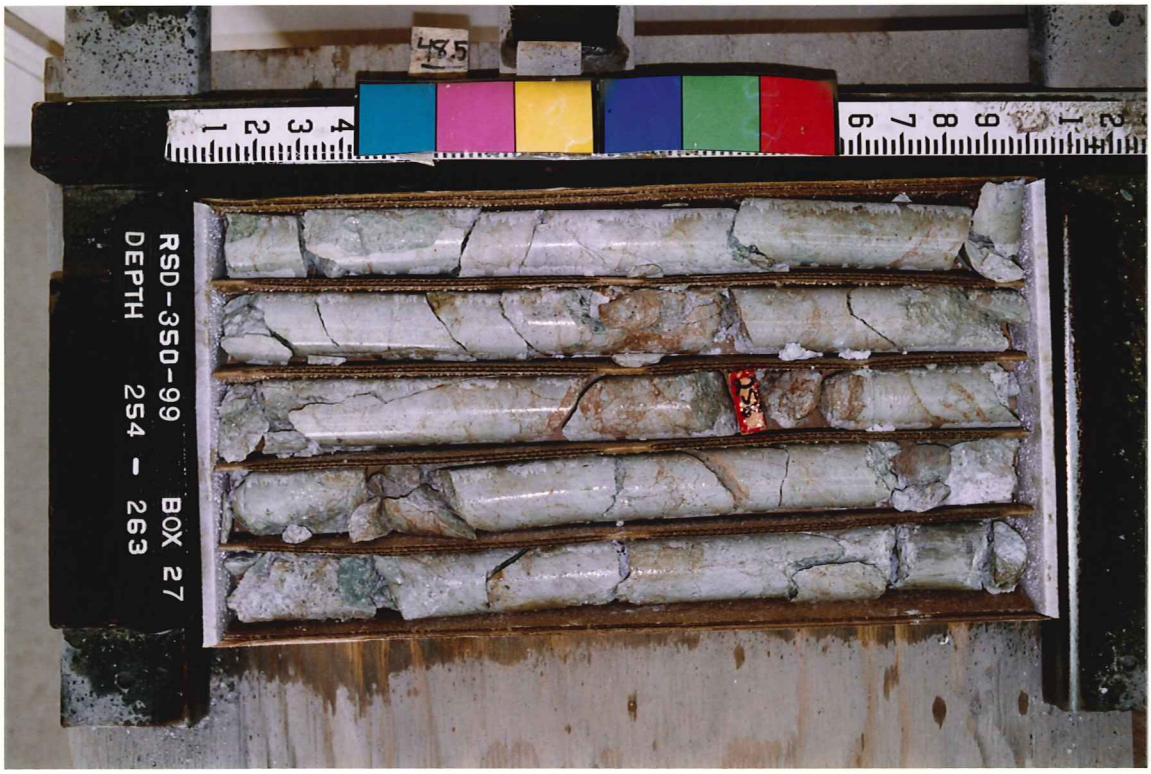
227.7
224.7
RSD-350-99 BOX 23
DEPTH 217 - 227

215
RSD-350-99 BOX 22
DEPTH 207.5 - 217

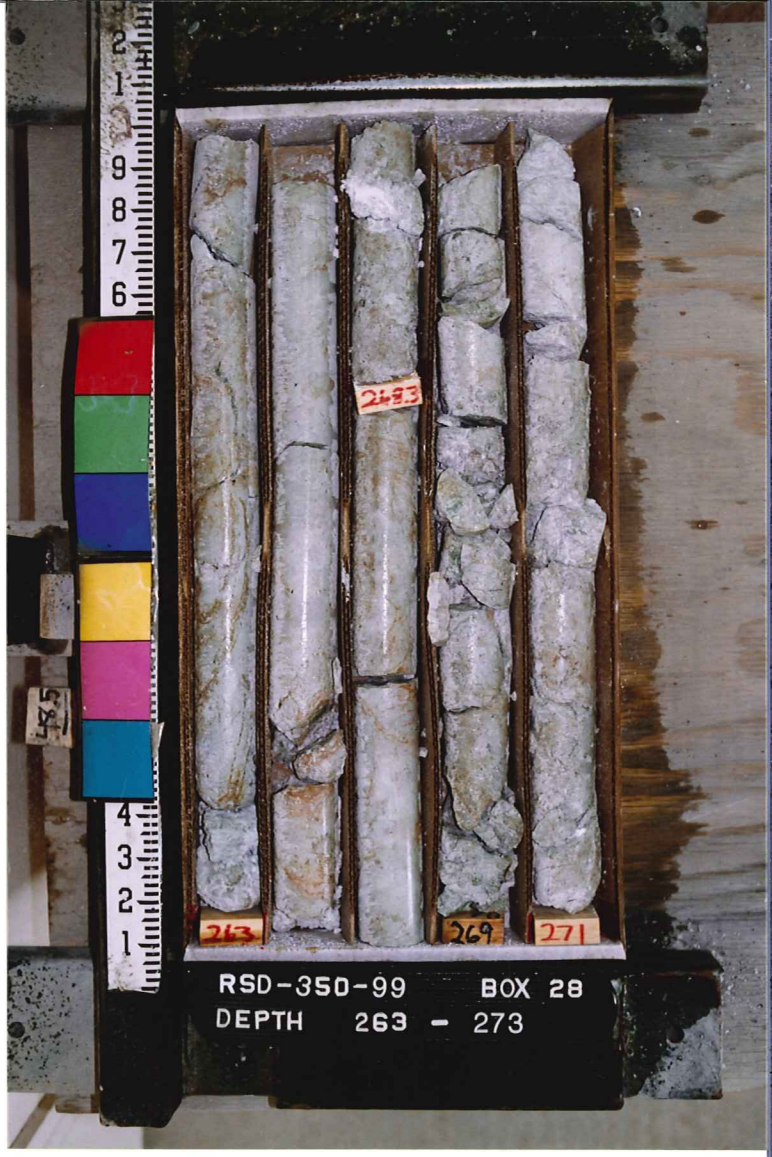

48.5
233
RSD-350-99 BOX 24
DEPTH 227 - 235

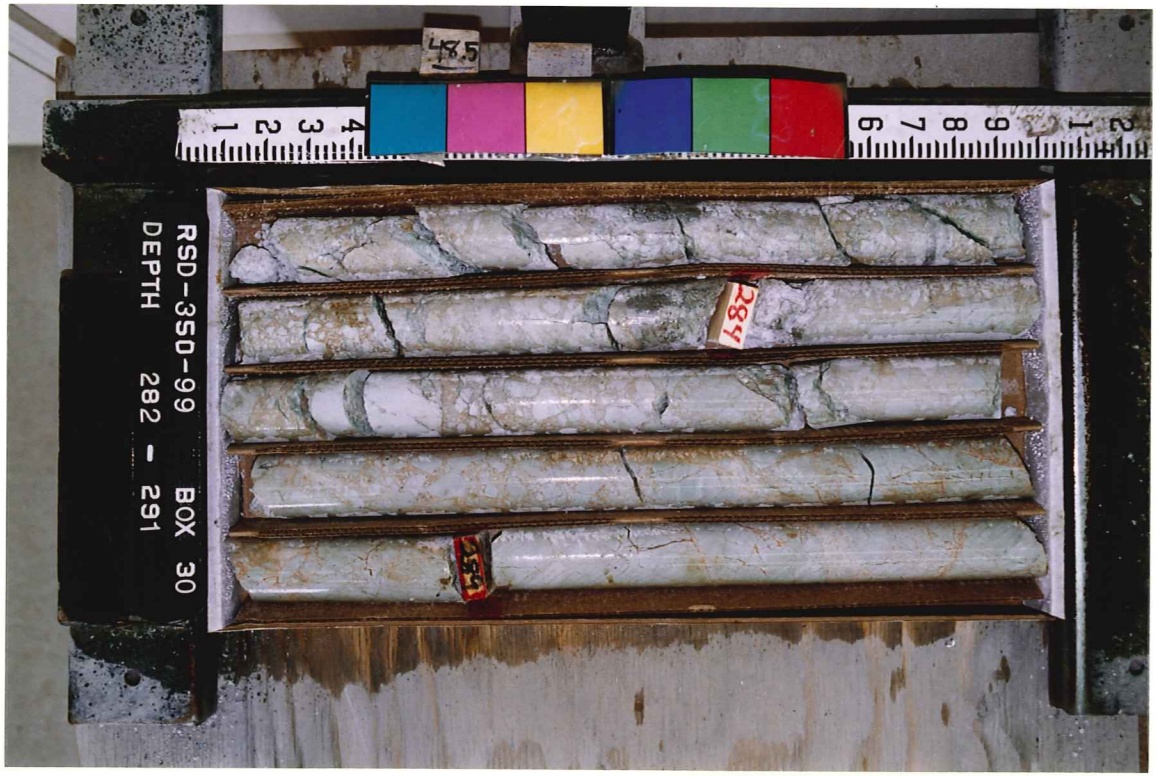

253
RSD-350-99 BOX 26
DEPTH 244 - 254

243
RSD-350-99 BOX 25
DEPTH 235 - 244


RSD-350-99 BOX 27
DEPTH 254 - 263

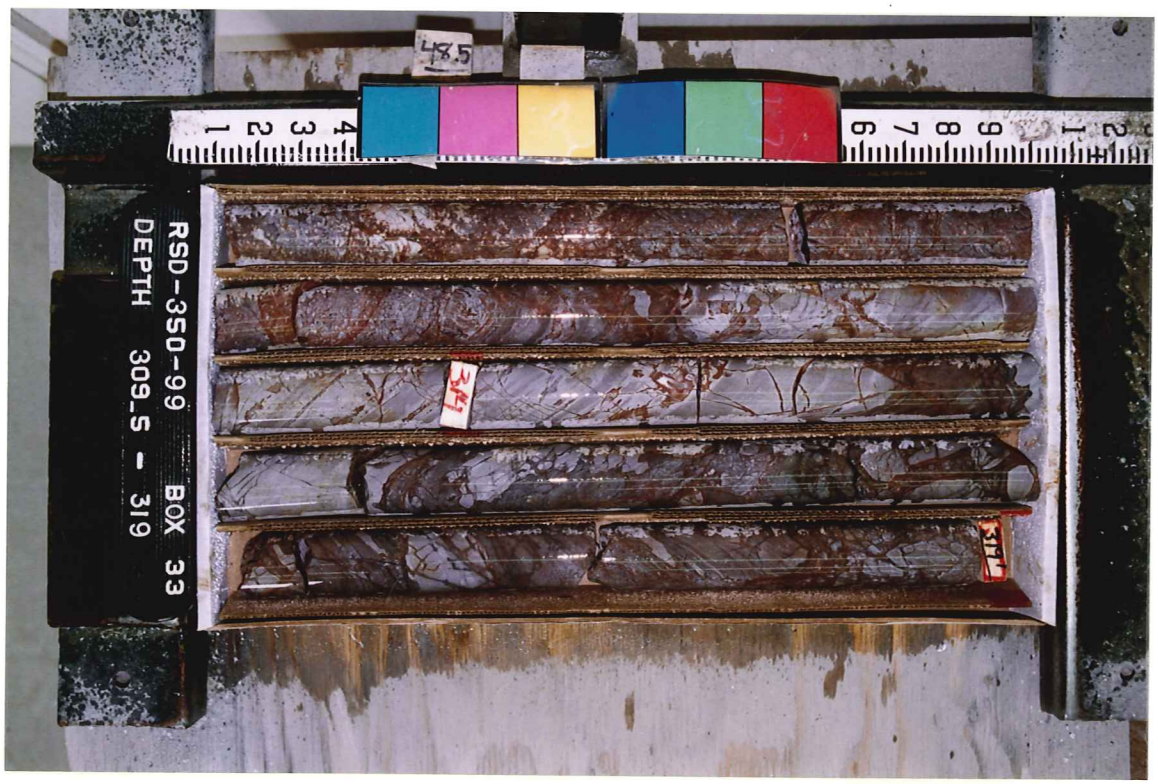
RSD-350-99 BOX 29
DEPTH 273 - 282
274
279

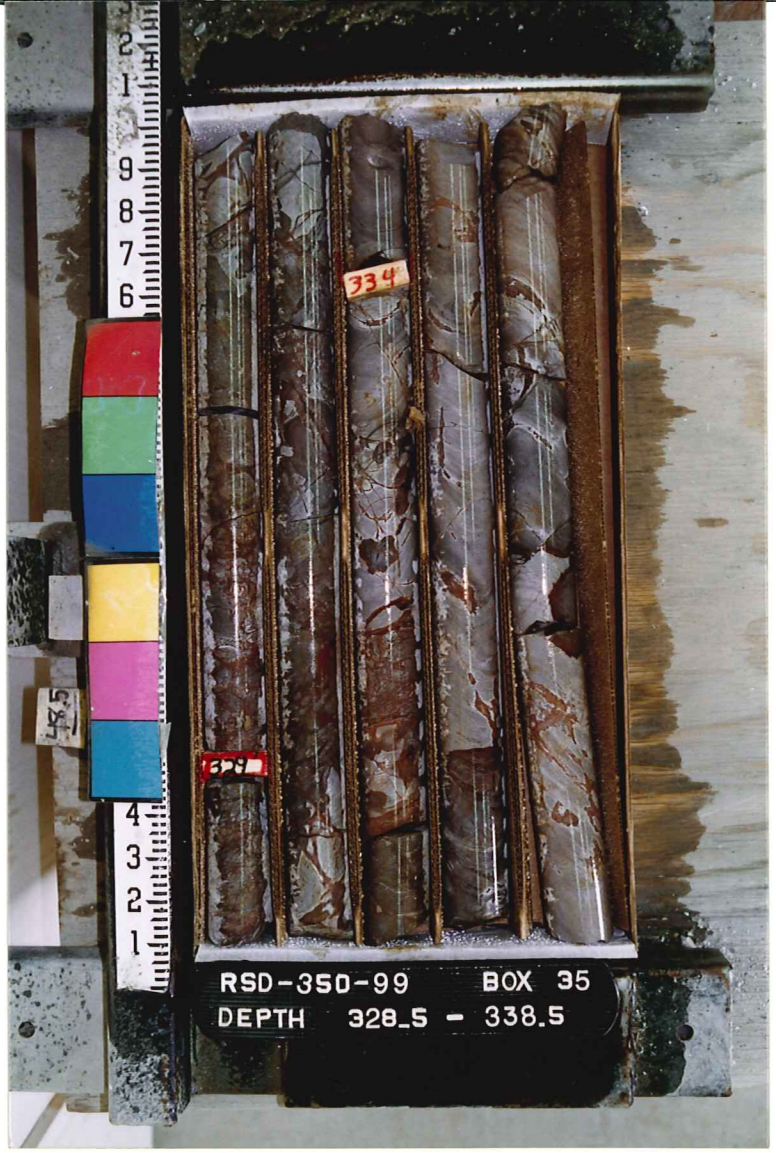

RSD-350-99 BOX 28
DEPTH 263 - 273
263
269
271


RSD-350-99 BOX 30
DEPTH 282 - 291
48.5
284

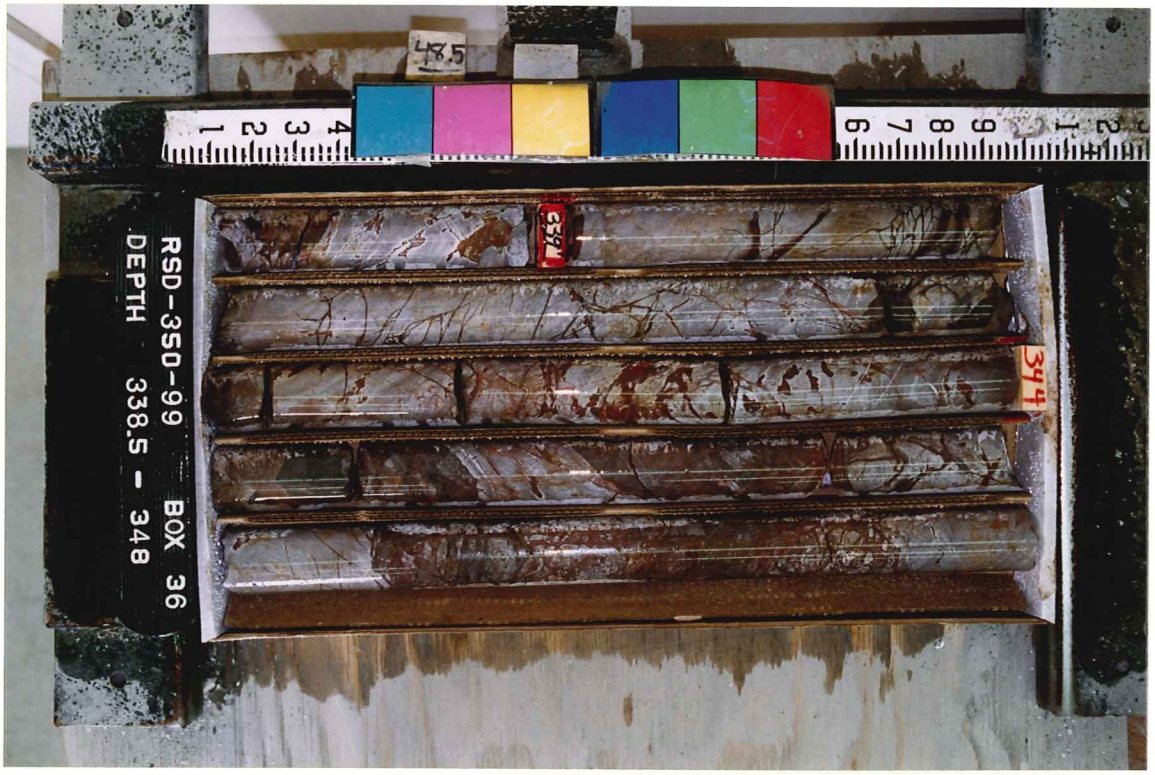
RSD-350-99 BOX 32
DEPTH 299 - 309_5
304
309
48.5

RSD-350-99 BOX 31
DEPTH 291 - 299
294
48.5


RSD-350-99 BOX 33
DEPTH 309_5 - 319
48.5

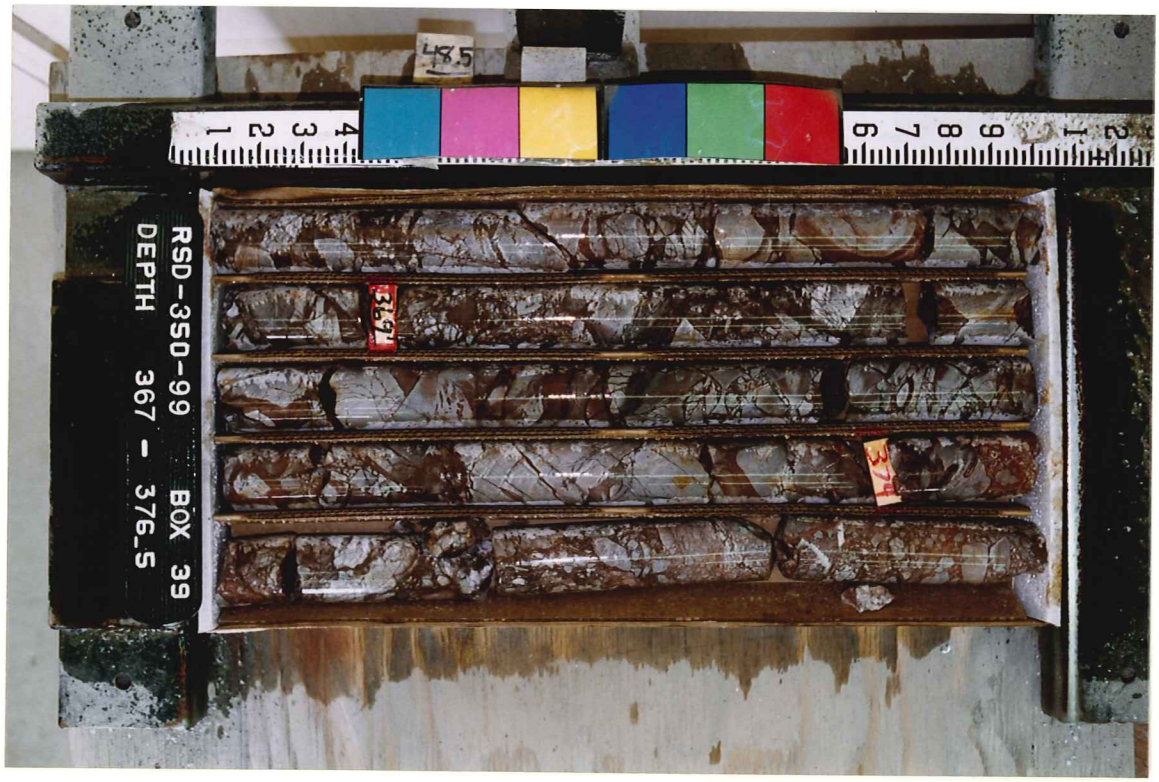

334
RSD-350-99 BOX 35
DEPTH 328.5 - 338.5

RSD-350-99 BOX 34
DEPTH 319 - 328.5


RSD-350-99 BOX 36
DEPTH 338.5 - 348
344

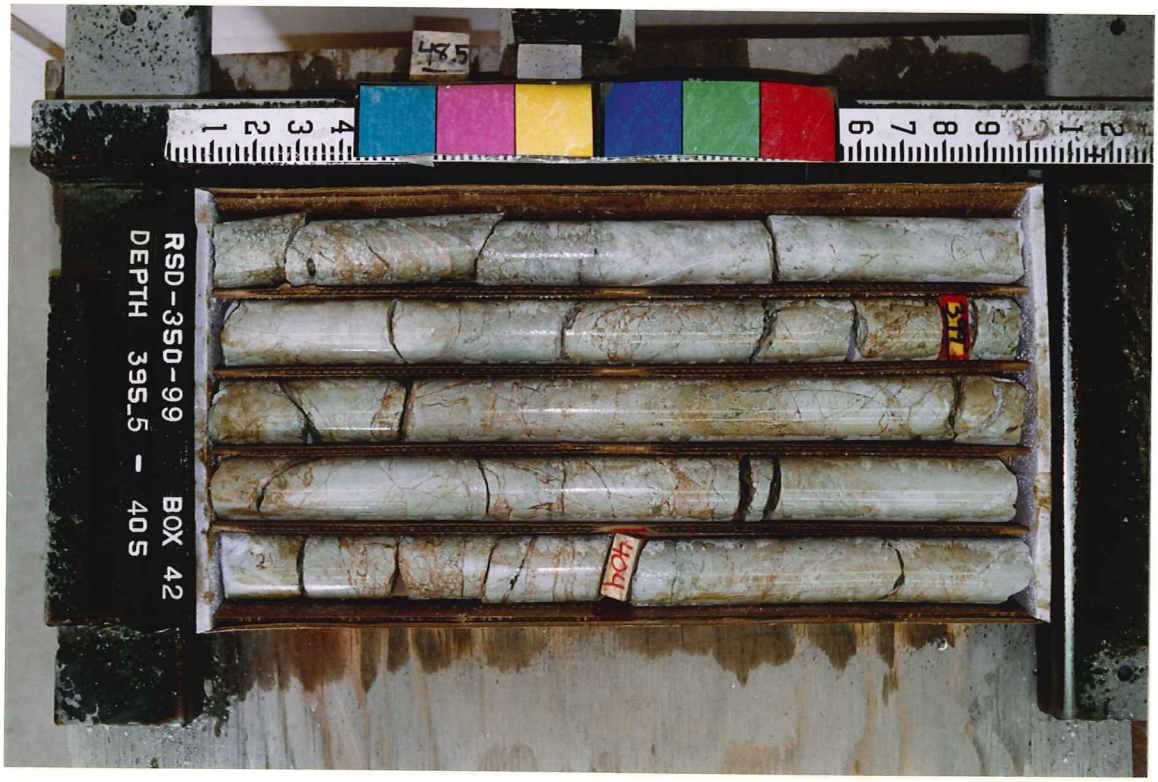
364
RSD-350-99 BOX 38
DEPTH 357 - 367

354
RSD-350-99 BOX 37
DEPTH 348 - 357


RSD-350-99 BOX 39
DEPTH 367 - 376_5

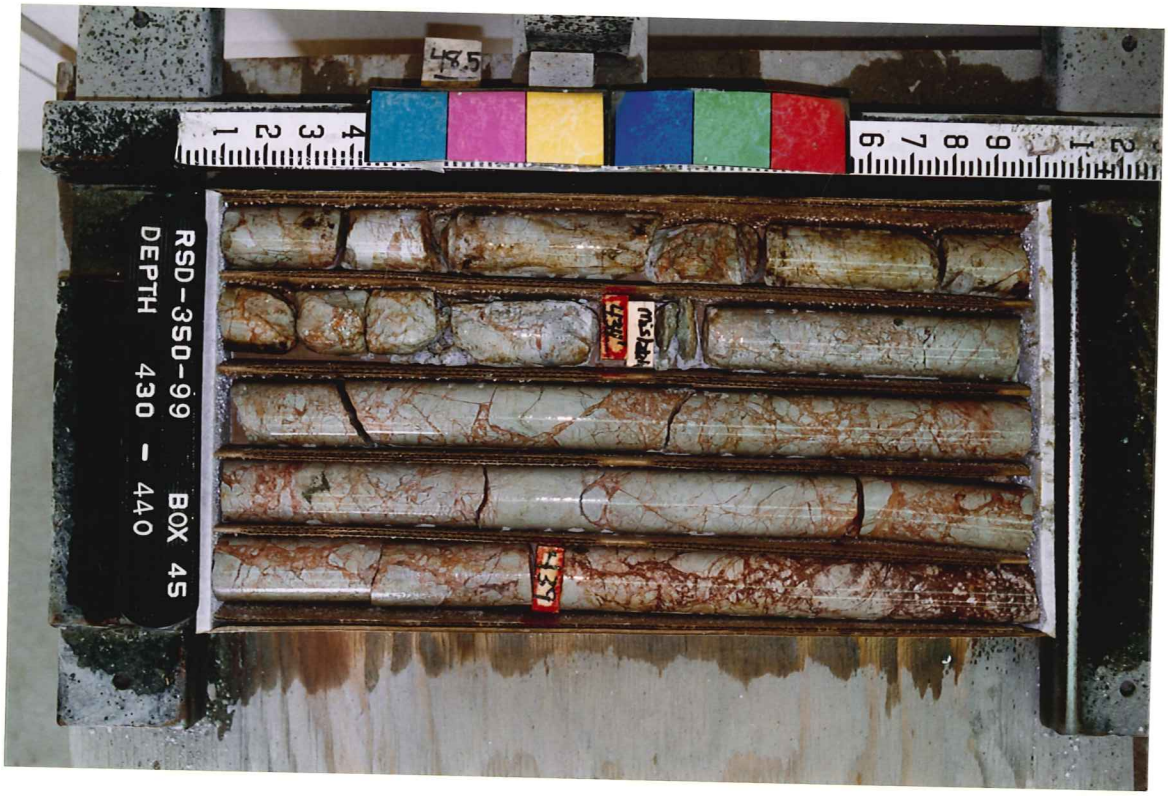
RSD-350-99 BOX 41
DEPTH 386.5 - 395.5
394

RSD-350-99 BOX 40
DEPTH 376.5 - 386.5
384


RSD-350-99 BOX 42
DEPTH 395.5 - 405

RSD-350-99 BOX 44
DEPTH 414_5 - 430

RSD-350-99 BOX 43
DEPTH 405 - 414_5


RSD-350-99 BOX 45
DEPTH 430 - 440

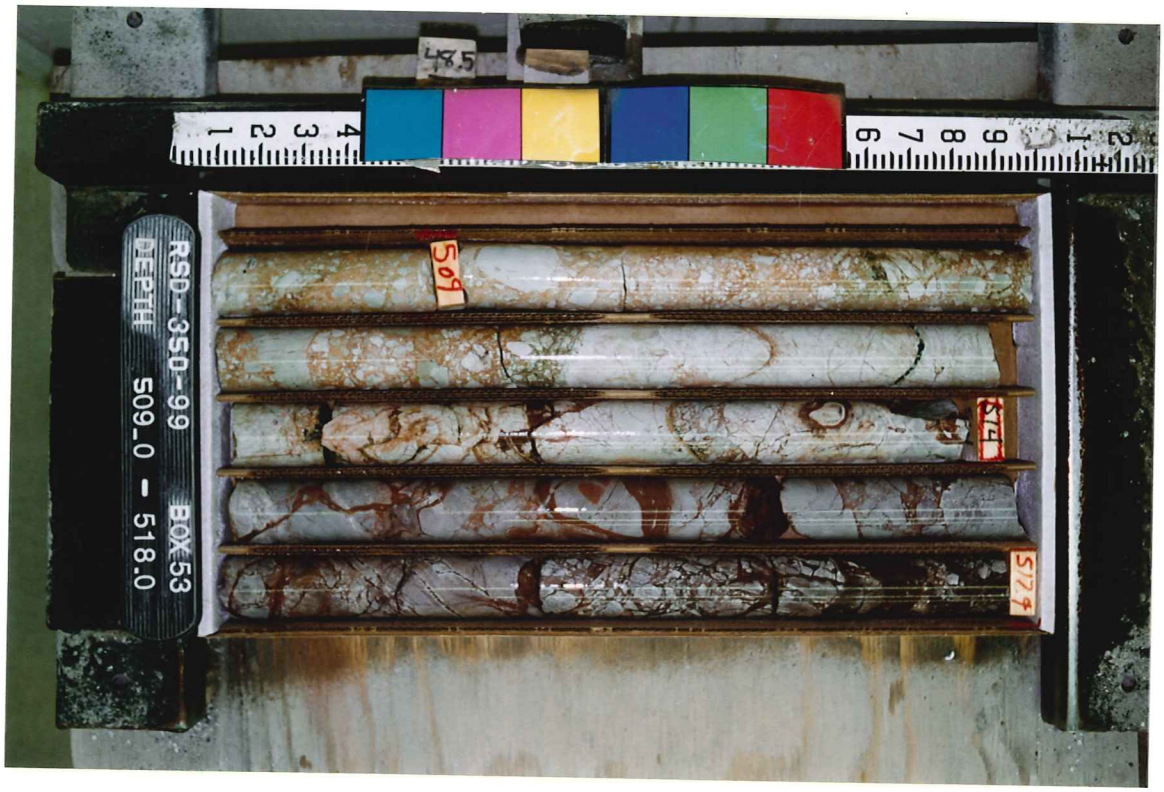
RSD-350-99 BOX 49
DEPTH 469.0 - 479.0

RSD-350-99 BOX 47
DEPTH 449.5 - 458.5

RSD-350-99 BOX 50
DEPTH 479.0 - 490.0

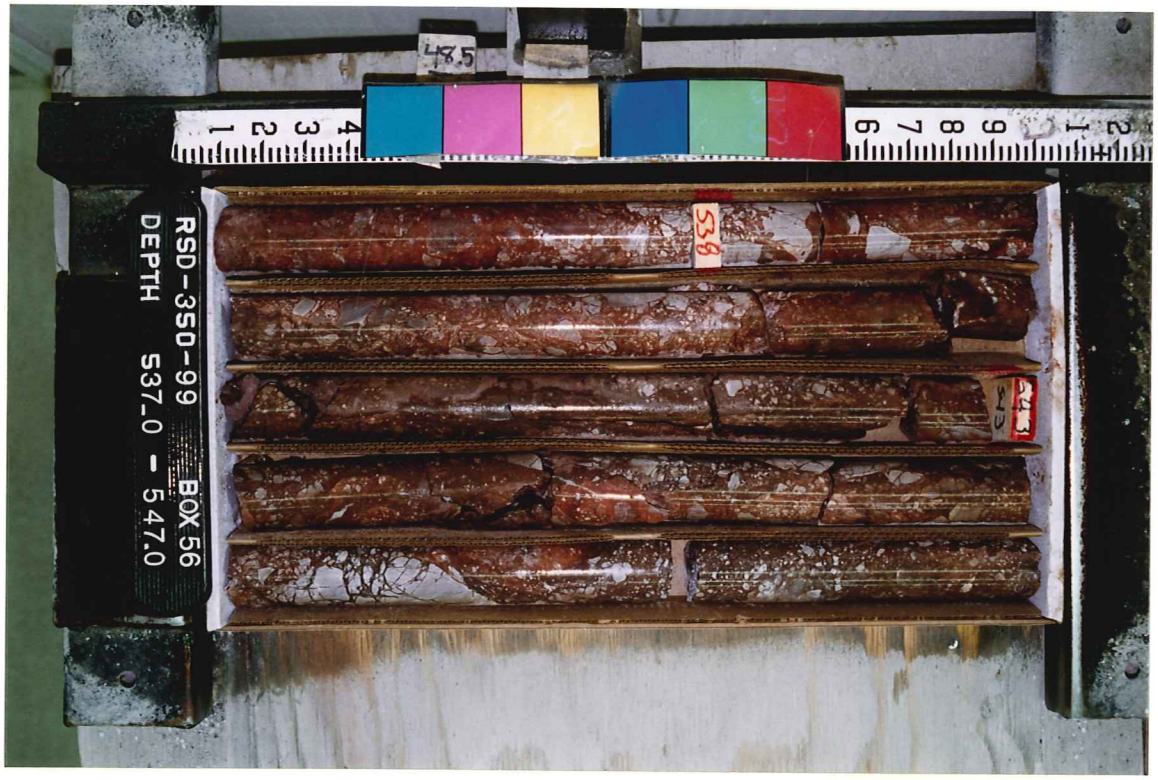
RSD-350-99 BOX 52
DEPTH 500.0 - 509.0
48.5
500.9

RSD-350-99 BOX 51
DEPTH 490.0 - 500.0
48.5
490
496.1
496.1


RSD-350-99 BOX 53
DEPTH 509.0 - 518.0
48.5
509
517.4
517.4

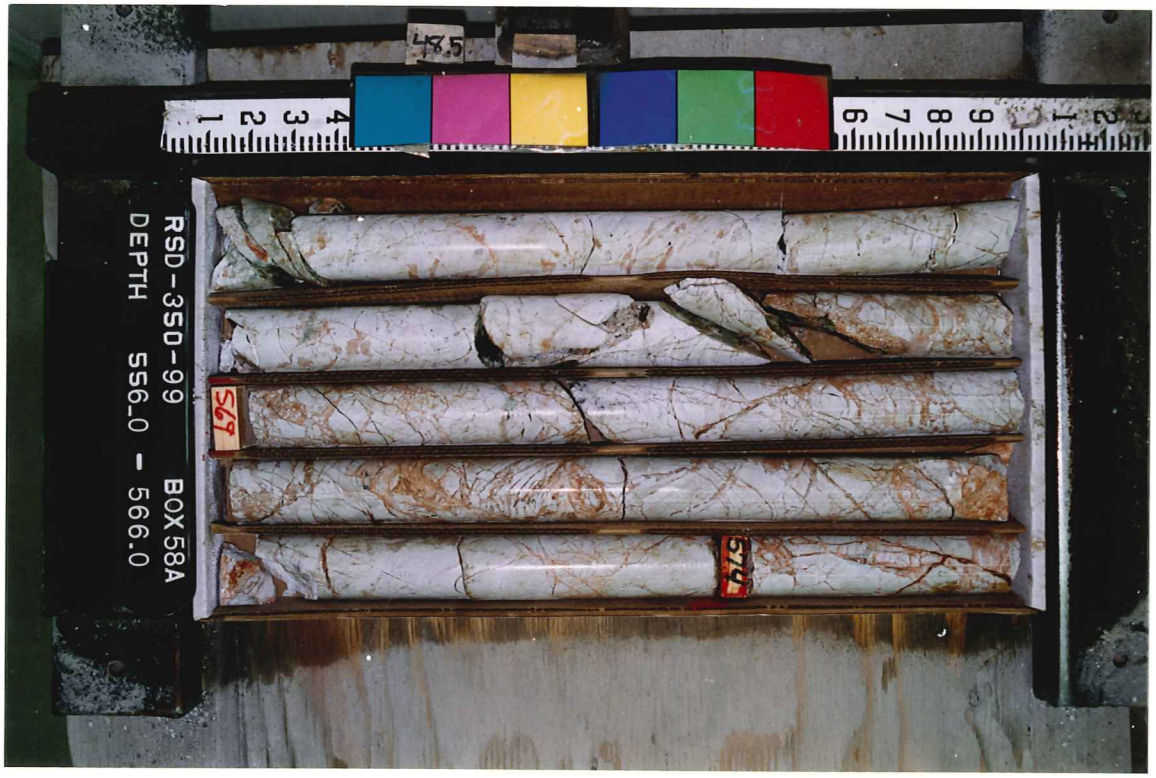
RSD-350-99 BOX 55
DEPTH 528.0 - 537.0
528
533
48.5

RSD-350-99 BOX 54
DEPTH 518.0 - 528.0
524
48.5


RSD-350-99 BOX 56
DEPTH 537.0 - 547.0
538
543
48.5

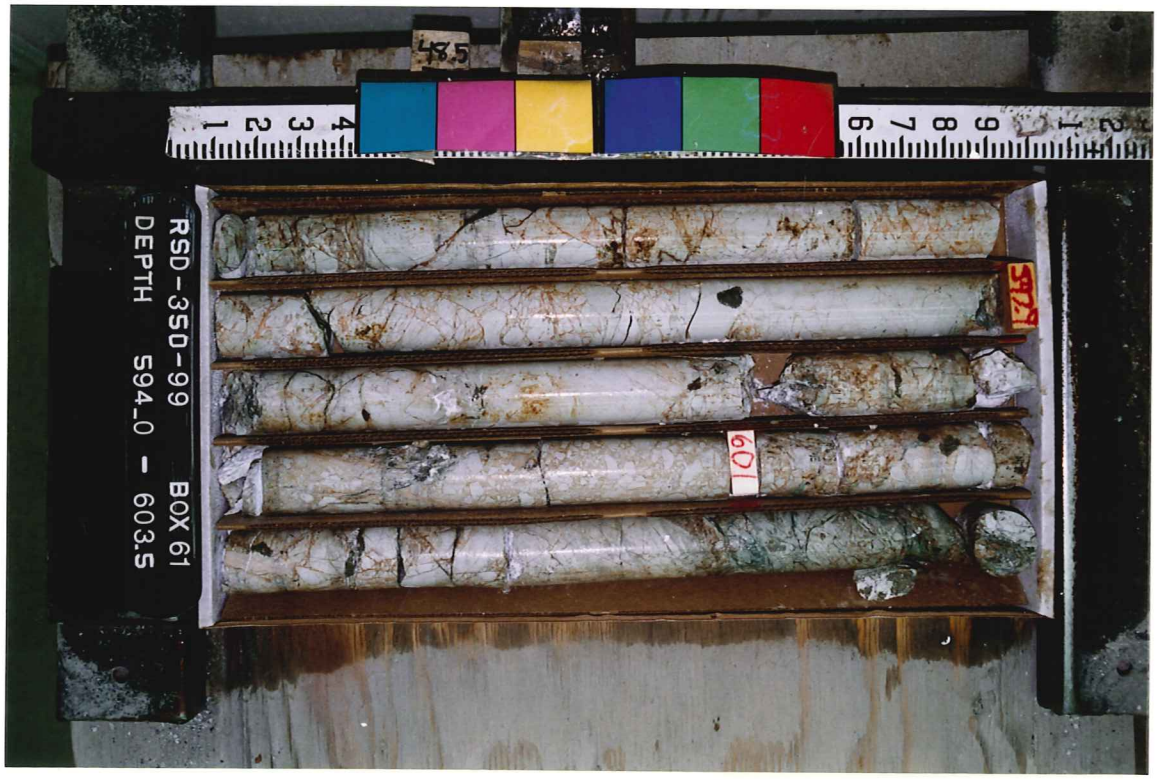
558
564
48.5
RSD-350-99 BOX 58
DEPTH 556_0 - 575.0

548
48.5
RSD-350-99 BOX 57
DEPTH 547_0 - 556.0


48.5
568
576
RSD-350-99 BOX 58A
DEPTH 556_0 - 566.0

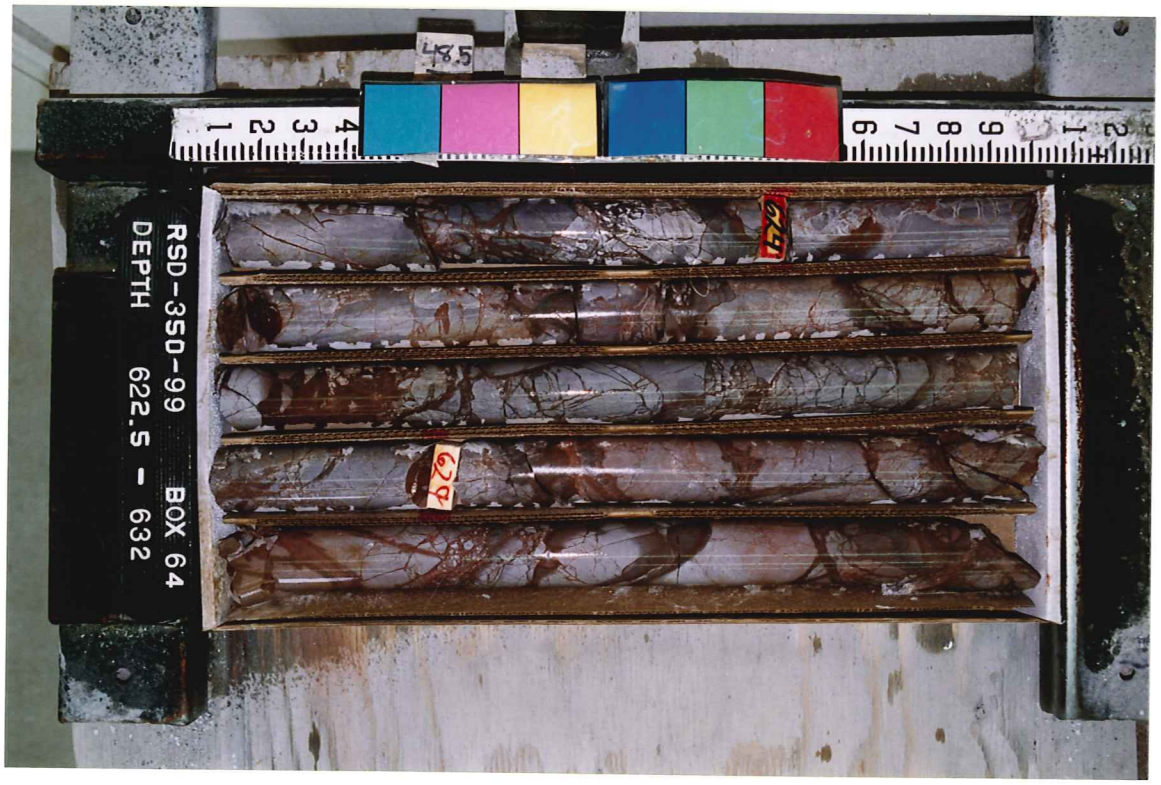
RSD-350-99 BOX 60
DEPTH 584.0 - 594.0

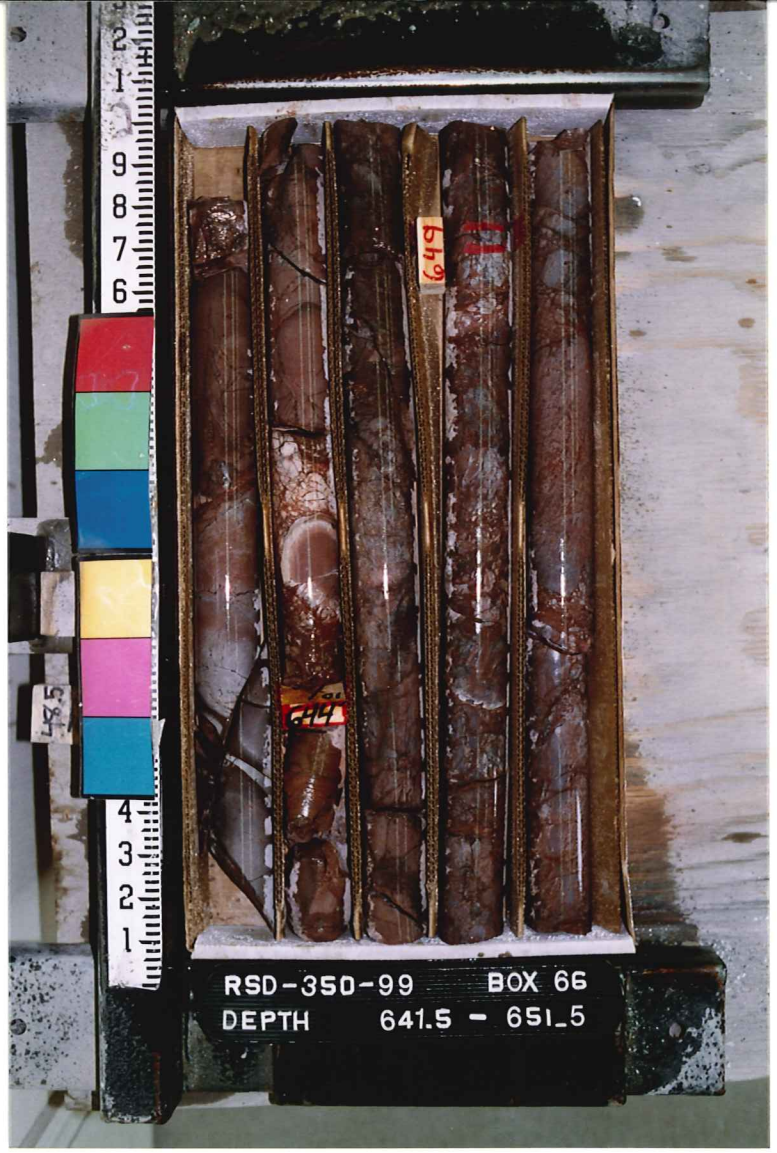
RSD-350-99 BOX 59
DEPTH 575.0 - 584.5

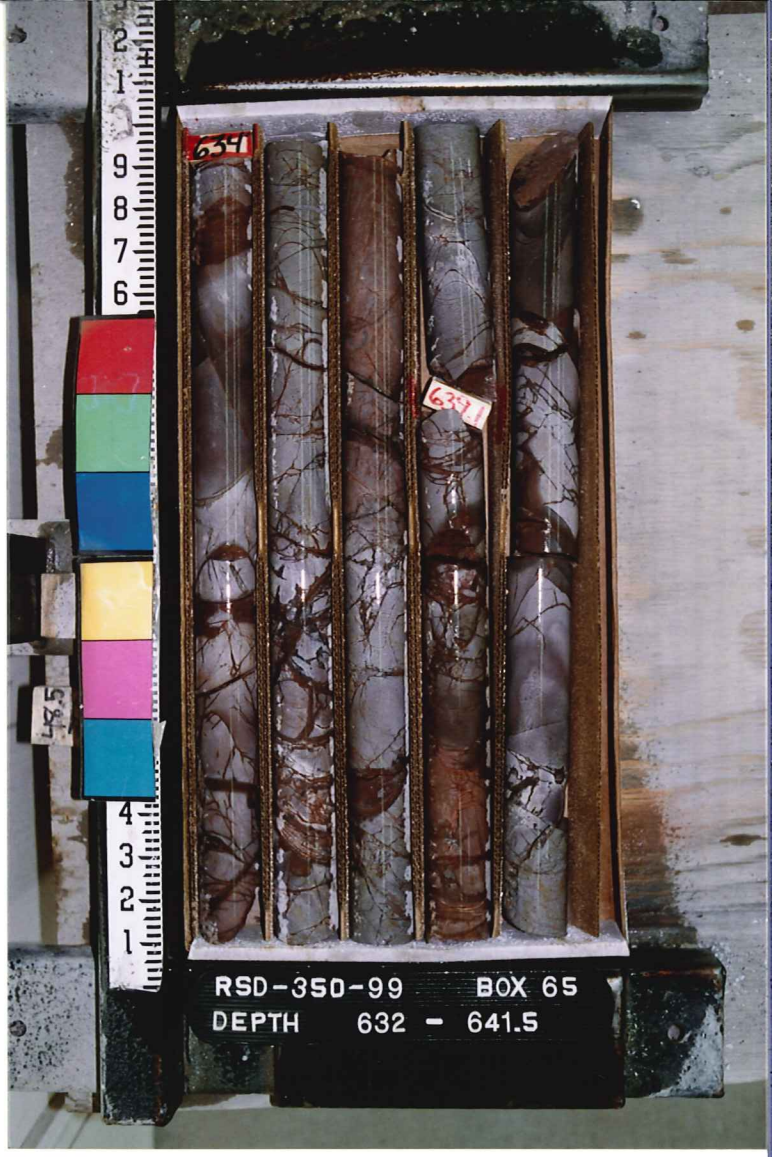

RSD-350-99 BOX 61
DEPTH 594.0 - 603.5

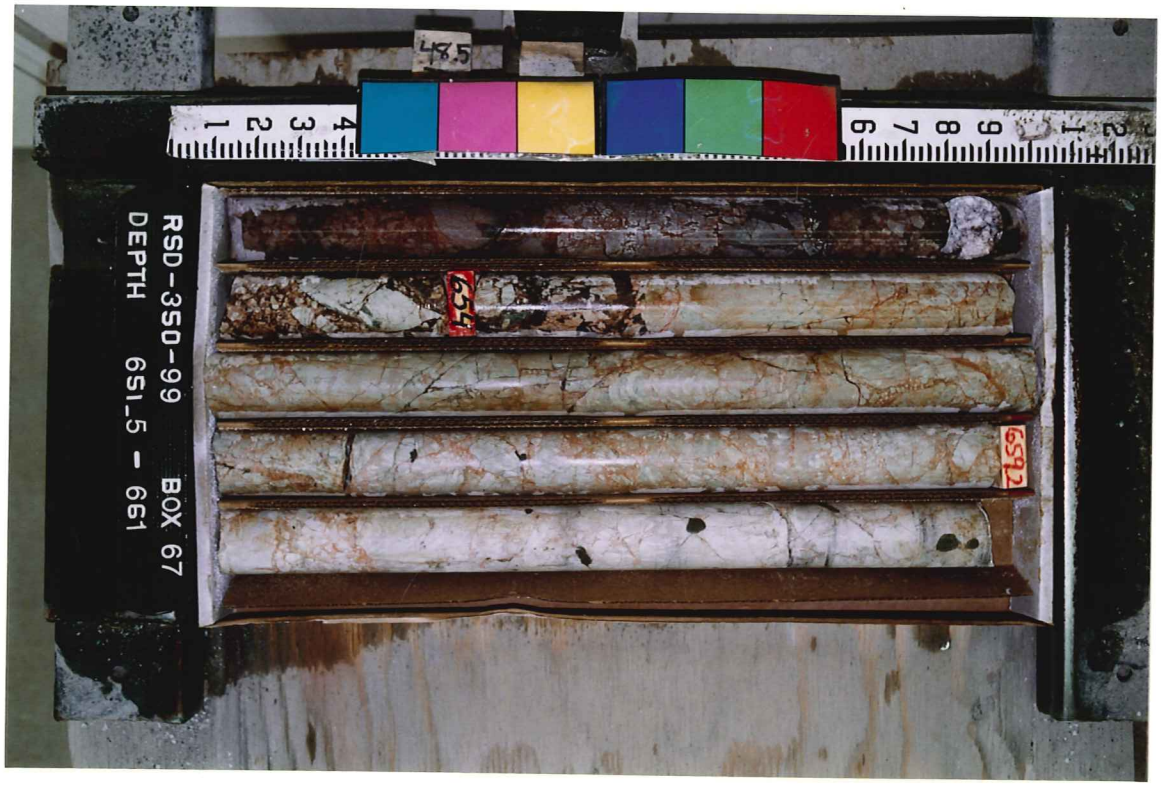
RSD-350-99 BOX 63
DEPTH 613 - 622.5
614
619
48.5

RSD-350-99 BOX 62
DEPTH 603.5 - 613
609
606
48.5


RSD-350-99 BOX 64
DEPTH 622.5 - 632
624
629
48.5

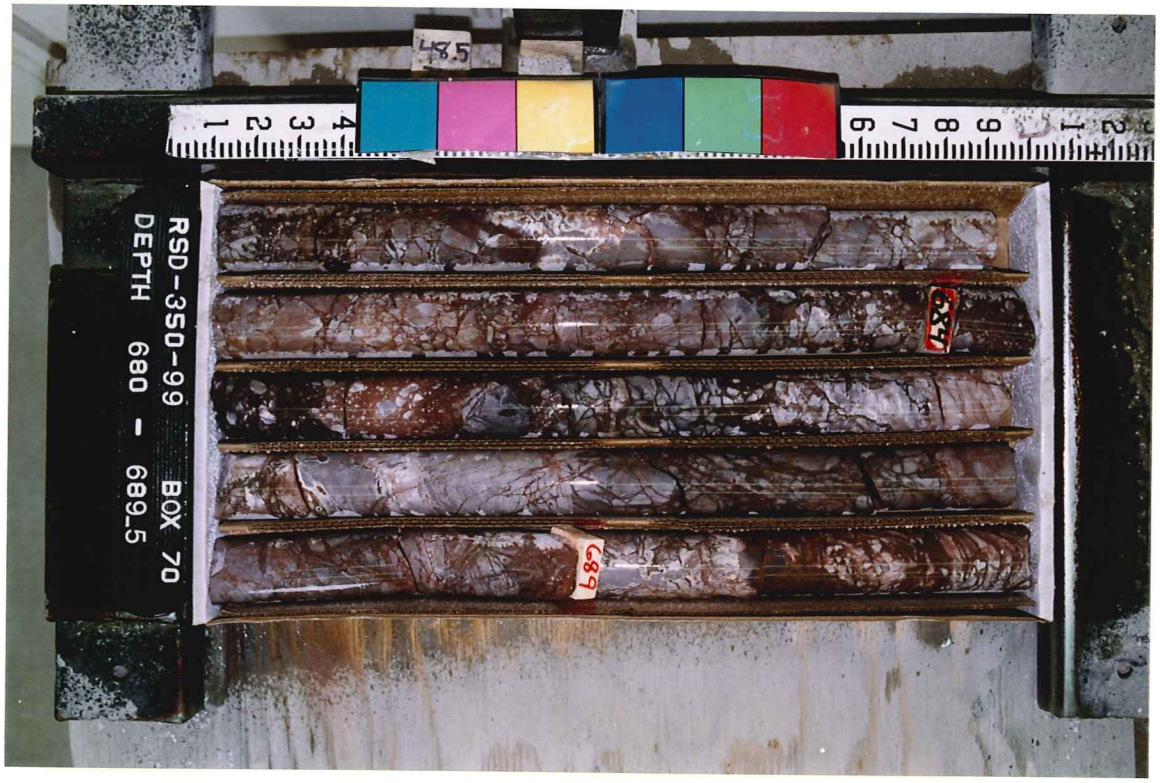

RSD-350-99 BOX 66
DEPTH 641.5 - 651_5


RSD-350-99 BOX 65
DEPTH 632 - 641.5


RSD-350-99 BOX 67
DEPTH 651_5 - 661

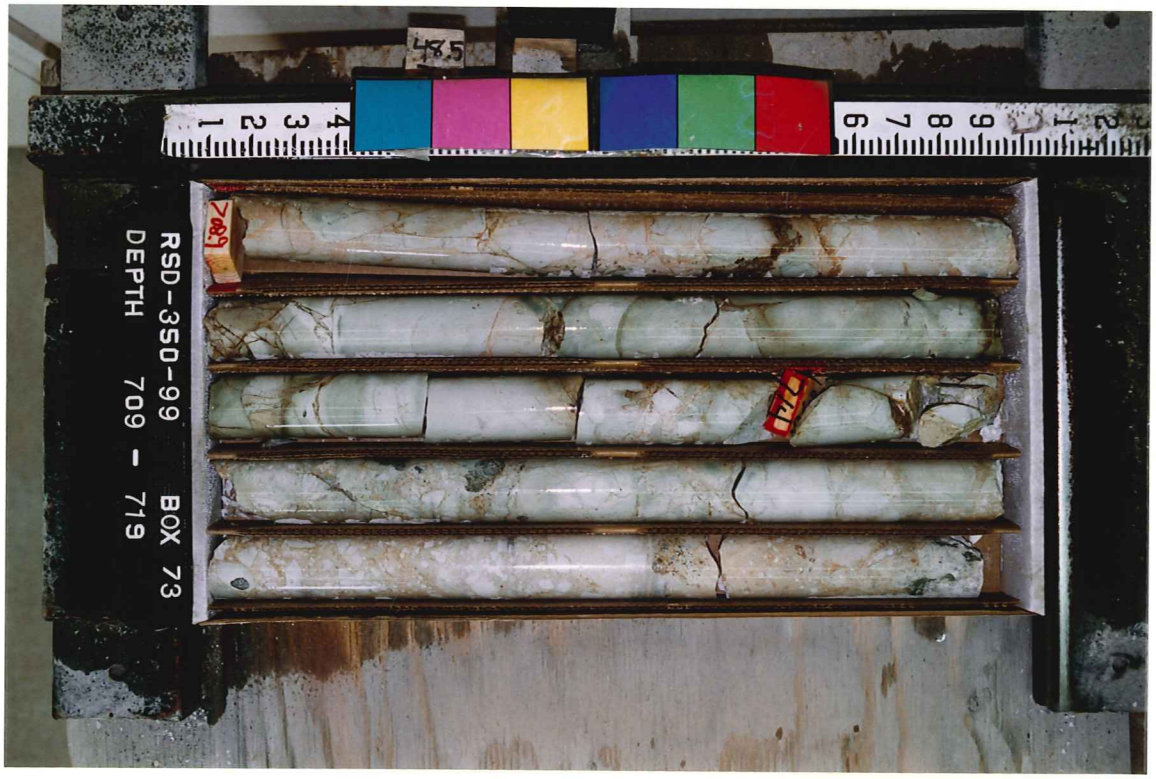
RSD-350-99 BOX 69
DEPTH 670_5 - 680
679

RSD-350-99 BOX 68
DEPTH 661 - 670_5
669


RSD-350-99 BOX 70
DEPTH 680 - 689_5
689

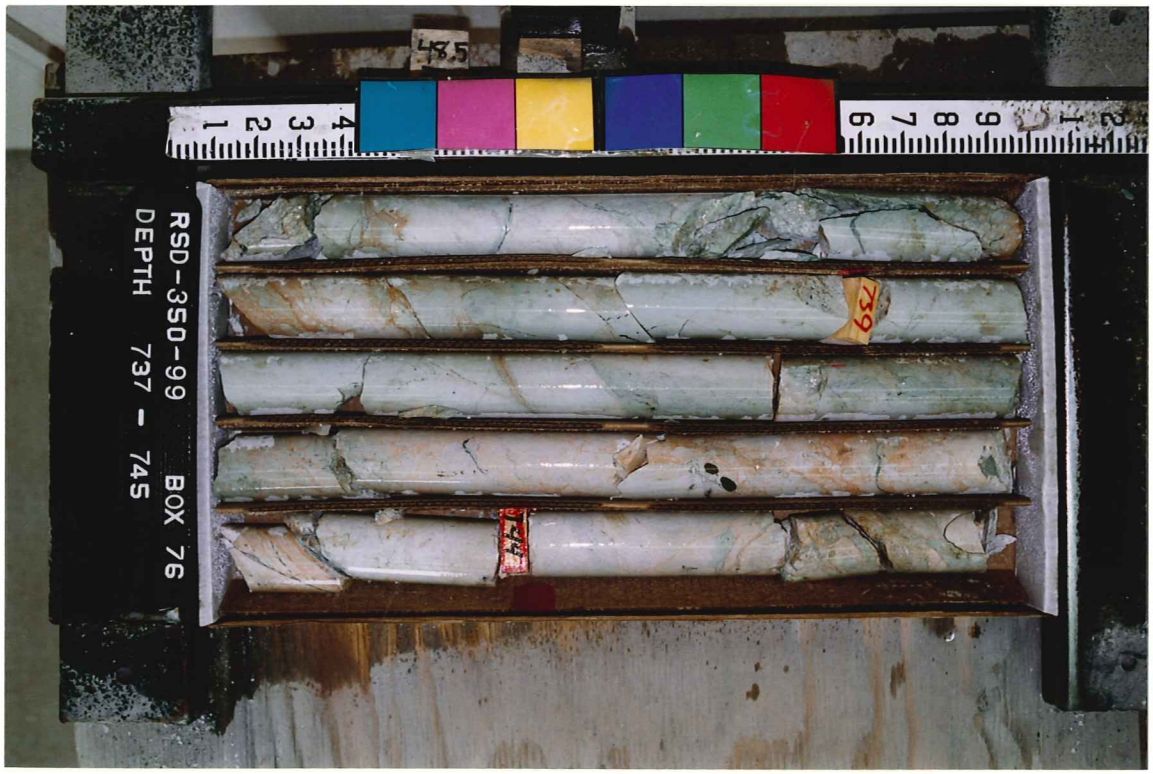
RSD-350-99 BOX 72
DEPTH 699 - 709

RSD-350-99 BOX 71
DEPTH 689_5 - 699


RSD-350-99 BOX 73
DEPTH 709 - 719

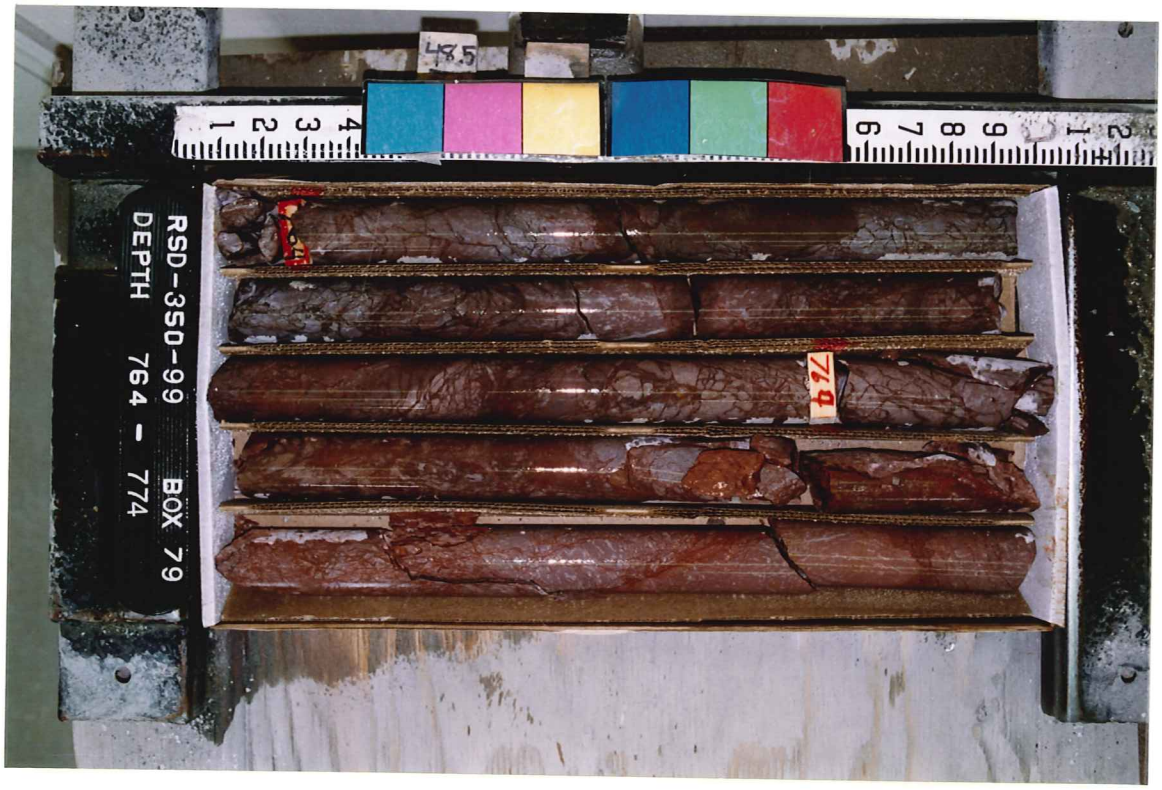
RSD-350-99 BOX 75
DEPTH 728 - 737
729
734
48.5

RSD-350-99 BOX 74
DEPTH 719 - 728
719
724
48.5


RSD-350-99 BOX 76
DEPTH 737 - 745
739
744
48.5

RSD-350-99 BOX 78
DEPTH 754 - 764
754

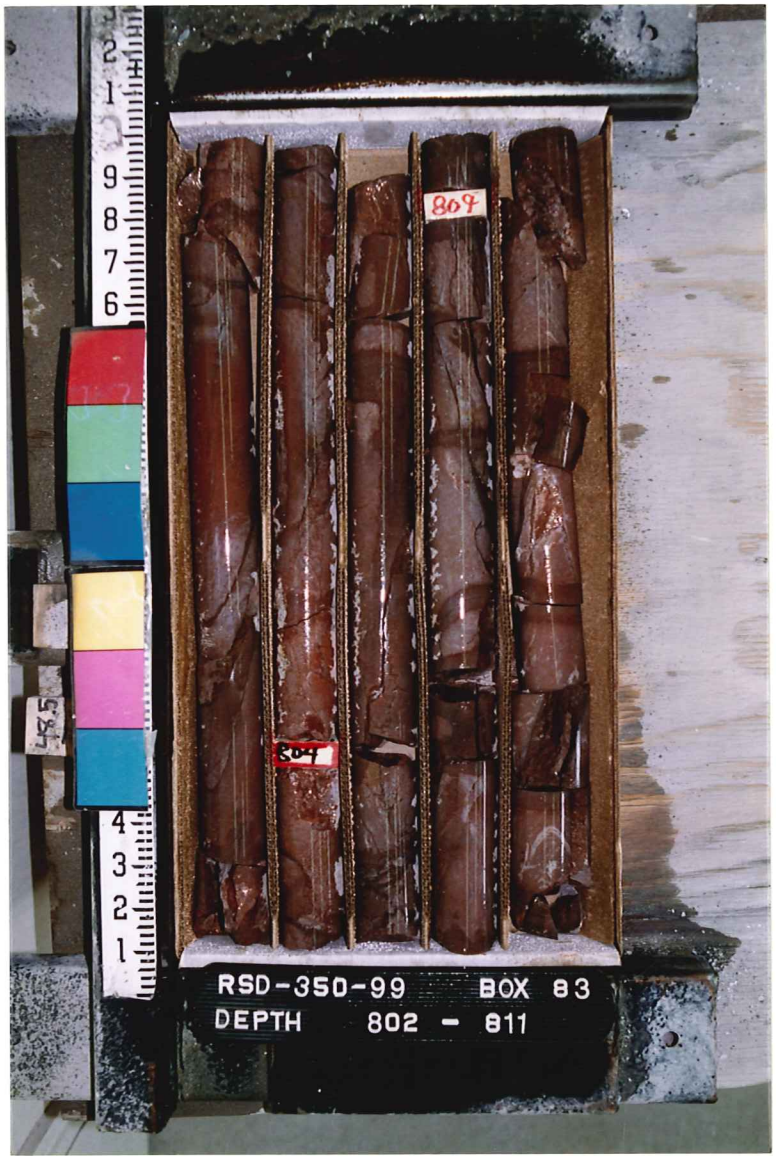
RSD-350-99 BOX 77
DEPTH 745 - 754
754
748.8


RSD-350-99 BOX 79
DEPTH 764 - 774
48.5
774

RSD-350-99 BOX 81
DEPTH 783 - 793

RSD-350-99 BOX 80
DEPTH 774 - 783

RSD-350-99 BOX 82
DEPTH 793 - 802


RSD-350-99 BOX 83
DEPTH 802 - 811
807
804

WELL RS-D350-99

DEPTH 50' (collar)

PICTURE NO.

INCLINATION 57.8

OBS. DIR. S 21 E

COR. DIR. 174.7

TOOL FACE

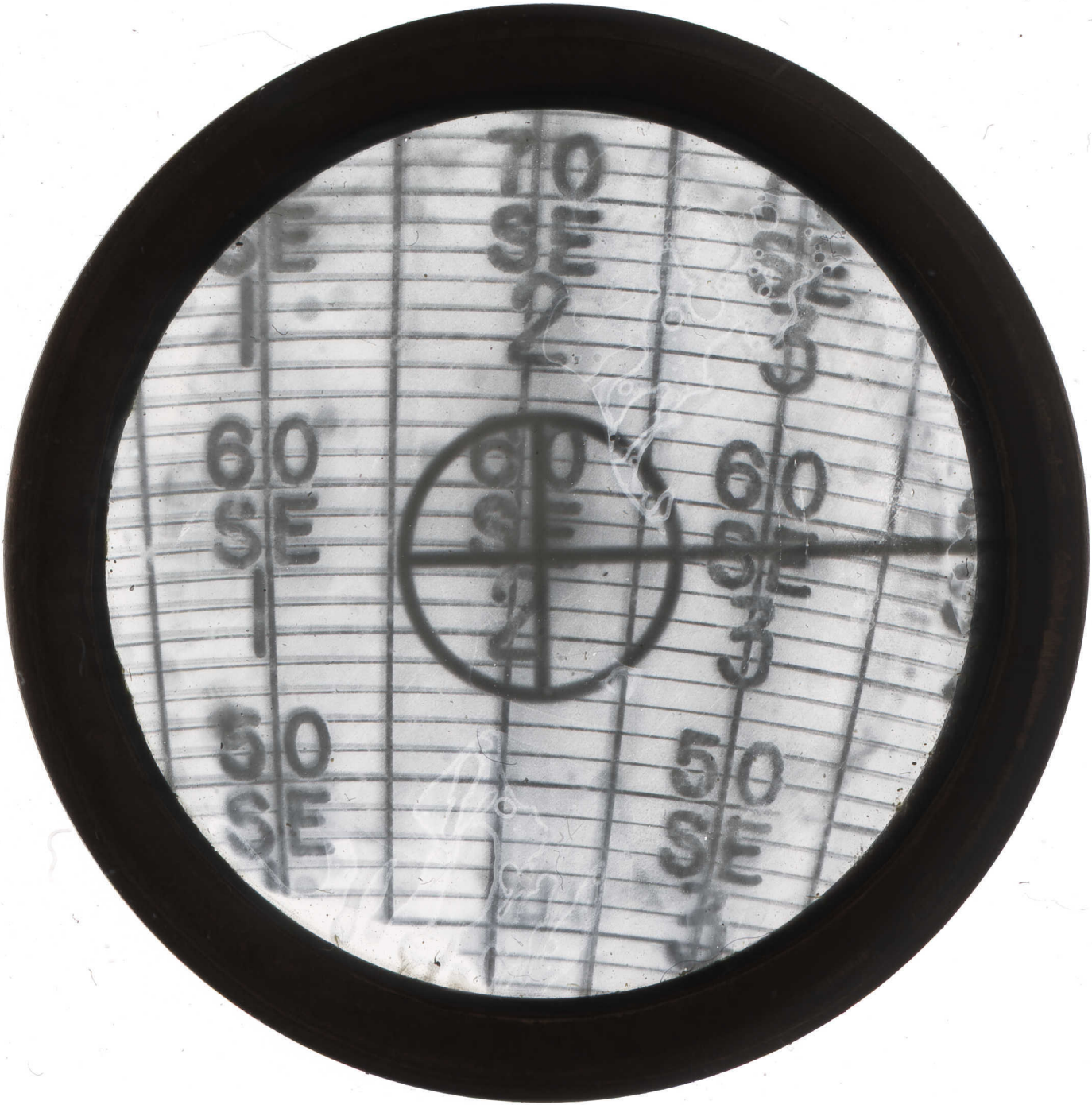
RUN BY ROGERS

DATE 5-1-99

CHECKED BY

sperry-sun

DRILLING SERVICES


70
SE
2
SE
3
60
SE
1
60
SE
2
60
SE
3
50
SE
50
SE

WELL RS-D350-99

DEPTH 600'

PICTURE NO.

INCLINATION

OBS. DIR. N38.5E

COR. DIR.

TOOL FACE

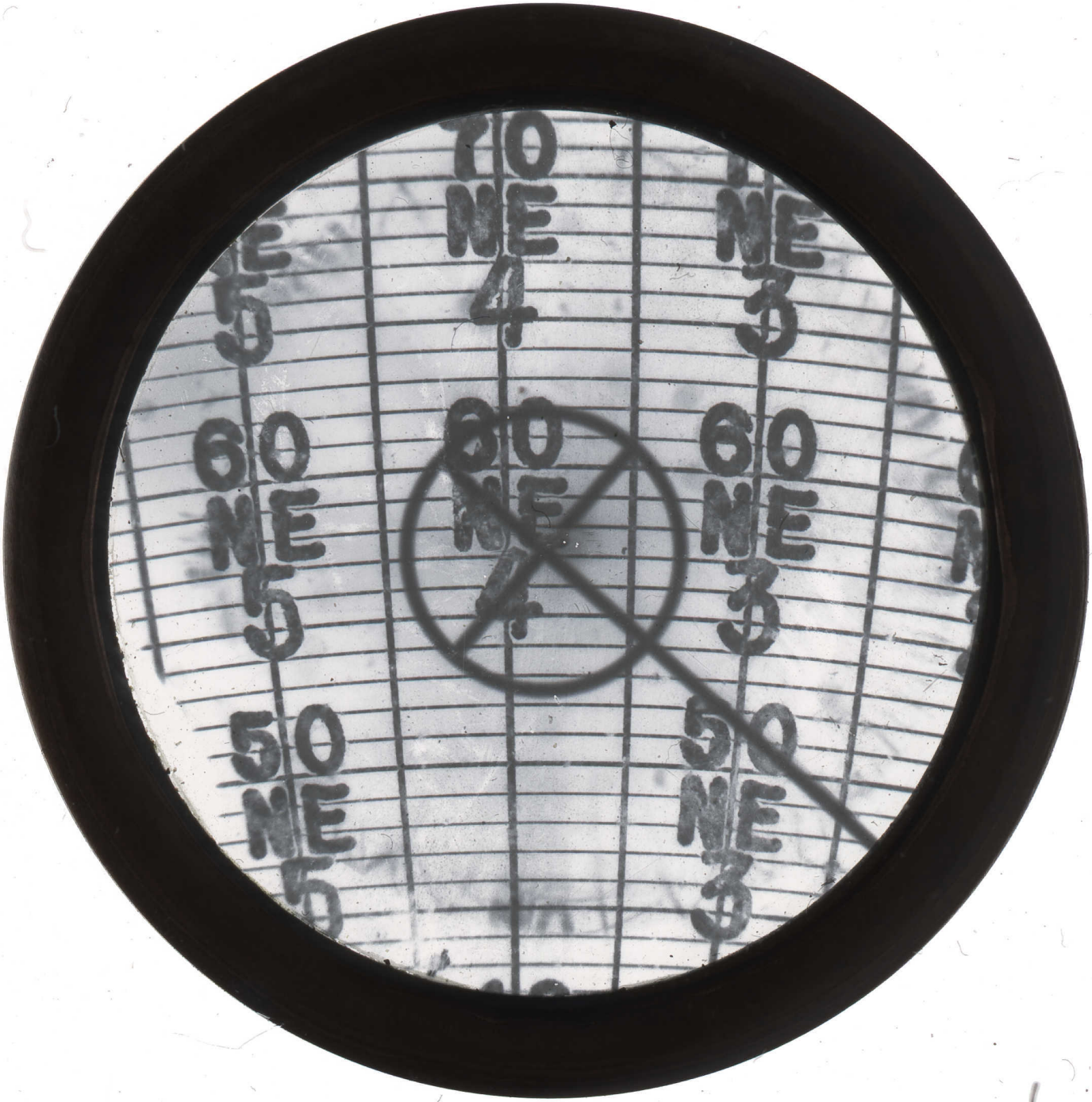
RUN BY ROGERS

DATE 5-1-99

CHECKED BY

sperry-sun

DRILLING SERVICES


70
NE
4
NE
3
60
NE
5
60
NE
4
60
NE
3
50
NE
5
50
NE
3

WELL RS-D350-99

DEPTH 400'

PICTURE NO.

INCLINATION 57

OBS. DIR. S 22.5 E

COR. DIR. 173.2

TOOL FACE

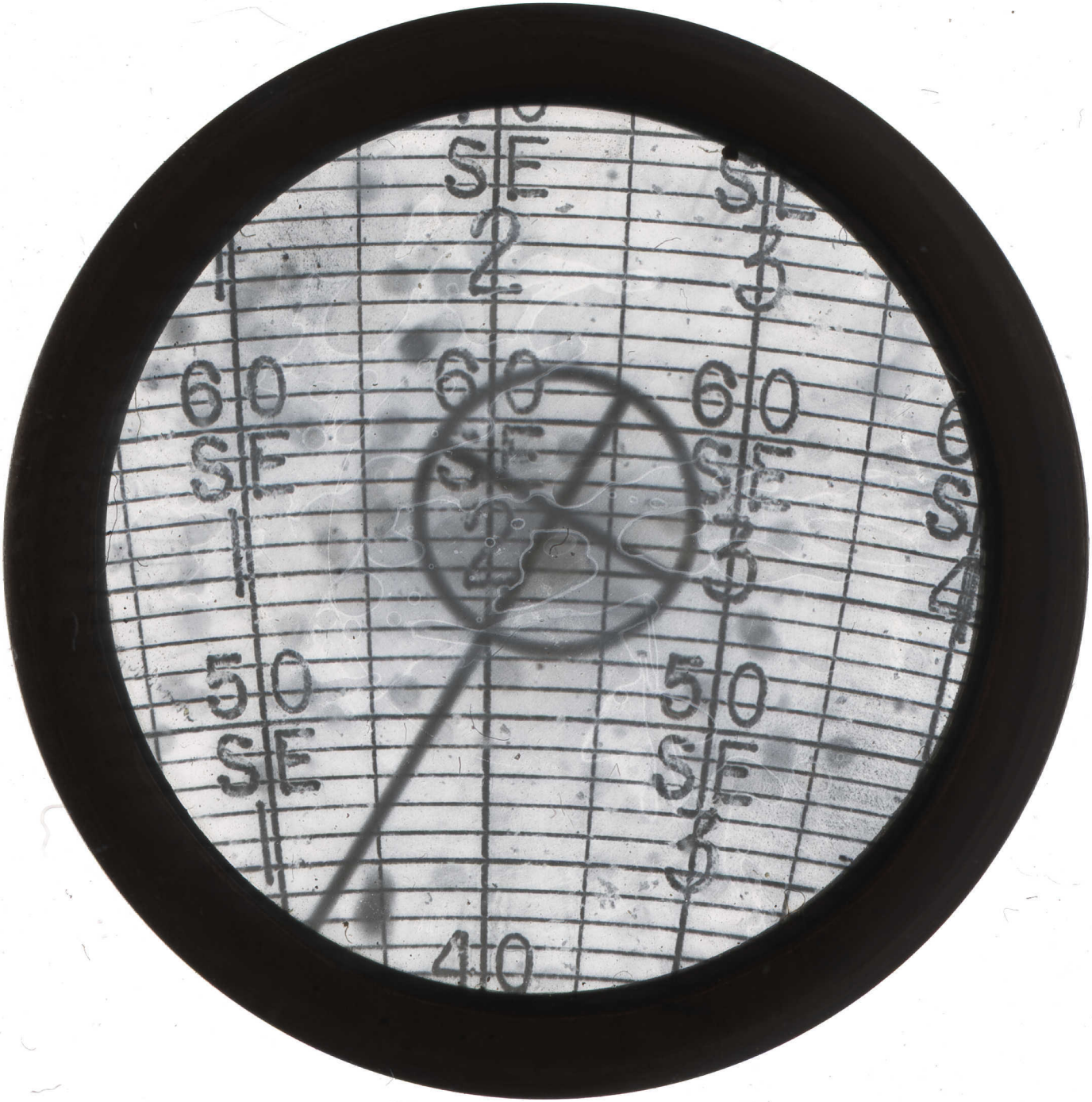
RUN BY ROGERS

DATE 5-1-99

CHECKED BY

sperry-sun

DRILLING SERVICES


SE
60
SE
50
SE
40

WELL RS-D350-99

DEPTH 820'

PICTURE NO.

INCLINATION

OBS. DIR. N 73 W

COR. DIR.

TOOL FACE

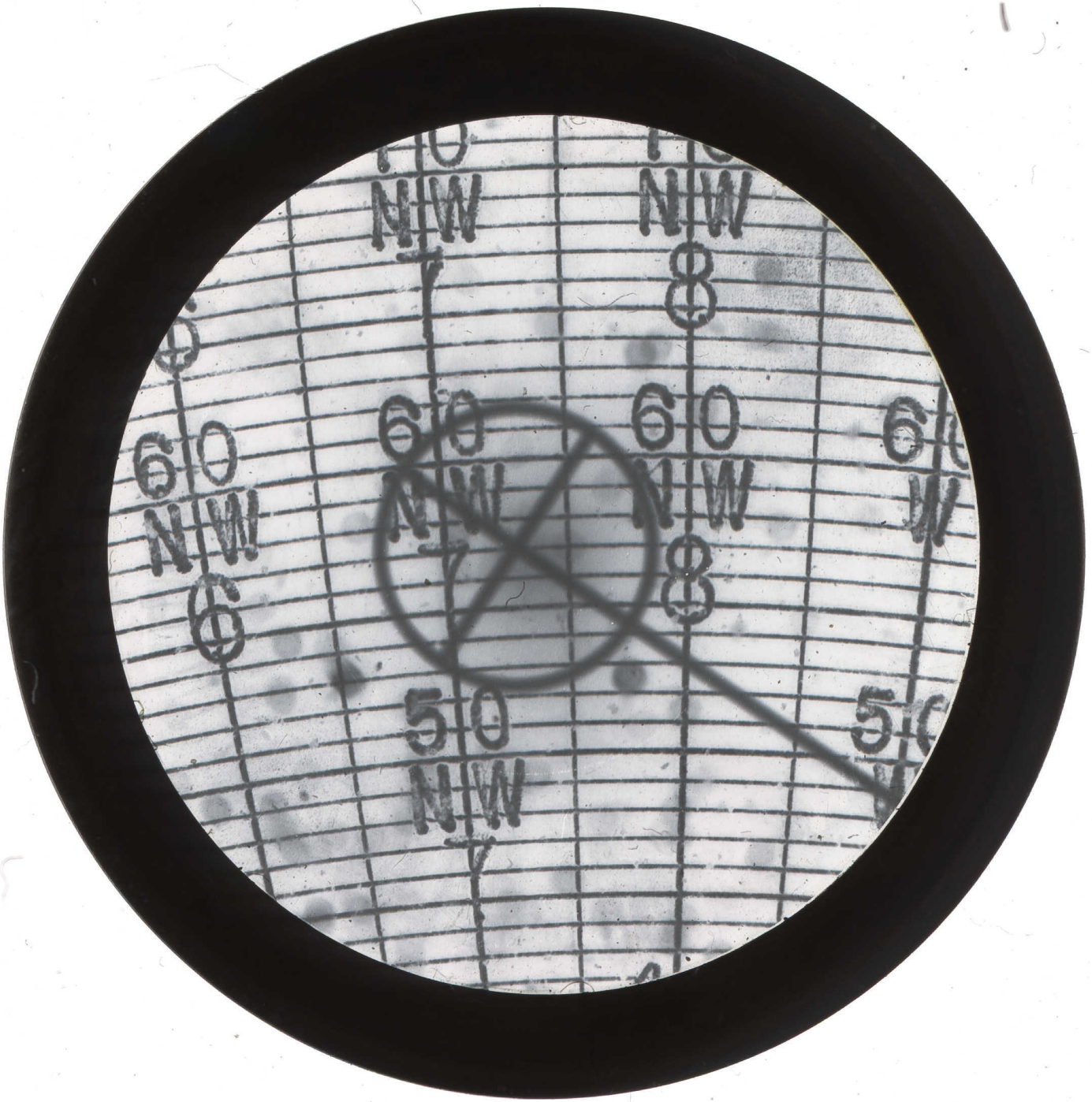
RUN BY ROGERS

DATE 5-1-99

CHECKED BY

sperry-sun

DRILLING SERVICES


NW
7
NW
8
60
NW
7
60
NW
8
60
NW
6
50
NW
7
50
NW