60000922

Mining District File Summary Sheet

| | |
|---|---|
| DISTRICT | Rosebud |
| DIST_NO | 4010 |
| COUNTY<br>If different from written on document | Pershing |
| TITLE<br>If not obvious | Rosebud Drill Hole File – Hole No. RS-D 359-99 |
| AUTHOR | D. Mackerrow; C. Ballew; K. Allen; R. Vance |
| DATE OF DOC(S) | 1999 |
| MULTI_DIST Y / (N?)<br>Additional Dist_Nos: | |
| QUAD_NAME | Sulphur 7.5' |
| P_M_C_NAME<br>(mine, claim & company names) | Rosebud Mine; Rosebud Project; Rosebud Mining Co. LLC<br>Hecla Mining Co.; Newmont Gold Co. |
| COMMODITY<br>If not obvious | gold; silver |
| NOTES | Drill log; geology; assay; [redacted]; total depth 602'<br>receipt; handwritten notes; downhole camera images<br>photographs<br><br>68p. 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)

SS: DD 5/12/08
Initials Date
DB: mah
Initials Date
SCANNED:
Initials Date

Revised: 1/22/08

RS-D 359 - 99

6000 0922 4010

359

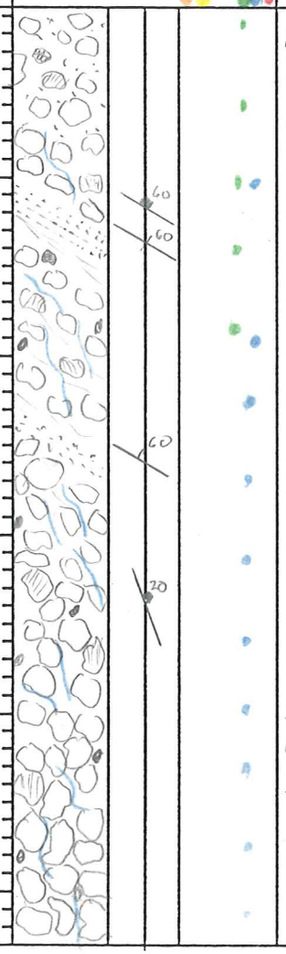
6000 0922

- 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-D359-99 | LOCATION | North Zone X-cut | REMARKS | |
| PAGE 1 OF | 9 | NORTHING | | First hole by Action drilling | |
| DATE | 7-28-99 | EASTING | | North Zone Mach Buy | |
| LOGGED BY | D.G. Mochetron | ELEVATION | | | |
| SCALE | 1"=10' | AZIMUTH | N 50°W | | |
| TOTAL DEPTH | 602 | INCLINATION | -37 | | |

| LITH | OX/RE | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| TOS Epiclastic | R | 0-199 TOS EPICLASTIC SEDIMENTS<br>Intercalated sandstones and conglomerates. Colors range from purple to pale green in color. Matrix of conglomerates is a volcanically derived clay/siltstone. Locally calcite veins are present. Clasture subrounded to angular in shape<br>52-70 Increased clay matrix giving core a volcanically derived appearance. small 4" sandstone intervals | 10<br>20<br>30<br>40<br>50 |  | Bedding of S.S. 60° tca. Core fractures on clay bedding seams<br>40 waxy green clay on fracture | 0-17 Calcite veining cuts core generally at a high angle to core axis<br>0-18. Traces of chloritic alteration overprinting hematitic alteration but bur<br>31.5-33.5 Leaching of matrix produces vuggy core |

| ANALYTICAL DATA | | | | | | |
|---|---|---|---|---|---|---|
| FROM | TO | W | Au | Ag | Au2 | A |
| 0 | 7 | | | | | |
| 7 | 12 | | | | | |
| 12 | 17 | | | | | |
| 17 | 22 | | | | | |
| 22 | 27 | | | | | |
| 27 | 32 | | | | | |
| 32 | 37 | | | | | |
| 37 | 42 | | | | | |
| 42 | 47 | | | | | |
| 47 | 52 | | | | | |

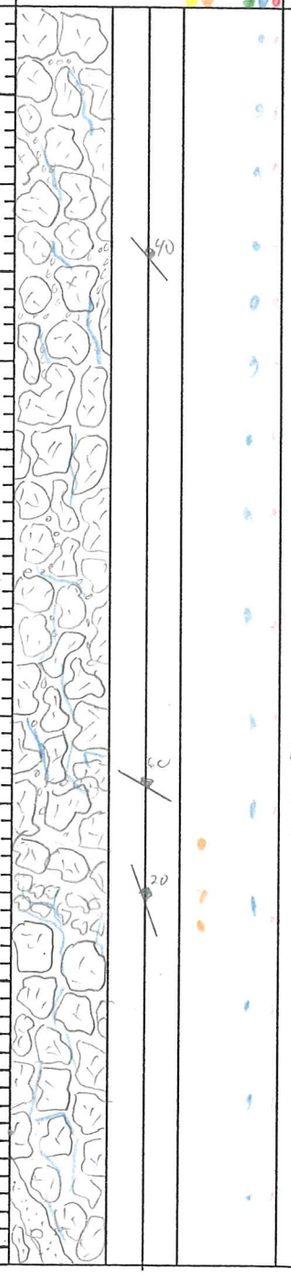
HOLE NUMBER RS-D359-99 PAGE 2 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| TOS Epiclastic | | 0-199 TOS EPICLASTIC SEDIMENTS<br>Epiclastic sandstone intercalated with conglomerates. Volcanic clay matrix supports subrounded to angular clast, General dip of sediments is 60°<br>52-70 Coarse to lapilli tuff Zone intercalated with narrow 4" sandstone beds<br>101.7 Basal conglomerate derived from the Dozer Clast size is generally larger then upper Tos Clast reach .5' in diameter. Dozer is pinkish gray in Color. | 50<br>60<br>70<br>80<br>90<br>100<br>110<br>120 | 60<br>30<br>30<br>50<br>60<br>60<br>30<br>60<br>70<br>70<br>60 | 65 30° tca fractures with slicks 90° tca Brick red hematite on fracture surface<br>71-73 Fracture zone with clay bedding partings<br>101.7 Very sharp contact with 1" calcite on surface minimal slicks on calcite surface 60° tca | 70-92 Weak chloritic alteration of clays<br>101.7 1" of calcite veins, Hematite specks present through core<br>112 First traces of pyrite seen in core < .5% |

ANALYTICAL DATA

| FROM | TO | W | Au | Ag | Au2 | A |
|---|---|---|---|---|---|---|
| 52 | 57 | | | | | |
| 57 | 62 | | | | | |
| 62 | 67 | | | | | |
| 67 | 72 | | | | | |
| 72 | 77 | | | | | |
| 77 | 82 | | | | | |
| 82 | 87 | | | | | |
| 87 | 92 | | | | | |
| 92 | 97 | | | | | |
| 97 | 101.7 | | | | | |
| 101.7 | 107 | | | | | |
| 107 | 112 | | | | | |
| 112 | 117 | | | | | |
| 117 | 122 | | | | | |

HOLE NUMBER RS-D359-99 PAGE 3 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| TOS | R | 0-199 TOS EPICLASTIC SEDIMENTS<br><br>Basal conglomerate derived Dozer formation continues from 101.7, color is pinkish gray from hematite<br><br>167-172 Weak Bleach of core around fracture zone. Clay on fractures from 169.5-170<br><br>169.5 Pinkish green clay | 120<br>130<br>140<br>150<br>160<br>170<br>180<br>190 |  | 134 waxy greenish clay on a fracture<br><br>169.5-170 Fracture zone with clay and minor ubbite | Traces of pyrite at <.5% level. Too low to indicate Hematite in the form of very fine disseminated specks Calcite veinlet still present<br><br>167-172 Traces of argillization with traces of clay on fractures |

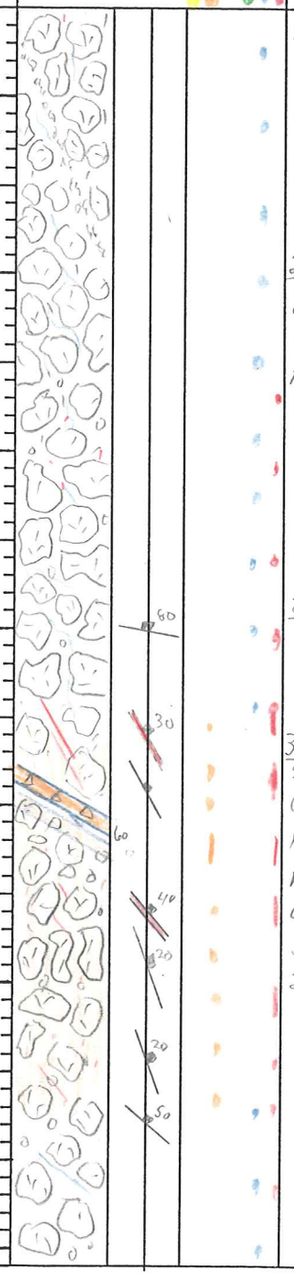
| ANALYTICAL DATA | | | | | | |
|---|---|---|---|---|---|---|
| FROM | TO | W | Au | Ag | Au2 | A |
| 122 | 127 | | | | | |
| 127 | 132 | | | | | |
| 132 | 137 | | | | | |
| 137 | 142 | | | | | |
| 142 | 147 | | | | | |
| 147 | 152 | | | | | |
| 152 | 157 | | | | | |
| 157 | 162 | | | | | |
| 162 | 167 | | | | | |
| 167 | 172 | | | | | |
| 172 | 177 | | | | | |
| 177 | 182 | | | | | |
| 182 | 187 | | | | | |
| 187 | 192 | | | | | |

HOLE NUMBER RS-D359-99 PAGE 4 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| Tos | R | 0-199 TOS EPICLASTIC SEDIMENTS<br>Basal conglomerate derived from Dozer | 190 | | | |
| Td | | 199-602 DOZER<br>Fine grain light gray rhyolite. Auto Breccia texture to the flow. Some clast show flow banding texture, calcite vein lets continue to be present.<br>232-272 Hematite stains clast of core and forms rinds around clast<br>249-253 Fractures zon has slicks with 20° tea slips | 200<br>210<br>220<br>230<br>240<br>250<br>260 | 40<br>40<br>66<br>50<br>30<br>80<br>60<br>50<br>30 | 199 Contact with Dozer is sharp but poorly defined<br>209.5 - 211.5 Fault with clay matrix rubble BXa Fault looks "cold" and unmineralized<br>238 80° tca Fracture with faint slips 80° tca<br>249-253 Fracture zone with traces of white clay | 199 Faint traces of chloritic alteration to Dozer<br>227 specks of Hematite begin to increase<br>251.5-262 Pyrite increases to a measurable amount (1%) Pyrite has a % of marcasite making it dark |

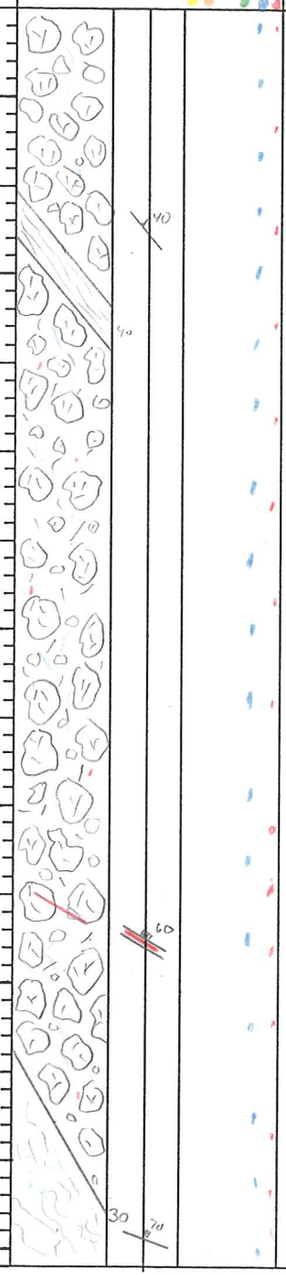
| ANALYTICAL DATA | | | | | | |
|---|---|---|---|---|---|---|
| FROM | TO | W | Au | Ag | Au2 | A |
| 192 | 197 | | | | | |
| 197 | 199 | | | | | |
| 199 | 202 | | | | | |
| 202 | 207 | | | | | |
| 207 | 209.5 | | | | | |
| 209.5 | 212 | | | | | |
| 212 | 217 | | | | | |
| 217 | 222 | | | | | |
| 222 | 227 | | | | | |
| 227 | 232 | | | | | |
| 232 | 237 | | | | | |
| 237 | 242 | | | | | |
| 242 | 247 | | | | | |
| 247 | 252 | | | | | |
| 252 | 257 | | | | | |
| 257 | 262 | | | | | |

HOLE NUMBER RS-D359-99 PAGE 5 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| Td | R | 199- DOZER<br>Auto brecciated fine grained rhyolite continues<br>Color varies with content of hematite, Brick red matrix or clast rinds around pale gray. Very faint trace of chloritic alteration.<br><br>300-322 Zone of alteration surround fault zone, Weak to moderate argillization. Sulfides of blended py and marcasite approach 2% in local concentrations<br>No silicification associated with the fault/fracture zone<br><br>310-317 The Auto breccia matrix becomes pinkish brown with light gray clasts | 260<br>270<br>280<br>290<br>300<br>310<br>320<br>330 |  | Rock is generally massive and weakly fractured<br><br>269 ½" 20° tca Hematitic clay and micro breccia seen. May be old healed tectonic bxx<br><br>295 30° tca fr with 30° tca slip surfaces<br><br>304.2-305.2 Sheared zone with 60° tca planes Footwall fault plane has two orientation to slips 50° tca and 200° tca | Calcite continues to coat micro fracture<br>Alteration is very restricted.<br><br>282 Pyrite crystals at <.5% present<br><br>300 Argillic alteration begins surrounding fault zone, Hematite in breccia matrix is removed by alteration.<br><br>300-327 Sulfide veinlets present around fault zone |

| ANALYTICAL DATA | | | | | | |
|---|---|---|---|---|---|---|
| FROM | TO | W | Au | Ag | Au2 | A |
| 257 | 262 | | | | | |
| 262 | 267 | | | | | |
| 267 | 272 | | | | | |
| 272 | 277 | | | | | |
| 277 | 282 | | | | | |
| 282 | 287 | | | | | |
| 287 | 292 | | | | | |
| 292 | 297 | | | | | |
| 297 | 302 | | | | | |
| 302 | 304.3 | | | | | |
| 304.3 | 305.3 | | | | | |
| 305.3 | 307 | | | | | |
| 307 | 312 | | | | | |
| 312 | 317 | | | | | |
| 317 | 322 | | | | | |
| 322 | 327 | | | | | |
| 327 | 332 | | | | | |

HOLE NUMBER RS-D359-99 PAGE 6 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| Td | R | 199 DOZER<br>Fine grained rhyolite with auto breccia texture.<br>Matrix of Autobreccia varies in % of the rock.<br>Calcite in matrix or as rinds around clast<br><br>343.7 - 345.7 Non brecciated flow<br><br>392.8 Contact of auto breccia and flow. contact was 30° tca<br>flow is internally disrupted but does not have matrix like auto breccia | 330<br>340<br>350<br>360<br>370<br>380<br>390<br>400 |  | 327 - Very minimal to no fractures<br><br>340 Flow textures at 40° tca | 332 sulfide content falls below <0.5%<br>Not above trace levels<br><br>377 slight increase in sulfide content but still not 1% |

ANALYTICAL DATA

| FROM | TO | W | Au | Ag | Au2 | A |
|---|---|---|---|---|---|---|
| 332 | 337 | | | | | |
| 337 | 342 | | | | | |
| 342 | 347 | | | | | |
| 347 | 352 | | | | | |
| 352 | 357 | | | | | |
| 357 | 362 | | | | | |
| 362 | 367 | | | | | |
| 367 | 372 | | | | | |
| 372 | 377 | | | | | |
| 377 | 382 | | | | | |
| 382 | 387 | | | | | |
| 387 | 392 | | | | | |
| 392 | 397 | | | | | |
| 397 | 402 | | | | | |

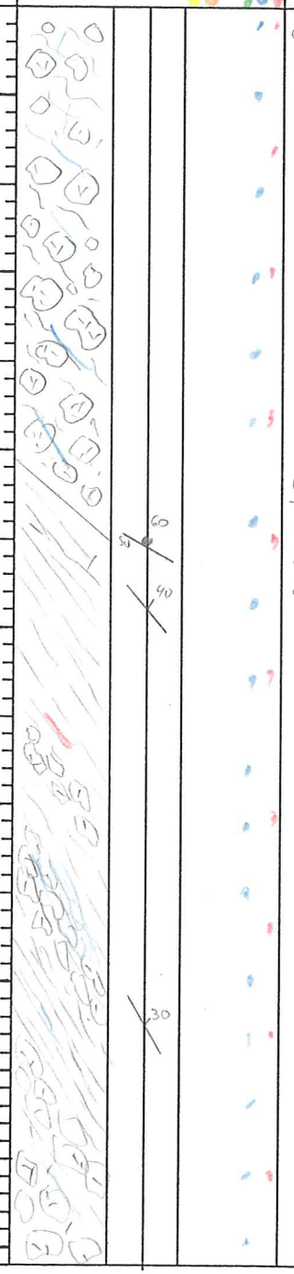
HOLE NUMBER RS-D359-99 PAGE 7 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| Td | R | 399-602 DOZER<br>Fine grained volcanic flow<br>Continues<br>Core is pale gray and minimally fractured<br><br>421 Ghost autobreccia texture begins to strengthen<br><br>432-452 flow begins to have very small <1mm white phenocrysts | 400<br>410<br>420<br>430<br>440<br>450<br>460<br>470 | 40<br>30<br>30<br>40 | Minimal fracturing | No alteration or just traces levels of argillization.<br><br>444-447 multiple narrow calcite veins 0° to 30° tca |

ANALYTICAL DATA

| FROM | TO | W | Au | Ag | Au2 | A |
|---|---|---|---|---|---|---|
| 402 | 407 | | | | | |
| 407 | 412 | | | | | |
| 412 | 417 | | | | | |
| 417 | 422 | | | | | |
| 422 | 427 | | | | | |
| 427 | 432 | | | | | |
| 432 | 437 | | | | | |
| 437 | 442 | | | | | |
| 442 | 447 | | | | | |
| 447 | 452 | | | | | |
| 452 | 457 | | | | | |
| 457 | 462 | | | | | |
| 462 | 467 | | | | | |
| 467 | 472 | | | | | |

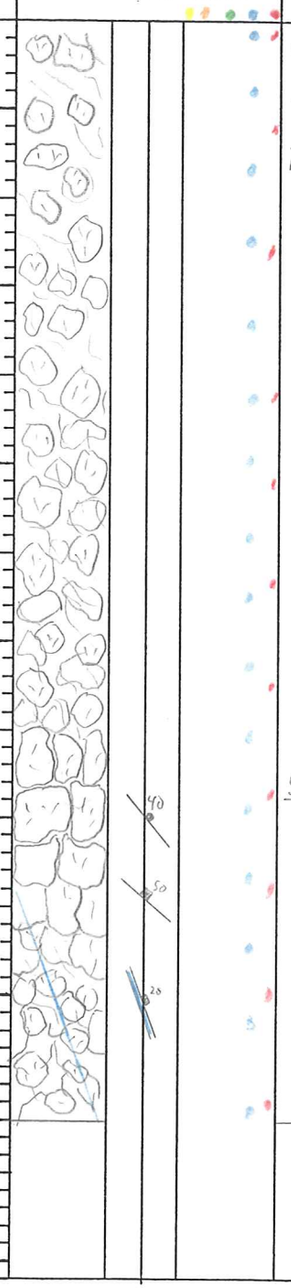
HOLE NUMBER RS-D359-99 PAGE 8 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| Td | K | 199-602 DOZER<br>Fine grained pale gray rhyolite continues, Pale gray in color<br><br>497.5 Flow boundary between Auto brecciated Dozer and flow.<br>497.5-529 Mixed zone of of laminated flow and short auto breccias<br><br>529 - Auto brecciated Dozer dominates texture of Dozer | 470<br>480<br>490<br>500<br>510<br>520<br>530<br>540 |  | Core is not fractured more the once in 10' or more.<br><br>497.5<br>Contact with Auto breccia and flow at 50° tca | Sulfide content less < .5%, Any alteration is at trace levels maximum<br>Weak calcite coating on micro fracture throughout the core. Locally calcite veins are present.<br><br>510 - A local concentration of Pyrite following the flow foliation. This pyrite is not a vein but a weak replacement |

ANALYTICAL DATA

| FROM | TO | W | Au | Ag | Au2 | A |
|---|---|---|---|---|---|---|
| 472 | 477 | | | | | |
| 477 | 482 | | | | | |
| 482 | 487 | | | | | |
| 487 | 492 | | | | | |
| 492 | 497 | | | | | |
| 497 | 502 | | | | | |
| 502 | 507 | | | | | |
| 507 | 512 | | | | | |
| 512 | 517 | | | | | |
| 517 | 522 | | | | | |
| 522 | 527 | | | | | |
| 527 | 532 | | | | | |
| 532 | 537 | | | | | |
| 537 | 542 | | | | | |

HOLE NUMBER RS-D359-99 PAGE 9 OF 9

| LITH. | OX/RED. | LITHOLOGY | FT | GRAPHIC LOG | STRUCTURE | ALTERATION AND MINERALIZATION |
|---|---|---|---|---|---|---|
| Td | R | 99-602 DOZER<br>Fine grained rhyolite flow with autobrecciated texture of flow banded flow.<br>577-587 Traces of either very fine black sulfide or carbon in matrix of auto breccia<br>T.D. 602 | 540, 550, 560, 570, 580, 590, 600 |  | Very low fracturing to core. As low as 1 fracture every 50ft<br>585 rare fracture 40° tcv | No alteration and minimal pyrite content. |



ANALYTICAL DATA

| FROM | TO | W | Au | Ag | Au2 | F |
|---|---|---|---|---|---|---|
| 542 | 547 | | | | | |
| 547 | 552 | | | | | |
| 552 | 557 | | | | | |
| 557 | 562 | | | | | |
| 562 | 567 | | | | | |
| 567 | 572 | | | | | |
| 572 | 577 | | | | | |
| 577 | 582 | | | | | |
| 582 | 587 | | | | | |
| 587 | 592 | | | | | |
| 592 | 597 | | | | | |
| 597 | 602 | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-28-99 LOGGED BY: D.G. MacKenzie PAGE 1 OF 11

| 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 | 7 | 17 | 43 | 11 | | | | | | | | | | |
| 7 | 12 | 100 | 100 | 94 | | | | | | | | | | |
| 12 | 17 | 100 | 102 | 90 | | | | | | | | | | |
| 17 | 22 | 100 | 102 | 90 | | | | | | | | | | |
| 22 | 27 | 100 | 106 | 64 | | | | | | | | | | |
| 27 | 32 | 100 | 100 | 60 | | | | | | | | | | |
| 32 | 37 | 100 | 100 | 62 | | | | | | | | | | |
| 37 | 42 | 100 | 104 | 98 | | | | | | | | | | |
| 42 | 47 | 100 | 102 | 96 | | | | | | | | | | |
| 47 | 52 | 100 | 100 | 86 | | | | | | | | | | |
| 52 | 57 | 100 | 104 | 94 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-28-99 LOGGED BY: D.G. MacKerron PAGE 2 OF 11

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57 | 62 | 100 | 102 | 100 | | | | | | | | | | |
| 62 | 67 | 100 | 100 | 80 | | | | | | | | | | |
| 67 | 72 | 100 | 100 | 68 | | | | | | | | | | |
| 72 | 77 | 100 | 100 | 66 | | | | | | | | | | |
| 77 | 82 | 100 | 102 | 60 | | | | | | | | | | |
| 82 | 87 | 100 | 100 | 86 | | | | | | | | | | |
| 87 | 92 | 100 | 100 | 84 | | | | | | | | | | |
| 92 | 97 | 100 | 100 | 96 | | | | | | | | | | |
| 97 | 102 | 100 | 100 | 88 | | | | | | | | | | |
| 102 | 107 | 100 | 106 | 100 | | | | | | | | | | |
| 107 | 112 | 100 | 100 | 98 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-28-99 LOGGED BY: D.G. Mackerrow PAGE 3 OF 11

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 112 | 117 | 100 | 100 | 90 | | | | | | | | | | |
| 117 | 122 | 100 | 100 | 95 | | | | | | | | | | |
| 122 | 127 | 100 | 102 | 94 | | | | | | | | | | |
| 127 | 132 | 100 | 100 | 82 | | | | | | | | | | |
| 132 | 137 | 100 | 100 | 70 | | | | | | | | | | |
| 137 | 142 | 100 | 100 | 80 | | | | | | | | | | |
| 142 | 147 | 100 | 102 | 90 | | | | | | | | | | |
| 147 | 152 | 100 | 100 | 80 | | | | | | | | | | |
| 152 | 157 | 100 | 104 | 66 | | | | | | | | | | |
| 157 | 162 | 100 | 104 | 90 | | | | | | | | | | |
| 162 | 167 | 100 | 100 | 80 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-28-99 LOGGED BY: D.G. MacFarrow PAGE 4 OF 11

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167 | 172 | 90 | 100 | 66 | | | | | | | | | | |
| 172 | 177 | 100 | 100 | 92 | | | | | | | | | | |
| 177 | 182 | 100 | 100 | 80 | | | | | | | | | | |
| 182 | 187 | 100 | 100 | 96 | | | | | | | | | | |
| 187 | 192 | 100 | 92 | 86 | | | | | | | | | | |
| 192 | 197 | 100 | 106 | 96 | | | | | | | | | | |
| 197 | 202 | 100 | 102 | 90 | | | | | | | | | | |
| 202 | 207 | 100 | 96 | 82 | | | | | | | | | | |
| 207 | 212 | 100 | 104 | 66 | | | | | | | | | | |
| 217 | 222 | 100 | 102 | 62 | | | | | | | | | | |
| 222 | 227 | 100 | 102 | 90 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-29-99 LOGGED BY: D.G. MacKerrow PAGE 5 OF 11

| 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. | A/G. ANGLE TO C.A. | ROUGHNESS | INFILL | DOWNHOLE DEPTH | SAMPLE WEIGHT (g) | DISPLACEMENT (cc) | DENSITY (g/cc) |
| 227 | 232 | 100 | 96 | 82 | | | | | | | | | | |
| 232 | 237 | 100 | 100 | 96 | | | | | | | | | | |
| 237 | 242 | 100 | 100 | 96 | | | | | | | | | | |
| 242 | 247 | 100 | 100 | 100 | | | | | | | | | | |
| 247 | 252 | 100 | 102 | 90 | | | | | | | | | | |
| 252 | 257 | 98 | 100 | 86 | | | | | | | | | | |
| 257 | 262 | 100 | 98 | 100 | | | | | | | | | | |
| 262 | 267 | 100 | 102 | 74 | | | | | | | | | | |
| 267 | 272 | 100 | 100 | 88 | | | | | | | | | | |
| 272 | 277 | 100 | 100 | 100 | | | | | | | | | | |
| 277 | 282 | 100 | 92 | 100 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-29-99 LOGGED BY: D. G. Mackenzie PAGE 6 OF 11

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 282 | 287 | 100 | 104 | 86 | | | | | | | | | | |
| 287 | 292 | 100 | 104 | 92 | | | | | | | | | | |
| 292 | 297 | 100 | 104 | 82 | | | | | | | | | | |
| 297 | 302 | 100 | 100 | 86 | | | | | | | | | | |
| 302 | 307 | 84 | 104 | 76 | | | | | | | | | | |
| 307 | 312 | 82 | 100 | 52 | | | | | | | | | | |
| 312 | 317 | 100 | 100 | 62 | | | | | | | | | | |
| 317 | 322 | 100 | 102 | 86 | | | | | | | | | | |
| 322 | 327 | 100 | 102 | 86 | | | | | | | | | | |
| 327 | 332 | 100 | 100 | 100 | | | | | | | | | | |
| 332 | 337 | 100 | 100 | 100 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-29-99 LOGGED BY: D.C. MacKerrow PAGE 7 OF 11

| 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. | A/G. ANGLE TO C.A. | ROUGHNESS | INFILL | DOWNHOLE DEPTH | SAMPLE WEIGHT (g) | DISPLACEMENT (cc) | DENSITY (g/cc) |
| 337 | 342 | 100 | 100 | 88 | | | | | | | | | | |
| 342 | 347 | 100 | 102 | 90 | | | | | | | | | | |
| 347 | 352 | 100 | 100 | 100 | | | | | | | | | | |
| 352 | 357 | 100 | 100 | 88 | | | | | | | | | | |
| 357 | 362 | 100 | 102 | 100 | | | | | | | | | | |
| 362 | 367 | 100 | 100 | 100 | | | | | | | | | | |
| 367 | 372 | 100 | 98 | 100 | | | | | | | | | | |
| 372 | 377 | 100 | 100 | 92 | | | | | | | | | | |
| 377 | 382 | 100 | 104 | 100 | | | | | | | | | | |
| 382 | 387 | 100 | 102 | 96 | | | | | | | | | | |
| 387 | 392 | 100 | 96 | 100 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-30-99 LOGGED BY: D.G. MacKerrow PAGE 8 OF 11

| 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) |
| 392 | 397 | 100 | 104 | 100 | | | | | | | | | | |
| 397 | 402 | 100 | 100 | 92 | | | | | | | | | | |
| 402 | 407 | 100 | 102 | 94 | | | | | | | | | | |
| 407 | 412 | 100 | 100 | 100 | | | | | | | | | | |
| 412 | 417 | 100 | 100 | 96 | | | | | | | | | | |
| 417 | 422 | 100 | 104 | 100 | | | | | | | | | | |
| 422 | 427 | 100 | 102 | 94 | | | | | | | | | | |
| 427 | 432 | 100 | 100 | 100 | | | | | | | | | | |
| 432 | 437 | 100 | 96 | 100 | | | | | | | | | | |
| 437 | 442 | 100 | 102 | 100 | | | | | | | | | | |
| 442 | 447 | 100 | 100 | 100 | | | | | | | | | | |

HECLA MINING COMPANY – ROSEBUD PROJECT
GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-30-99 LOGGED BY: D.G. Mackerrow PAGE 9 OF 12

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 447 | 452 | 100 | 100 | 100 | | | | | | | | | | |
| 452 | 457 | 100 | 104 | 100 | | | | | | | | | | |
| 457 | 462 | 100 | 100 | 100 | | | | | | | | | | |
| 462 | 467 | 100 | 98 | 92 | | | | | | | | | | |
| 467 | 472 | 100 | 100 | 100 | | | | | | | | | | |
| 472 | 482 | 100 | 100 | 100 | | | | | | | | | | |
| 482 | 487 | 100 | 102 | 100 | | | | | | | | | | |
| 487 | 492 | 100 | 96 | 100 | | | | | | | | | | |
| 492 | 497 | 100 | 102 | 100 | | | | | | | | | | |
| 497 | 502 | 100 | 98 | 100 | | | | | | | | | | |
| 502 | 507 | 100 | 104 | 100 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

HOLE # RS-D359-99 DATE: 7-31-99 LOGGED BY: D.G. Mackerrow PAGE 10 OF 11

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 507 | 512 | 100 | 98 | 80 | | | | | | | | | | |
| 512 | 517 | 100 | 102 | 100 | | | | | | | | | | |
| 517 | 522 | 100 | 100 | 100 | | | | | | | | | | |
| 522 | 527 | 100 | 100 | 100 | | | | | | | | | | |
| 527 | 532 | 100 | 100 | 100 | | | | | | | | | | |
| 532 | 537 | 100 | 98 | 100 | | | | | | | | | | |
| 537 | 542 | 100 | 100 | 100 | | | | | | | | | | |
| 542 | 547 | 100 | 98 | 100 | | | | | | | | | | |
| 547 | 552 | 100 | 102 | 90 | | | | | | | | | | |
| 552 | 557 | 100 | 100 | 96 | | | | | | | | | | |
| 557 | 562 | 100 | 104 | 96 | | | | | | | | | | |

# HECLA MINING COMPANY – ROSEBUD PROJECT
## GEOTECHNICAL DRILL LOG

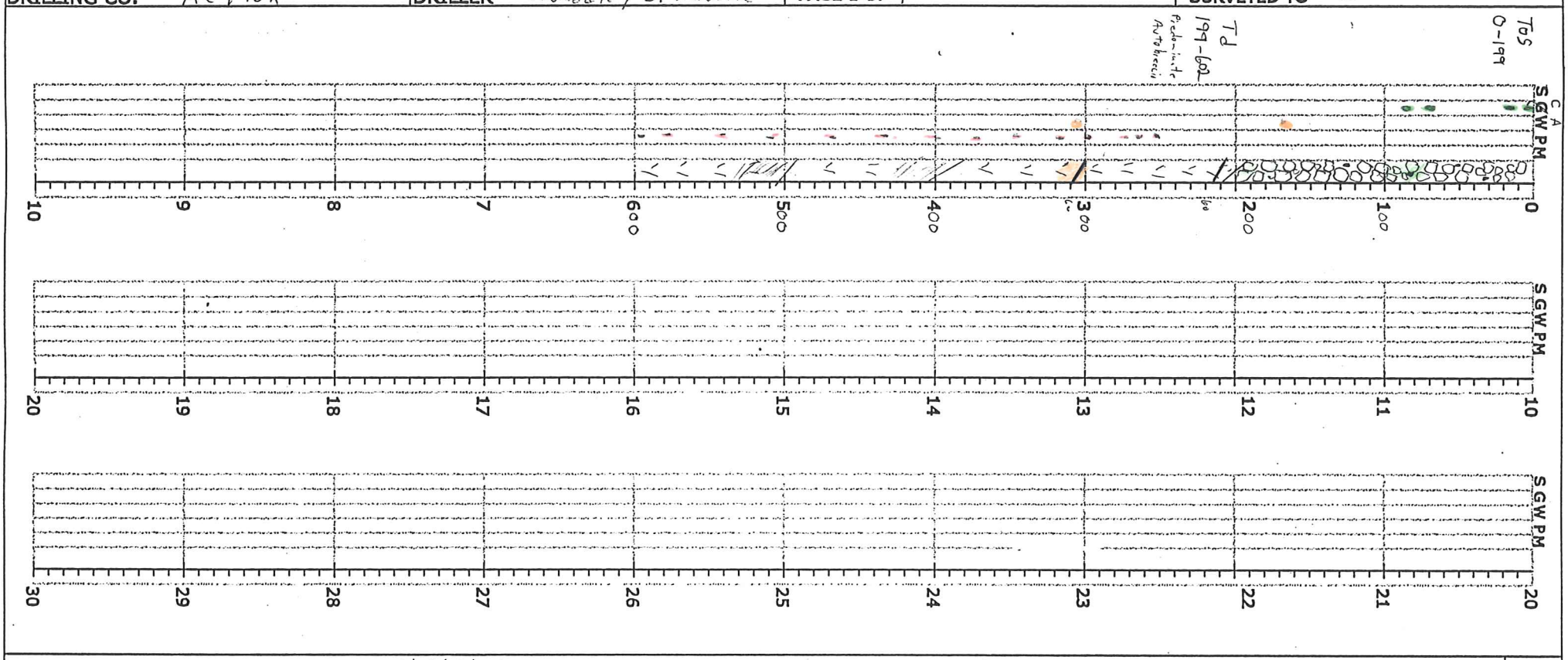
HOLE # RS-D359-99 DATE: 7-31-99 LOGGED BY: D.G. Mackerrow PAGE 11 OF 11

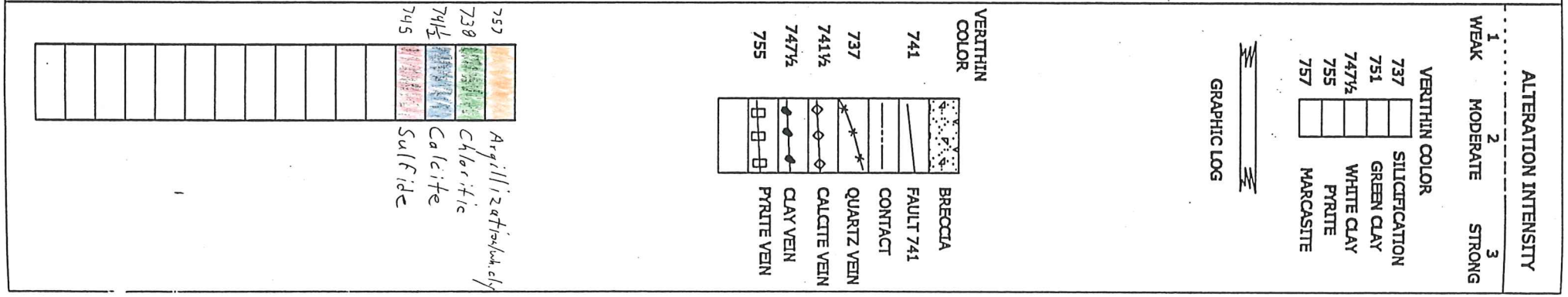
| DRILL RUN | | SOLID CORE RECOVERY (%) | TOTAL CORE RECOVERY (%) | RQD | ROCK STRENGTH | | FRACTURE DATA | | | | DENSITY DATA | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FROM | TO | | | | DOWNHOLE DEPTH | POINT LOAD INDEX (psi) | FRACTURE DENSITY/FT. | AVG. ANGLE TO C.A. | ROUGHNESS | INFILL | DOWNHOLE DEPTH | SAMPLE WEIGHT (g) | DISPLACEMENT (cc) | DENSITY (g/cc) |
| 562 | 567 | 100 | 98 | 100 | | | | | | | | | | |
| 567 | 572 | 100 | 104 | 100 | | | | | | | | | | |
| 572 | 577 | 100 | 100 | 100 | | | | | | | | | | |
| 577 | 582 | 100 | 100 | 100 | | | | | | | | | | |
| 582 | 587 | 100 | 100 | 100 | | | | | | | | | | |
| 587 | 592 | 100 | 100 | 100 | | | | | | | | | | |
| 592 | 597 | 100 | 100 | 100 | | | | | | | | | | |
| 597 | 602 | 100 | 100 | 100 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

# ROSEBUD MINING COMPANY, LLC.

| | | | |
|---|---|---|---|
| START HOLE 7/22/99 | FINISH HOLE 7/25/99. | HOLE # RS-D359-99 | |
| HOLE TYPE Core | LOGGED BY D.G. MacKerrow | | |
| BEARING N 50°W | ANGLE -37 | T.D 602 | |
| PAGE 1 OF 1 | SURVEYED TO 600 | | |

| | |
|---|---|
| COLLAR COORDINATES | |
| NORTH | |
| EAST | |
| ELEV | |
| DRILLING CO. Action | DRILLER T. Gaddie / J. Lavulle |



# Newmont Gold Core Form

**Hole#** RS-D359-99 **Az/Incl** N50W/-32 **Page** 1 of 3

**Logged by** D.G. MacKerron **Area** **Total Depth** 602

**Date** 7-28-99 **Coords** **Contractor** ACTION

| 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 | Met.: CO3 | Met.: Sulfide | Mineralogy: Pyrite | Mineralogy: Marcasite | Mineralogy: Calc/Dolo | Mineralogy: Clay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOS | EPIC SEDS | Pinkish grey | | | | | | | | | 0 - TOS EPICLASTIC | 0 | 0 | 0 | 0 | 0 | Tr | | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | | | | | | | | | | | | | | 199 SEDIMENTS | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | INTERCALATED | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | conglomerate, SANDSTONE | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | AND AIR FALL TUFF | | | | | | 0 | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | Tr | | | | | | | | |
| 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | 0 | | | | | | | | |
| 100 | | | | | | | | | 70 | | | | | 101.7 Basal conglomerate | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | derived from the | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | Dozer begins | | | | | | | | | | | Tr | | | |
| 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 140 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 | | | Td | Rhyo | Grey | | | 40 | | | | | | 199 - DOZER | | | | | | | | | | | 0 | | | |

# Newmont Gold Core Form

**Hole#** RS-D359-99 **Az/Incl** N50W/-37 **Page** 3 of 3

**Logged by** D.C. MacKerron **Area** **Total Depth** 602

**Date** 7-29-99 **Coords** **Contractor** Action

| 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 | Met.: CO3 | Met.: Sulfide | Mineralogy: Pyrite | Mineralogy: Marcasite | Mineralogy: Calc/Dolo | Mineralogy: Clay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 200 | | | Td | Rhyo | Poly grey | | | | 40 | | | | | 199-602 DOZER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | | | | | | | | | | | | | | Auto brecciated volcanic | | | | | | | | | | | | | |
| 220 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240 | | | | | | | | | | | | | | | | | | | | | | | | 1 | Tr | | |
| 260 | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | | |
| 280 | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | Tr |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| 300 | | | | | | | | | 60 | | | | | 304.2-305.7 Fault zone | | 1 | | | | | | | | | | | 1 |
| 320 | | | | | | | | | | | | | | | | 0 | | | | | | | | Tr | | | 0 |
| 340 | | | | | | | | | | | | | | 343.7-345.7 Non auto brecciated Flow. | | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# Newmont Gold Core Form

**Hole#** RS-D359-99 **Az/Incl** N50W / -37 **Page** 3 of 3

**Logged by** D.G. Muckerron **Area** **Total Depth** 602

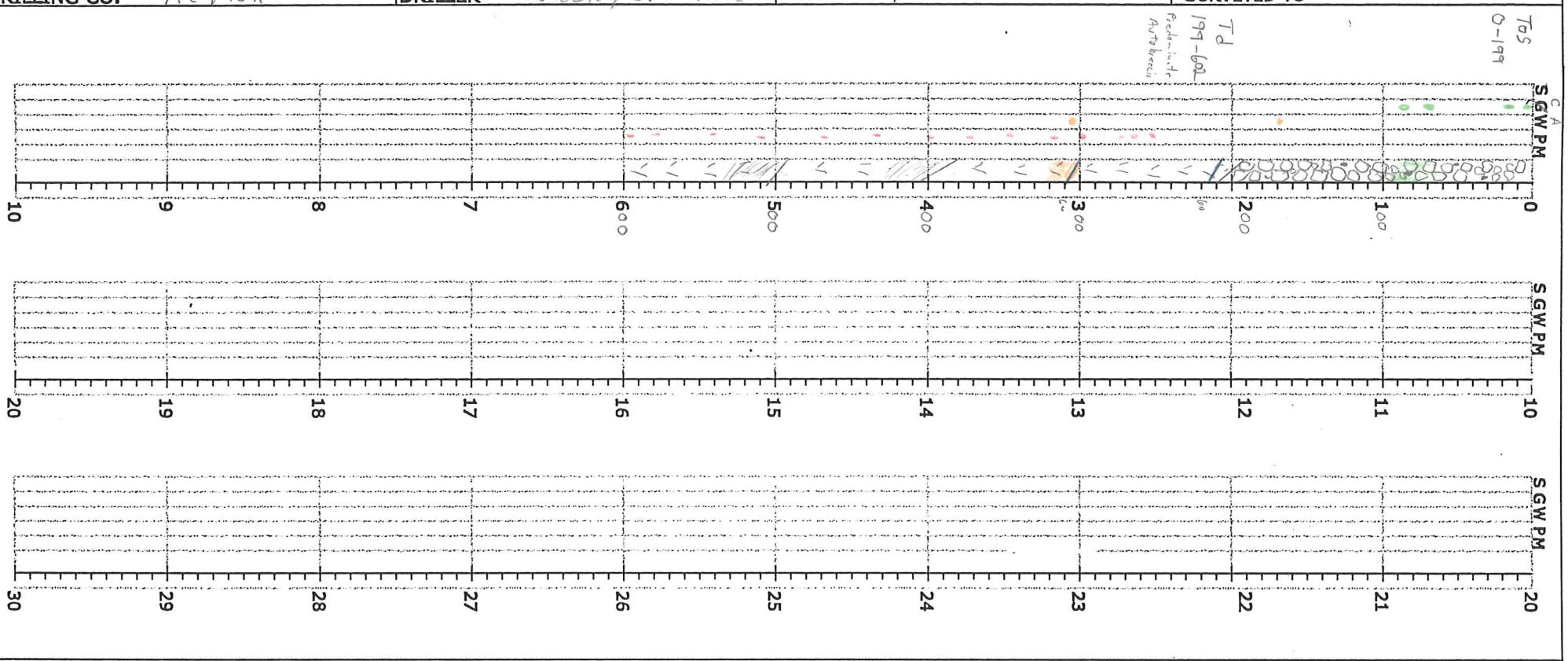
**Date** 7-30-99 **Coords** **Contractor** Action

| 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 | Met.: CO3 | Met.: Sulfide | Mineralogy: Pyrite | Mineralogy: Marcasite | Mineralogy: Calc/Dolo | Mineralogy: Clay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 400 | | | Td | Rhy | Pale Gray | | | | | | | | | 199-602 Dozer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| | | | | | | | | | | | | | | Rhyolite continues | | | | | | | | | | | | | |
| 420 | | | | | | | | | | | | | | Both autobreccia and flow banded volcanics, | | | | | | | | | | Tr | | | |
| 440 | | | | | | | | | | | | | | Minimal alteration and sulfide content | | | | | | | | | | | | | |
| 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 480 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 497.5-529 Mixed zone of Laminated flow and autobreccia | | | | | | | | | | | | |
| 520 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 540 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 560 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 580 | | | | | | | | | | | | | | TD 602 | | | | | | | | | | | | | |

# ROSEBUD MINING COMPANY, LLC.

| | | | |
|---|---|---|---|
| START HOLE: 7/22/99 | FINISH HOLE: 7/25/99 | HOLE #: RS-D359-99 | |
| HOLE TYPE: Core | LOGGED BY: D.G. MacKerrow | | |
| BEARING: N 50°W | ANGLE: -37 | T.D: 602 | |
| PAGE 1 OF 1 | SURVEYED TO: 600 | | |

| | |
|---|---|
| COLLAR COORDINATES | |
| NORTH | |
| EAST | |
| ELEV | |
| DRILLING CO. Action | DRILLER T. Goddie / J. Lavulle |




ALTERATION INTENSITY

1 WEAK | 2 MODERATE | 3 STRONG

VERITHIN COLOR

- 737 SILICIFICATION
- 751 GREEN CLAY
- 747½ WHITE CLAY
- 755 PYRITE
- 757 MARCASITE

GRAPHIC LOG

VERITHIN COLOR

- 741 BRECCIA
- FAULT 741
- CONTACT
- 737 QUARTZ VEIN
- 741½ CALCITE VEIN
- 747½ CLAY VEIN
- 755 PYRITE VEIN

- 757 Argillization/Auto.clay
- 738 Chloritic
- 741½ Calcite
- 745 Sulfide

# BARRINGER LABORATORIES INC.

13000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445

NSI

23-Aug-99

Page: 1
Copy: 1 of 4
Set : 1

Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 0.00 7.00 | 98 | 0.003 | 7.7 |
| RS-D359-99 7.00 12.00 | 15 | 0.000 | 0.3 |
| RS-D359-99 12.00 17.00 | 14 | 0.000 | 0.4 |
| RS-D359-99 17.00 22.00 | 29 | 0.001 | 1.3 |
| RS-D359-99 22.00 27.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 27.00 32.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 32.00 37.00 | 22 | 0.001 | 0.9 |
| RS-D359-99 37.00 42.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 42.00 47.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 47.00 52.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 52.00 57.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 57.00 62.00 | 13 | 0.000 | 0.1 |
| RS-D359-99 62.00 67.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 67.00 72.00 | 6 | 0.000 | <0.1 |
| RS-D359-99 72.00 77.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 77.00 82.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 82.00 87.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 87.00 92.00 | 11 | 0.000 | <0.1 |
| RS-D359-99 92.00 97.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 97.00 101.70 | 5 | 0.000 | <0.1 |
| RS-D359-99 101.70 107.00 | 4 | 0.000 | 0.3 |
| RS-D359-99 107.00 112.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 112.00 117.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 117.00 122.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 122.00 127.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 127.00 132.00 | <2 | 0.000 | 0.1 |
| RS-D359-99 132.00 137.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 137.00 142.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 142.00 147.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 147.00 152.00 | 12 | 0.000 | 0.1 |

# BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E. SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445

23-Aug-99

Page: 2
Copy: 1 of 4
Set : 1

Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

Core

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 152.00 157.00 | 9 | 0.000 | 0.1 |
| RS-D359-99 157.00 162.00 | <2 | 0.000 | <0.1 |
| RS-D359-99 162.00 167.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 167.00 172.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 172.00 177.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 177.00 182.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 182.00 187.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 187.00 192.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 192.00 197.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 197.00 199.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 199.00 202.00 | 3 | 0.000 | 0.2 |
| RS-D359-99 202.00 207.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 207.00 209.50 | 92 | 0.003 | 1.5 |
| RS-D359-99 209.50 212.00 | 11 | 0.000 | 0.3 |
| RS-D359-99 212.00 217.00 | 15 | 0.000 | 0.4 |
| RS-D359-99 217.00 222.00 | 17 | 0.000 | 0.4 |
| RS-D359-99 222.00 227.00 | 8 | 0.000 | 0.2 |
| RS-D359-99 227.00 232.00 | 26 | 0.001 | 0.4 |
| RS-D359-99 232.00 237.00 | 7 | 0.000 | 0.3 |
| RS-D359-99 237.00 242.00 | 16 | 0.000 | 0.7 |
| RS-D359-99 242.00 247.00 | 20 | 0.001 | 0.1 |
| RS-D359-99 247.00 252.00 | 138 | 0.004 | 0.5 |
| RS-D359-99 252.00 257.00 | 25 | 0.001 | 0.3 |
| RS-D359-99 257.00 262.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 262.00 267.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 267.00 272.00 | 210 | 0.006 | 0.3 |
| RS-D359-99 272.00 277.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 277.00 282.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 282.00 287.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 287.00 292.00 | 7 | 0.000 | 0.1 |

# BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E. SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445

23-Aug-99

Page: 3
Copy: 1 of 4
Set : 1

Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| **Core** | | | |
| RS-D359-99 292.00 297.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 297.00 302.00 | 151 | 0.004 | 0.6 |
| RS-D359-99 302.00 304.30 | 20 | 0.001 | 0.5 |
| RS-D359-99 304.30 305.30 | 74 | 0.002 | 1.4 |
| **Pulp** | | | |
| RS-D359-99 304.30 305.30B-STD | 188 | 0.005 | 0.3 |
| **Core** | | | |
| RS-D359-99 305.30 307.00 | 26 | 0.001 | 0.6 |
| RS-D359-99 307.00 312.00 | 52 | 0.002 | 1.2 |
| RS-D359-99 312.00 317.00 | 46 | 0.001 | 0.3 |
| RS-D359-99 317.00 322.00 | 309 | 0.009 | 0.6 |
| **Core** | | | |
| RS-D359-99 322.00 327.00 | 79 | 0.002 | 0.5 |
| RS-D359-99 327.00 332.00 | 10 | 0.000 | 0.2 |
| **Core** | | | |
| RS-D359-99 332.00 337.00 | 11 | 0.000 | 0.2 |
| RS-D359-99 337.00 342.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 342.00 347.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 347.00 352.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 352.00 357.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 357.00 362.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 362.00 367.00 | 18 | 0.001 | 0.2 |
| RS-D359-99 367.00 372.00 | 10 | 0.000 | 0.1 |

# BARRINGER LABORATORIES INC.

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CHARLOTTE BALLEW
NEWMONT GOLD CO.
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WINNEMUCCA NV 89445

23-Aug-99

Page: 4
Copy: 1 of 4
Set : 1

Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 372.00 377.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 377.00 382.00 | 26 | 0.001 | 0.2 |
| RS-D359-99 382.00 387.00 | 29 | 0.001 | 0.1 |
| RS-D359-99 387.00 392.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 392.00 397.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 397.00 402.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 402.00 407.00 | 50 | 0.001 | 0.3 |
| RS-D359-99 407.00 412.00 | 38 | 0.001 | 0.3 |
| RS-D359-99 412.00 417.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 417.00 422.00 | 10 | 0.000 | 0.3 |
| RS-D359-99 422.00 427.00 | 12 | 0.000 | 0.1 |
| RS-D359-99 427.00 432.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 432.00 437.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 437.00 442.00 | 29 | 0.001 | 0.1 |
| RS-D359-99 442.00 447.00 | 3 | 0.000 | 0.2 |
| RS-D359-99 447.00 452.00 | 121 | 0.004 | 0.4 |
| RS-D359-99 452.00 457.00 | 9 | 0.000 | 0.1 |
| RS-D359-99 457.00 462.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 462.00 467.00 | 3 | 0.000 | <0.1 |
| RS-D359-99 467.00 472.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 472.00 477.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 477.00 482.00 | 19 | 0.001 | 0.1 |
| RS-D359-99 482.00 487.00 | 11 | 0.000 | <0.1 |
| RS-D359-99 487.00 492.00 | 14 | 0.000 | <0.1 |
| RS-D359-99 492.00 497.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 497.00 502.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 502.00 507.00 | 7 | 0.000 | <0.1 |
| RS-D359-99 507.00 512.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 512.00 517.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 517.00 522.00 | 28 | 0.001 | 0.1 |

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CHARLOTTE BALLEW
NEWMONT GOLD CO.
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WINNEMUCCA NV 89445

23-Aug-99

Page: 5
Copy: 1 of 4
Set : 1

Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

Core

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 522.00 527.00 | 16 | 0.000 | <0.1 |
| **Core** | | | |
| RS-D359-99 527.00 532.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 532.00 537.00 | 12 | 0.000 | 0.2 |
| RS-D359-99 537.00 542.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 542.00 547.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 547.00 552.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 552.00 557.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 557.00 562.00 | 53 | 0.002 | 0.1 |
| RS-D359-99 562.00 567.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 567.00 572.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 572.00 577.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 577.00 582.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 582.00 587.00 | 5 | 0.000 | 0.4 |
| RS-D359-99 587.00 592.00 | 17 | 0.000 | 0.2 |
| RS-D359-99 592.00 597.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 597.00 602.00 | 13 | 0.000 | 0.2 |

# BARRINGER LABORATORIES, INC.

RENO, NEVADA, U.S.A., 5301 Longley Lane, Bldg. E, Reno, NV, 89511, TEL: 702-828-1158, FAX: 702-828-1263

*BARRINGER LABORATORIOS de MEXICO, S.A.de C.V.*
Carretera Panamericana, KM 10445
Durango, Durango, Mexico C.P. 34030
TEL/FAX (52)(18) 12-00-52

*BARRINGER LABORATORIES del PERU S.A.*
Avenida Domingo Orué 489
Surquillo, Lima 34, Peru
TEL (011-51-1) 222-2801
FAX (011-51-1) 442-7195

*BARRINGER de COLOMBIA*
Calle 80 Sur N. 47D-65, L-106
Sabaneta, Colombia
TEL (574) 301-0704

*BARRINGER LABORATORIOS de MEXICO, S.A. de C.V.*
Blvd. García Morales 829-A, Bodega #2
Colonia La Manga
Hermosillo, Sonora, Mexico C.P. 83210
TEL/FAX (011-52-6) 261-0415

*BARRINGER LABORATORIES NICARAGUA*
COMPLEJO OCAL
Km 7.5 Carretera Norte
Managua, Nicaragua
TEL (011-50-5) 883-0778

*McCLELLAND/BARRINGER LABORATORIOS HONDURAS*
Kilometro 5,
Boulevard Suyapa
Tegucigalpa, M.D.C., Honduras
TEL (011-50-4) 231-1841

Work Order # _____
Date Received _____
Purchase Order # _____
Project # _____
Date Shipped 8/4/99
Shipped Via _____
# of Cartons _____
# of Samples _____

## Geochemical Laboratory Instruction Sheet

| Copy of Results: | Results And Invoice To: |
|---|---|
| Fax to: Kurt Allen Rosebud Mine | Charlotte Bullen |
| 623-6967 | Newmont Gold |
| Randy Vance Newmont Gold | 861 W. 6th ST. Winnemucca NV |
| 625-5055 | 89445 |
| | AUTHORITY: |

| No. of Samples | Sample Type | List of Sample Numbers | Elements Requested |
|---|---|---|---|
| 124 | core | RS-10359-99 | Au Ag |
| | | sample list on attachment | Use Rosebud Min- |
| | | | development protocol |
| | | | |
| | | | |
| 1 | Pulp | standard: 305.3B | Au Ag Only |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

PEEL HERE
RS-10359-99
MS-2
(RMG1)
305.3B

**COARSE REJECT (Free storage for 30 days)**
- [x] Return/collect after analysis
- [ ] Return/collect after 30 days
- [ ] Discard after 30 days

IF NOT MARKED, REJECT DISCARDED AFTER 30 DAYS

**PULP (Free storage for 6 months)**
- [x] Return/collect after analysis
- [ ] Return/collect at 6 months
- [ ] Discard at 6 months

IF NOT MARKED, PULP IS DISCARDED AFTER 6 MONTHS

**COARSE REJECTS/PULPS WILL BE DISCARDED UNLESS OTHERWISE REQUESTED**

**Au - GOLD METHOD**
- [x] Fire Assay/A.A.
- [ ] Fire Assay/Gravimetric
- [ ] NaCN/A.A.

RESULTS REPORTED IN:
- [ ] ppb
- [ ] PPM
- [x] oz/T
- [ ] grams/T

**TRACE ELEMENT METHOD**
- [ ] Wet Chem./A.A.
- [ ] Wet Chem./ICP

RESULTS REPORTED IN:
- [ ] ppm
- [ ] Percent %
- [ ] oz/T
- [ ] grams/T

ADDITIONAL INSTRUCTIONS: _____

**RS-D359-99**

| Depth From | To | Interval | Au | Ag | Sample Number | Pulps |
|---|---|---|---|---|---|---|
| 0 | 7 | 7 | x | x | 1 | |
| 7 | 12 | 5 | x | x | 2 | |
| 12 | 17 | 5 | x | x | 3 | |
| 17 | 22 | 5 | x | x | 4 | |
| 22 | 27 | 5 | x | x | 5 | |
| 27 | 32 | 5 | x | x | 6 | |
| 32 | 37 | 5 | x | x | 7 | |
| 37 | 42 | 5 | x | x | 8 | |
| 42 | 47 | 5 | x | x | 9 | |
| 47 | 52 | 5 | x | x | 10 | |
| 52 | 57 | 5 | x | x | 11 | |
| 57 | 62 | 5 | x | x | 12 | |
| 62 | 67 | 5 | x | x | 13 | |
| 67 | 72 | 5 | x | x | 14 | |
| 72 | 77 | 5 | x | x | 15 | |
| 77 | 82 | 5 | x | x | 16 | |
| 82 | 87 | 5 | x | x | 17 | |
| 87 | 92 | 5 | x | x | 18 | |
| 92 | 97 | 5 | x | x | 19 | |
| 97 | 101.7 | 4.7 | x | x | 20 | |
| 101.7 | 107 | 5.3 | x | x | 21 | |
| 107 | 112 | 5 | x | x | 22 | |
| 112 | 117 | 5 | x | x | 23 | |
| 117 | 122 | 5 | x | x | 24 | |
| 122 | 127 | 5 | x | x | 25 | |
| 127 | 132 | 5 | x | x | 26 | |
| 132 | 137 | 5 | x | x | 27 | |
| 137 | 142 | 5 | x | x | 28 | |
| 142 | 147 | 5 | x | x | 29 | |
| 147 | 152 | 5 | x | x | 30 | |
| 152 | 157 | 5 | x | x | 31 | |
| 157 | 162 | 5 | x | x | 32 | |
| 162 | 167 | 5 | x | x | 33 | |
| 167 | 172 | 5 | x | x | 34 | |
| 172 | 177 | 5 | x | x | 35 | |
| 177 | 182 | 5 | x | x | 36 | |
| 182 | 187 | 5 | x | x | 37 | |
| 187 | 192 | 5 | x | x | 38 | |
| 192 | 197 | 5 | x | x | 39 | |
| 197 | 199 | 2 | x | x | 40 | |
| 199 | 202 | 3 | x | x | 41 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 202 | 207 | 5 | x | x | 42 | |
| 207 | 209.5 | 2.5 | x | x | 43 | |
| 209.5 | 212 | 2.5 | x | x | 44 | |
| 212 | 217 | 5 | x | x | 45 | |
| 217 | 222 | 5 | x | x | 46 | |
| 222 | 227 | 5 | x | x | 47 | |
| 227 | 232 | 5 | x | x | 48 | |
| 232 | 237 | 5 | x | x | 49 | |
| 237 | 242 | 5 | x | x | 50 | |
| 242 | 247 | 5 | x | x | 51 | |
| 247 | 252 | 5 | x | x | 52 | |
| 252 | 257 | 5 | x | x | 53 | |
| 257 | 262 | 5 | x | x | 54 | |
| 262 | 267 | 5 | x | x | 55 | |
| 267 | 272 | 5 | x | x | 56 | |
| 272 | 277 | 5 | x | x | 57 | |
| 277 | 282 | 5 | x | x | 58 | |
| 282 | 287 | 5 | x | x | 59 | |
| 287 | 292 | 5 | x | x | 60 | |
| 292 | 297 | 5 | x | x | 61 | |
| 297 | 302 | 5 | x | x | 62 | |
| 302 | 304.3 | 2.3 | x | x | 63 | |
| 304.3 | 305.3 | 2.7 | x | x | 64 | 305.3B |
| 305.3 | 307 | 1.7 | x | x | 65 | |
| 307 | 312 | 5 | x | x | 66 | |
| 312 | 317 | 5 | x | x | 67 | |
| 317 | 322 | 5 | x | x | 68 | |
| 322 | 327 | 5 | x | x | 69 | |
| 327 | 332 | 5 | x | x | 70 | |
| 332 | 337 | 5 | x | x | 71 | |
| 337 | 342 | 5 | x | x | 72 | |
| 342 | 347 | 5 | x | x | 73 | |
| 347 | 352 | 5 | x | x | 74 | |
| 352 | 357 | 5 | x | x | 75 | |
| 357 | 362 | 5 | x | x | 76 | |
| 362 | 367 | 5 | x | x | 77 | |
| 367 | 372 | 5 | x | x | 78 | |
| 372 | 377 | 5 | x | x | 79 | |
| 377 | 382 | 5 | x | x | 80 | |
| 382 | 387 | 5 | x | x | 81 | |
| 387 | 392 | 5 | x | x | 82 | |
| 392 | 397 | 5 | x | x | 83 | |
| 397 | 402 | 5 | x | x | 84 | |
| 402 | 407 | 5 | x | x | 85 | |

| | | | | | |
|---|---|---|---|---|---|
| 407 | 412 | 5 | x | x | 86 |
| 412 | 417 | 5 | x | x | 87 |
| 417 | 422 | 5 | x | x | 88 |
| 422 | 427 | 5 | x | x | 89 |
| 427 | 432 | 5 | x | x | 90 |
| 432 | 437 | 5 | x | x | 91 |
| 437 | 442 | 5 | x | x | 92 |
| 442 | 447 | 5 | x | x | 93 |
| 447 | 452 | 5 | x | x | 94 |
| 452 | 457 | 5 | x | x | 95 |
| 457 | 462 | 5 | x | x | 96 |
| 462 | 467 | 5 | x | x | 97 |
| 467 | 472 | 5 | x | x | 98 |
| 472 | 477 | 5 | x | x | 99 |
| 477 | 482 | 5 | x | x | 100 |
| 482 | 487 | 5 | x | x | 101 |
| 487 | 492 | 5 | x | x | 102 |
| 492 | 497 | 5 | x | x | 103 |
| 497 | 502 | 5 | x | x | 104 |
| 502 | 507 | 5 | x | x | 105 |
| 507 | 512 | 5 | x | x | 106 |
| 512 | 517 | 5 | x | x | 107 |
| 517 | 522 | 5 | x | x | 108 |
| 522 | 527 | 5 | x | x | 109 |
| 527 | 532 | 5 | x | x | 110 |
| 532 | 537 | 5 | x | x | 111 |
| 537 | 542 | 5 | x | x | 112 |
| 542 | 547 | 5 | x | x | 113 |
| 547 | 552 | 5 | x | x | 114 |
| 552 | 557 | 5 | x | x | 115 |
| 557 | 562 | 5 | x | x | 116 |
| 562 | 567 | 5 | x | x | 117 |
| 567 | 572 | 5 | x | x | 118 |
| 572 | 577 | 5 | x | x | 119 |
| 577 | 582 | 5 | x | x | 120 |
| 582 | 587 | 5 | x | x | 121 |
| 587 | 592 | 5 | x | x | 122 |
| 592 | 597 | 5 | x | x | 123 |
| 597 | 602 | 5 | x | x | 124 |

Down Hole Survey Data
RS-D359-99

| Footage | Measured Bearing | Corrected Azimuth | Measured Inclination | Calculated Dip |
|---|---|---|---|---|
| | | -15.66 | | |
| 42 | 67 | 308.7 | 53 | -37.0 |
| 222 | 69 | 306.7 | 50.5 | -39.5 |
| 600 | 69.5 | 306.2 | 51.5 | -38.5 |

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23-Aug-99

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 0.00 7.00 | 98 | 0.003 | 7.7 |
| RS-D359-99 7.00 12.00 | 15 | 0.000 | 0.3 |
| RS-D359-99 12.00 17.00 | 14 | 0.000 | 0.4 |
| RS-D359-99 17.00 22.00 | 29 | 0.001 | 1.3 |
| RS-D359-99 22.00 27.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 27.00 32.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 32.00 37.00 | 22 | 0.001 | 0.9 |
| RS-D359-99 37.00 42.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 42.00 47.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 47.00 52.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 52.00 57.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 57.00 62.00 | 13 | 0.000 | 0.1 |
| RS-D359-99 62.00 67.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 67.00 72.00 | 6 | 0.000 | <0.1 |
| RS-D359-99 72.00 77.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 77.00 82.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 82.00 87.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 87.00 92.00 | 11 | 0.000 | <0.1 |
| RS-D359-99 92.00 97.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 97.00 101.70 | 5 | 0.000 | <0.1 |
| RS-D359-99 101.70 107.00 | 4 | 0.000 | 0.3 |
| RS-D359-99 107.00 112.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 112.00 117.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 117.00 122.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 122.00 127.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 127.00 132.00 | <2 | 0.000 | 0.1 |
| RS-D359-99 132.00 137.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 137.00 142.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 142.00 147.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 147.00 152.00 | 12 | 0.000 | 0.1 |

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23-Aug-99

CHARLOTTE BALLEW
NEWMONT GOLD CO.
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WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

Received: 4-Aug-99 21:39

PO #:

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 152.00 157.00 | 9 | 0.000 | 0.1 |
| RS-D359-99 157.00 162.00 | <2 | 0.000 | <0.1 |
| RS-D359-99 162.00 167.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 167.00 172.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 172.00 177.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 177.00 182.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 182.00 187.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 187.00 192.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 192.00 197.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 197.00 199.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 199.00 202.00 | 3 | 0.000 | 0.2 |
| RS-D359-99 202.00 207.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 207.00 209.50 | 92 | 0.003 | 1.5 |
| RS-D359-99 209.50 212.00 | 11 | 0.000 | 0.3 |
| RS-D359-99 212.00 217.00 | 15 | 0.000 | 0.4 |
| RS-D359-99 217.00 222.00 | 17 | 0.000 | 0.4 |
| RS-D359-99 222.00 227.00 | 8 | 0.000 | 0.2 |
| RS-D359-99 227.00 232.00 | 26 | 0.001 | 0.4 |
| RS-D359-99 232.00 237.00 | 7 | 0.000 | 0.3 |
| RS-D359-99 237.00 242.00 | 16 | 0.000 | 0.7 |
| RS-D359-99 242.00 247.00 | 20 | 0.001 | 0.1 |
| RS-D359-99 247.00 252.00 | 138 | 0.004 | 0.5 |
| RS-D359-99 252.00 257.00 | 25 | 0.001 | 0.3 |
| RS-D359-99 257.00 262.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 262.00 267.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 267.00 272.00 | 210 | 0.006 | 0.3 |
| RS-D359-99 272.00 277.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 277.00 282.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 282.00 287.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 287.00 292.00 | 7 | 0.000 | 0.1 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| **Core** | | | |
| RS-D359-99 292.00 297.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 297.00 302.00 | 151 | 0.004 | 0.6 |
| RS-D359-99 302.00 304.30 | 20 | 0.001 | 0.5 |
| RS-D359-99 304.30 305.30 | 74 | 0.002 | 1.4 |
| **Pulp** | | | |
| RS-D359-99 304.30 305.30B-STD | 188 | 0.005 | 0.3 |
| **Core** | | | |
| RS-D359-99 305.30 307.00 | 26 | 0.001 | 0.6 |
| RS-D359-99 307.00 312.00 | 52 | 0.002 | 1.2 |
| RS-D359-99 312.00 317.00 | 46 | 0.001 | 0.3 |
| RS-D359-99 317.00 322.00 | 309 | 0.009 | 0.6 |
| **Core** | | | |
| RS-D359-99 322.00 327.00 | 79 | 0.002 | 0.5 |
| RS-D359-99 327.00 332.00 | 10 | 0.000 | 0.2 |
| **Core** | | | |
| RS-D359-99 332.00 337.00 | 11 | 0.000 | 0.2 |
| RS-D359-99 337.00 342.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 342.00 347.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 347.00 352.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 352.00 357.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 357.00 362.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 362.00 367.00 | 18 | 0.001 | 0.2 |
| RS-D359-99 367.00 372.00 | 10 | 0.000 | 0.1 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
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5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 372.00 377.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 377.00 382.00 | 26 | 0.001 | 0.2 |
| RS-D359-99 382.00 387.00 | 29 | 0.001 | 0.1 |
| RS-D359-99 387.00 392.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 392.00 397.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 397.00 402.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 402.00 407.00 | 50 | 0.001 | 0.3 |
| RS-D359-99 407.00 412.00 | 38 | 0.001 | 0.3 |
| RS-D359-99 412.00 417.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 417.00 422.00 | 10 | 0.000 | 0.3 |
| RS-D359-99 422.00 427.00 | 12 | 0.000 | 0.1 |
| RS-D359-99 427.00 432.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 432.00 437.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 437.00 442.00 | 29 | 0.001 | 0.1 |
| RS-D359-99 442.00 447.00 | 3 | 0.000 | 0.2 |
| RS-D359-99 447.00 452.00 | 121 | 0.004 | 0.4 |
| RS-D359-99 452.00 457.00 | 9 | 0.000 | 0.1 |
| RS-D359-99 457.00 462.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 462.00 467.00 | 3 | 0.000 | <0.1 |
| RS-D359-99 467.00 472.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 472.00 477.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 477.00 482.00 | 19 | 0.001 | 0.1 |
| RS-D359-99 482.00 487.00 | 11 | 0.000 | <0.1 |
| RS-D359-99 487.00 492.00 | 14 | 0.000 | <0.1 |
| RS-D359-99 492.00 497.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 497.00 502.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 502.00 507.00 | 7 | 0.000 | <0.1 |
| RS-D359-99 507.00 512.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 512.00 517.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 517.00 522.00 | 28 | 0.001 | 0.1 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 522.00 527.00 | 16 | 0.000 | <0.1 |

**Core**

| | | | |
|---|---|---|---|
| RS-D359-99 527.00 532.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 532.00 537.00 | 12 | 0.000 | 0.2 |
| RS-D359-99 537.00 542.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 542.00 547.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 547.00 552.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 552.00 557.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 557.00 562.00 | 53 | 0.002 | 0.1 |
| RS-D359-99 562.00 567.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 567.00 572.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 572.00 577.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 577.00 582.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 582.00 587.00 | 5 | 0.000 | 0.4 |
| RS-D359-99 587.00 592.00 | 17 | 0.000 | 0.2 |
| RS-D359-99 592.00 597.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 597.00 602.00 | 13 | 0.000 | 0.2 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
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RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

Received: 4-Aug-99 21:39
PO #:

Job: 993100R

Status: Final

Abbreviations:

Parameters:

| | |
|---|---|
| Au | : Gold |
| Ag | : Silver |

Methods:

| | |
|---|---|
| FA/AA/AAS | : Fire Assay/Atomic Absorption Finish |
| AA | : Atomic Absorption |

Units:

| | |
|---|---|
| ppb | : Parts per billion |
| oz/ton | : ounces per ton |
| ppm | : Parts per million |

Quality codes:

| | |
|---|---|
| < | : Less than |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
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23-Aug-99

CHARLOTTE BALLEW
NEWMONT GOLD CO.
861 W. 6TH STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

Received: 4-Aug-99 21:39
PO #:

Job: 993100R

Status: Final

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 geologic 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.

Job approved by:

Signed: .....
Chuck Whipple
Richard Grondin

cc: RANDY VANCE, NEWMONT MINING CORP.
KURT ALLEN, HECLA MINING COMPANY - ROSEBUD MINE

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
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PHONE: (775) 828-1158

# INVOICE

**CHARLOTTE BALLEW**
**NEWMONT GOLD CO.**
**861 W. 6TH STREET**
**WINNEMUCCA NV 89445**

Date : **26-Aug-99**

Job : **993100R**

Invoice: **40605R**

Authority: Kurt Allen PO #:
Project: Terms:

| | | | |
|---|---|---|---|
| | Preparation Charges: | | |
| 125 | Dcore 11-15 Lbs | 4.25 | $ 531.25 |
| | Digestion Charges: | | |
| 125 | AQR | 2.00 | $ 250.00 |
| | Analyses: | | |
| 125 | Au FA/AA/AAS | 6.50 | $ 812.50 |
| 125 | Ag AA | 1.50 | $ 187.50 |
| | Sub Total: | | $1781.25 |
| | Discount: | -30.00 | $-534.38 |
| | TOTAL DUE: | | $1246.88 |

COPY

Remit to: Barringer Laboratories, Inc.
Department 0297
Denver, CO 80291-0297

**--- Remittance Copy ---**

MEETING THE ANALYTICAL CHALLENGES OF A CHANGING WORLD

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

RANDY VANCE
NEWMONT MINING CORP.
861 WEST 6th STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 0.00 7.00 | 98 | 0.003 | 7.7 |
| RS-D359-99 7.00 12.00 | 15 | 0.000 | 0.3 |
| RS-D359-99 12.00 17.00 | 14 | 0.000 | 0.4 |
| RS-D359-99 17.00 22.00 | 29 | 0.001 | 1.3 |
| RS-D359-99 22.00 27.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 27.00 32.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 32.00 37.00 | 22 | 0.001 | 0.9 |
| RS-D359-99 37.00 42.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 42.00 47.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 47.00 52.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 52.00 57.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 57.00 62.00 | 13 | 0.000 | 0.1 |
| RS-D359-99 62.00 67.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 67.00 72.00 | 6 | 0.000 | <0.1 |
| RS-D359-99 72.00 77.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 77.00 82.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 82.00 87.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 87.00 92.00 | 11 | 0.000 | <0.1 |
| RS-D359-99 92.00 97.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 97.00 101.70 | 5 | 0.000 | <0.1 |
| RS-D359-99 101.70 107.00 | 4 | 0.000 | 0.3 |
| RS-D359-99 107.00 112.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 112.00 117.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 117.00 122.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 122.00 127.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 127.00 132.00 | <2 | 0.000 | 0.1 |
| RS-D359-99 132.00 137.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 137.00 142.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 142.00 147.00 | 4 | 0.000 | <0.1 |
| RS-D359-99 147.00 152.00 | 12 | 0.000 | 0.1 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

RANDY VANCE
NEWMONT MINING CORP.
861 WEST 6th STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 152.00 157.00 | 9 | 0.000 | 0.1 |
| RS-D359-99 157.00 162.00 | <2 | 0.000 | <0.1 |
| RS-D359-99 162.00 167.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 167.00 172.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 172.00 177.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 177.00 182.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 182.00 187.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 187.00 192.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 192.00 197.00 | 4 | 0.000 | 0.2 |
| RS-D359-99 197.00 199.00 | 3 | 0.000 | 0.1 |
| RS-D359-99 199.00 202.00 | 3 | 0.000 | 0.2 |
| RS-D359-99 202.00 207.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 207.00 209.50 | 92 | 0.003 | 1.5 |
| RS-D359-99 209.50 212.00 | 11 | 0.000 | 0.3 |
| RS-D359-99 212.00 217.00 | 15 | 0.000 | 0.4 |
| RS-D359-99 217.00 222.00 | 17 | 0.000 | 0.4 |
| RS-D359-99 222.00 227.00 | 8 | 0.000 | 0.2 |
| RS-D359-99 227.00 232.00 | 26 | 0.001 | 0.4 |
| RS-D359-99 232.00 237.00 | 7 | 0.000 | 0.3 |
| RS-D359-99 237.00 242.00 | 16 | 0.000 | 0.7 |
| RS-D359-99 242.00 247.00 | 20 | 0.001 | 0.1 |
| RS-D359-99 247.00 252.00 | 138 | 0.004 | 0.5 |
| RS-D359-99 252.00 257.00 | 25 | 0.001 | 0.3 |
| RS-D359-99 257.00 262.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 262.00 267.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 267.00 272.00 | 210 | 0.006 | 0.3 |
| RS-D359-99 272.00 277.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 277.00 282.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 282.00 287.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 287.00 292.00 | 7 | 0.000 | 0.1 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

RANDY VANCE
NEWMONT MINING CORP.
861 WEST 6th STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 292.00 297.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 297.00 302.00 | 151 | 0.004 | 0.6 |
| RS-D359-99 302.00 304.30 | 20 | 0.001 | 0.5 |
| RS-D359-99 304.30 305.30 | 74 | 0.002 | 1.4 |
| **Pulp** | | | |
| RS-D359-99 304.30 305.30B-STD | 188 | 0.005 | 0.3 |
| **Core** | | | |
| RS-D359-99 305.30 307.00 | 26 | 0.001 | 0.6 |
| RS-D359-99 307.00 312.00 | 52 | 0.002 | 1.2 |
| RS-D359-99 312.00 317.00 | 46 | 0.001 | 0.3 |
| RS-D359-99 317.00 322.00 | 309 | 0.009 | 0.6 |
| **Core** | | | |
| RS-D359-99 322.00 327.00 | 79 | 0.002 | 0.5 |
| RS-D359-99 327.00 332.00 | 10 | 0.000 | 0.2 |
| **Core** | | | |
| RS-D359-99 332.00 337.00 | 11 | 0.000 | 0.2 |
| RS-D359-99 337.00 342.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 342.00 347.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 347.00 352.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 352.00 357.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 357.00 362.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 362.00 367.00 | 18 | 0.001 | 0.2 |
| RS-D359-99 367.00 372.00 | 10 | 0.000 | 0.1 |

BARRINGER LABORATORIES INC.

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23-Aug-99

RANDY VANCE
NEWMONT MINING CORP.
861 WEST 6th STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 372.00 377.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 377.00 382.00 | 26 | 0.001 | 0.2 |
| RS-D359-99 382.00 387.00 | 29 | 0.001 | 0.1 |
| RS-D359-99 387.00 392.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 392.00 397.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 397.00 402.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 402.00 407.00 | 50 | 0.001 | 0.3 |
| RS-D359-99 407.00 412.00 | 38 | 0.001 | 0.3 |
| RS-D359-99 412.00 417.00 | 7 | 0.000 | 0.2 |
| RS-D359-99 417.00 422.00 | 10 | 0.000 | 0.3 |
| RS-D359-99 422.00 427.00 | 12 | 0.000 | 0.1 |
| RS-D359-99 427.00 432.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 432.00 437.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 437.00 442.00 | 29 | 0.001 | 0.1 |
| RS-D359-99 442.00 447.00 | 3 | 0.000 | 0.2 |
| RS-D359-99 447.00 452.00 | 121 | 0.004 | 0.4 |
| RS-D359-99 452.00 457.00 | 9 | 0.000 | 0.1 |
| RS-D359-99 457.00 462.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 462.00 467.00 | 3 | 0.000 | <0.1 |
| RS-D359-99 467.00 472.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 472.00 477.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 477.00 482.00 | 19 | 0.001 | 0.1 |
| RS-D359-99 482.00 487.00 | 11 | 0.000 | <0.1 |
| RS-D359-99 487.00 492.00 | 14 | 0.000 | <0.1 |
| RS-D359-99 492.00 497.00 | 8 | 0.000 | 0.1 |
| RS-D359-99 497.00 502.00 | 6 | 0.000 | 0.1 |
| RS-D359-99 502.00 507.00 | 7 | 0.000 | <0.1 |
| RS-D359-99 507.00 512.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 512.00 517.00 | 4 | 0.000 | 0.1 |
| RS-D359-99 517.00 522.00 | 28 | 0.001 | 0.1 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
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5301 LONGLEY LANE
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RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

RANDY VANCE
NEWMONT MINING CORP.
861 WEST 6th STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

PO #:

Received: 4-Aug-99 21:39

Job: 993100R

Status: Final

**Core**

| Sample Id | Au FA/AA/AAS ppb | Au FA/AA/AAS oz/ton | Ag AA ppm |
|---|---|---|---|
| RS-D359-99 522.00 527.00 | 16 | 0.000 | <0.1 |

**Core**

| | | | |
|---|---|---|---|
| RS-D359-99 527.00 532.00 | 10 | 0.000 | 0.2 |
| RS-D359-99 532.00 537.00 | 12 | 0.000 | 0.2 |
| RS-D359-99 537.00 542.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 542.00 547.00 | 5 | 0.000 | 0.1 |
| RS-D359-99 547.00 552.00 | 6 | 0.000 | 0.2 |
| RS-D359-99 552.00 557.00 | 9 | 0.000 | 0.2 |
| RS-D359-99 557.00 562.00 | 53 | 0.002 | 0.1 |
| RS-D359-99 562.00 567.00 | 8 | 0.000 | <0.1 |
| RS-D359-99 567.00 572.00 | 14 | 0.000 | 0.1 |
| RS-D359-99 572.00 577.00 | 7 | 0.000 | 0.1 |
| RS-D359-99 577.00 582.00 | 10 | 0.000 | 0.1 |
| RS-D359-99 582.00 587.00 | 5 | 0.000 | 0.4 |
| RS-D359-99 587.00 592.00 | 17 | 0.000 | 0.2 |
| RS-D359-99 592.00 597.00 | 9 | 0.000 | <0.1 |
| RS-D359-99 597.00 602.00 | 13 | 0.000 | 0.2 |

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

5301 LONGLEY LANE
BUILDING E, SUITE 178
RENO, NEVADA 89511
PHONE: (775) 828-1158

23-Aug-99

RANDY VANCE
NEWMONT MINING CORP.
861 WEST 6th STREET
WINNEMUCCA NV 89445



Attn: Kurt Allen
Project:

Received: 4-Aug-99 21:39

PO #:

Job: 993100R

Status: Final

Abbreviations:

Parameters:

| | |
|---|---|
| Au | : Gold |
| Ag | : Silver |

Methods:

| | |
|---|---|
| FA/AA/AAS | : Fire Assay/Atomic Absorption Finish |
| AA | : Atomic Absorption |

Units:

| | |
|---|---|
| ppb | : Parts per billion |
| oz/ton | : ounces per ton |
| ppm | : Parts per million |

Quality codes:

| | |
|---|---|
| < | : Less than |

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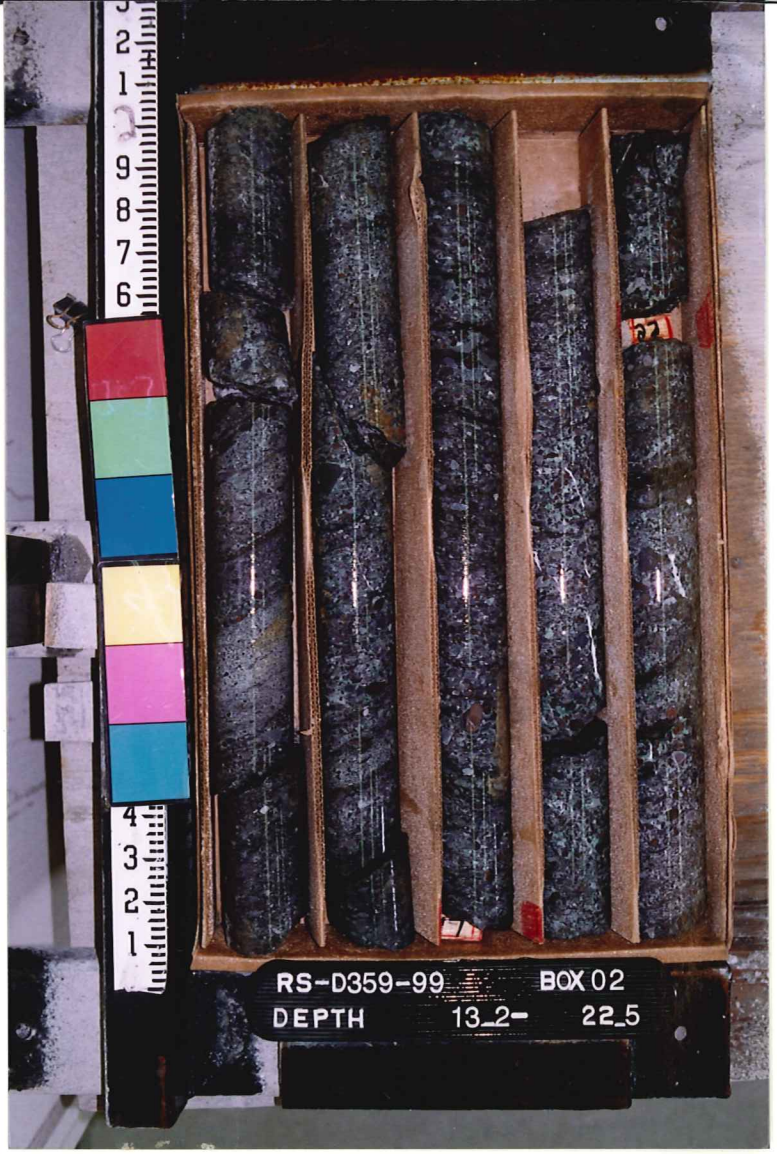
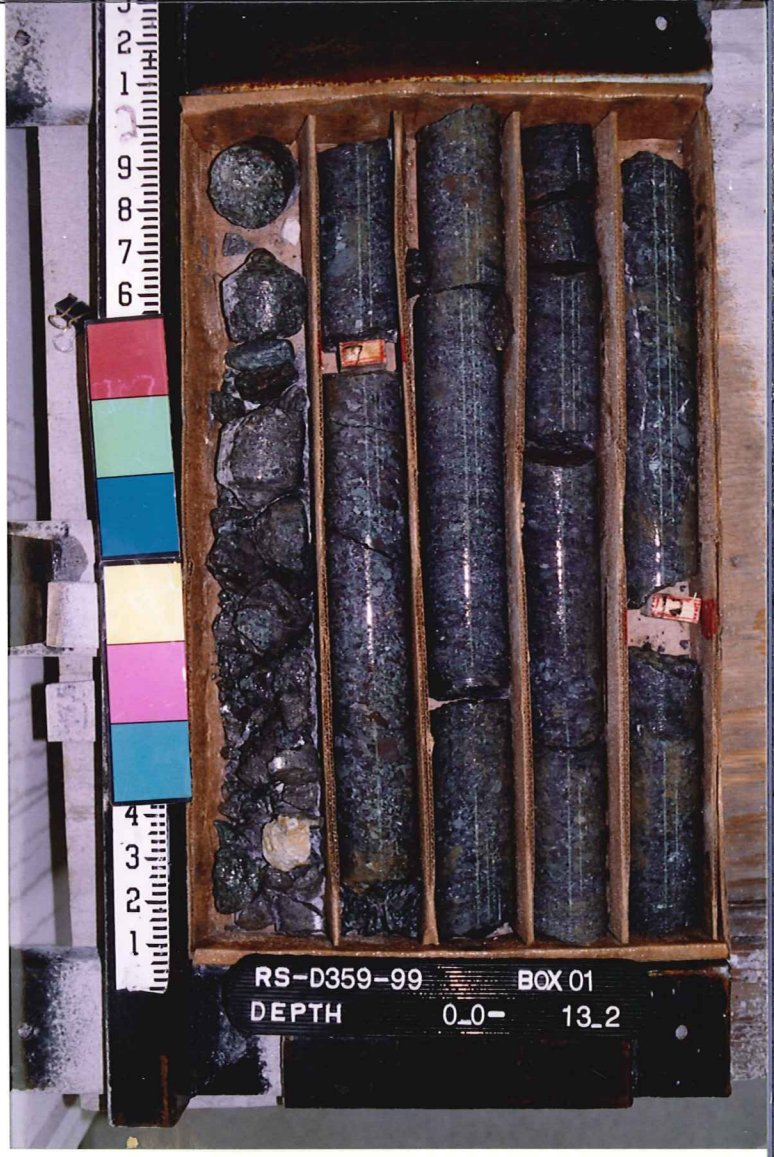
The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective 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.

Job approved by:

Signed: .....
Chuck Whipple
Richard Grondin


RS-D359-99
BOX 02
DEPTH
13_2-
22_5


RS-D359-99
BOX 01
DEPTH
0_0-
13_2

RS-D359-99
BOX 03
DEPTH
22_5-
31_8

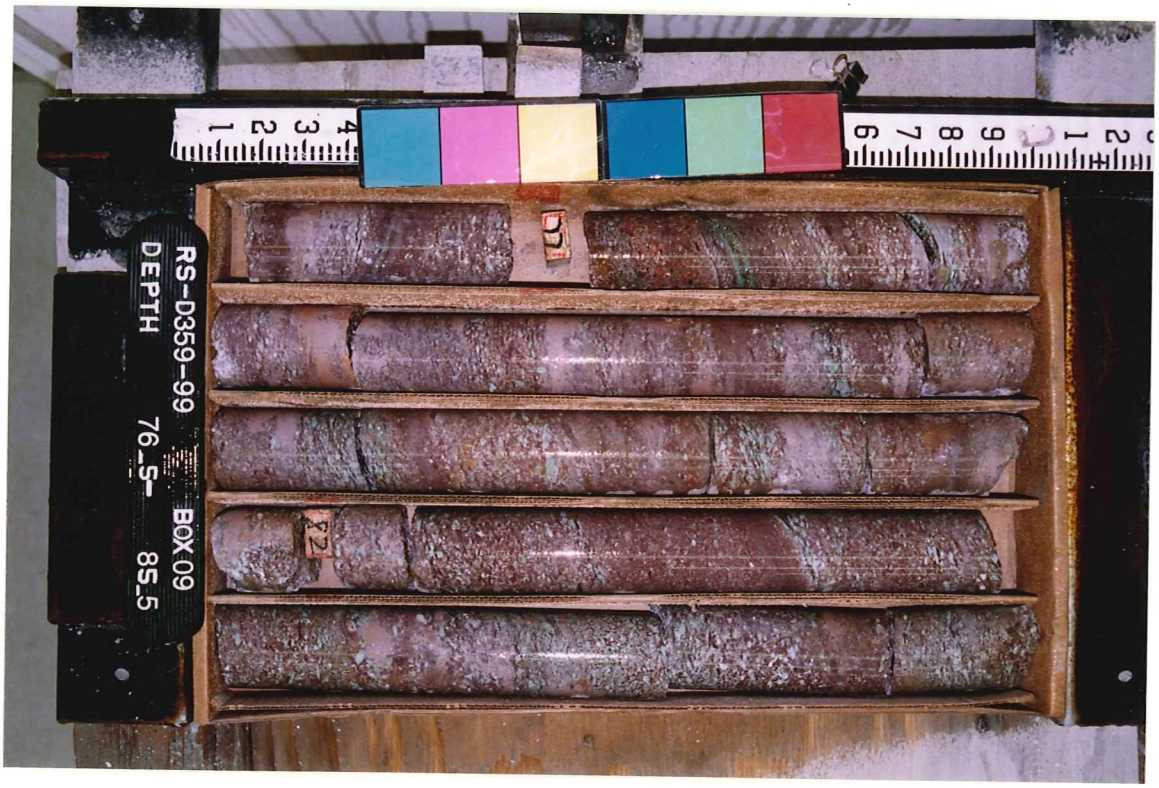
RS-D359-99 BOX 05
DEPTH 40_5- 49_5

RS-D359-99 BOX 04
DEPTH 31_8- 40_5

RS-D359-99 BOX 06
DEPTH 49_5- 59_0

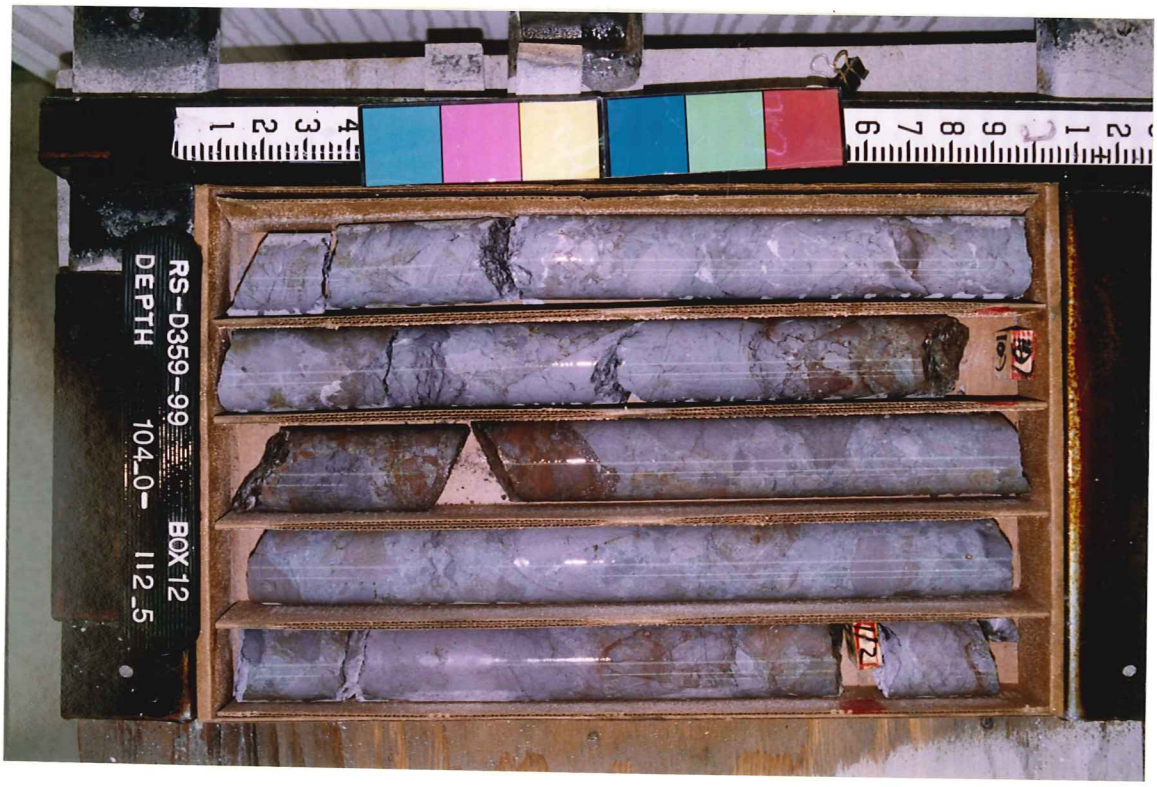
RS-D359-99 BOX 08
DEPTH 67_5- 76_5

RS-D359-99 BOX 07
DEPTH 59_0- 67_5


RS-D359-99 BOX 09
DEPTH 76_5- 85_5

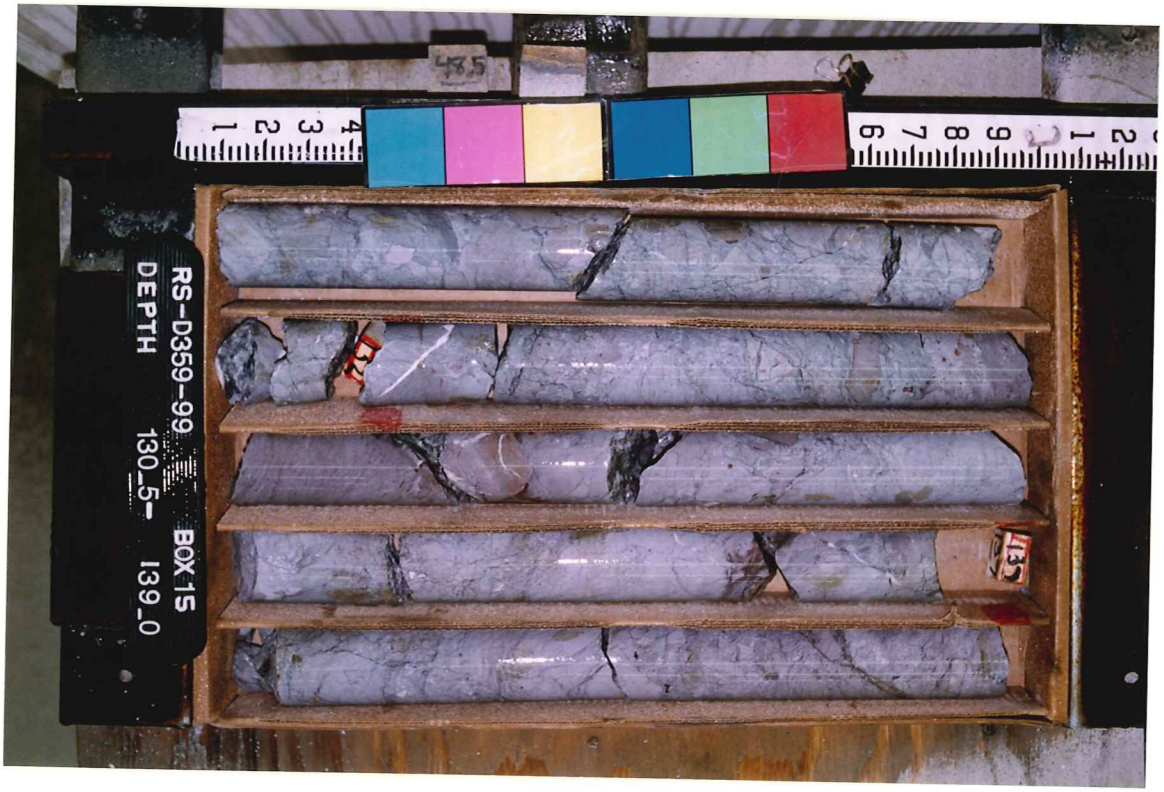
RS-D359-99 BOX 11
DEPTH 95_0- 104_0

RS-D359-99 BOX 10
DEPTH 85_5- 95_0


RS-D359-99 BOX 12
DEPTH 104_0- 112_5

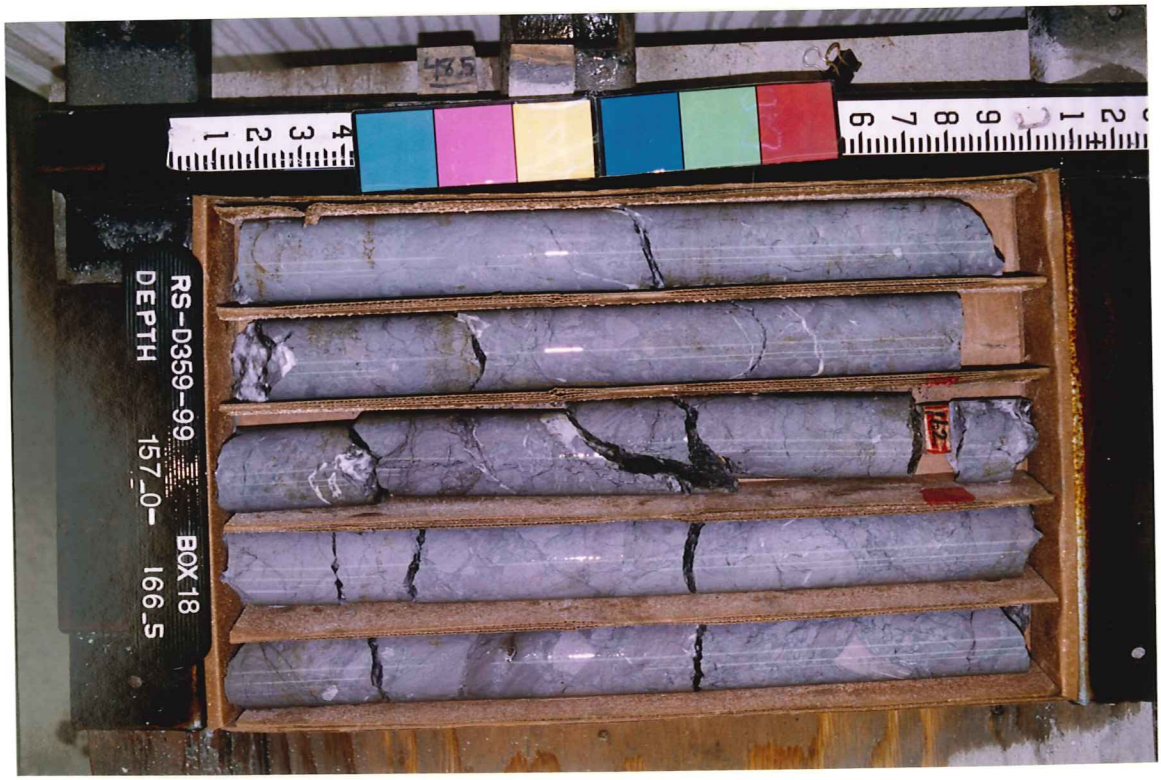
RS-D359-99
BOX 14
DEPTH 121_5- 130_5

RS-D359-99
BOX 13
DEPTH 112_0- 121_5


RS-D359-99
BOX 15
DEPTH 130_5- 139_0

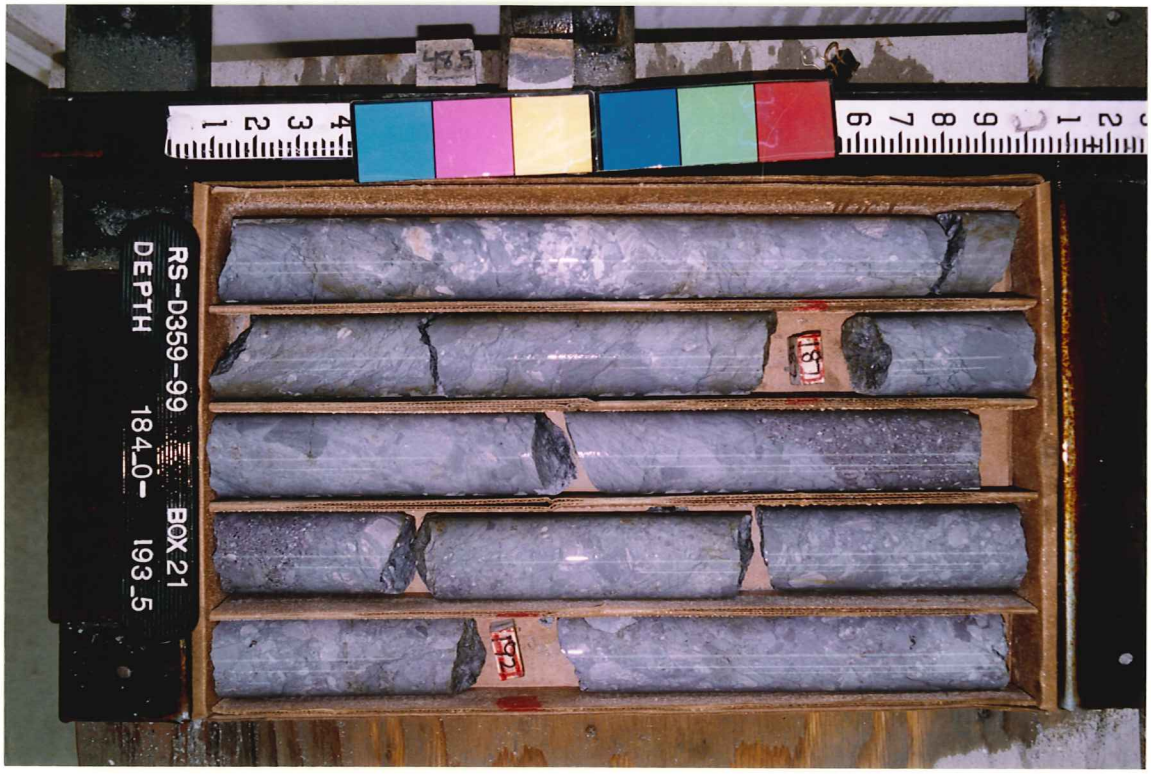
RS-D359-99 BOX 17
DEPTH 148_0- 157_0

RS-D359-99 BOX 16
DEPTH 139_0- 148_0


RS-D359-99 BOX 18
DEPTH 157_0- 166_5

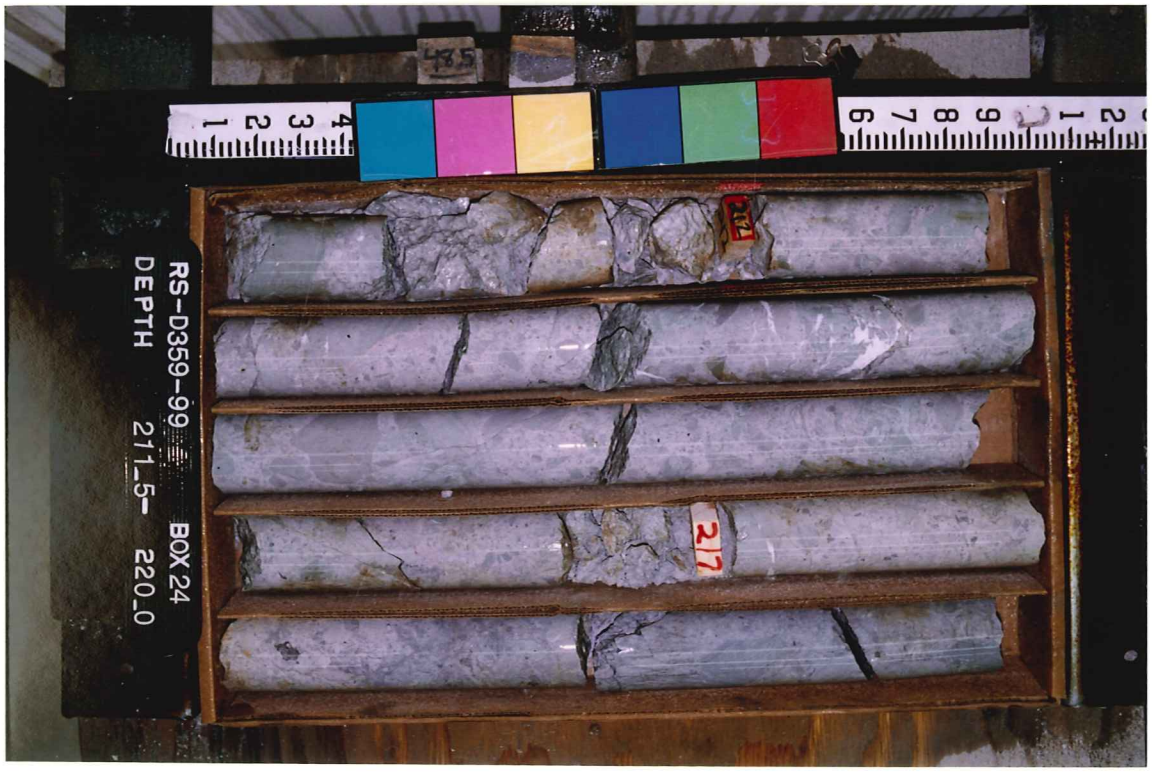
RS-D359-99 BOX 20
DEPTH 175_5- 184_0

RS-D359-99 BOX 19
DEPTH 166_5- 175_5

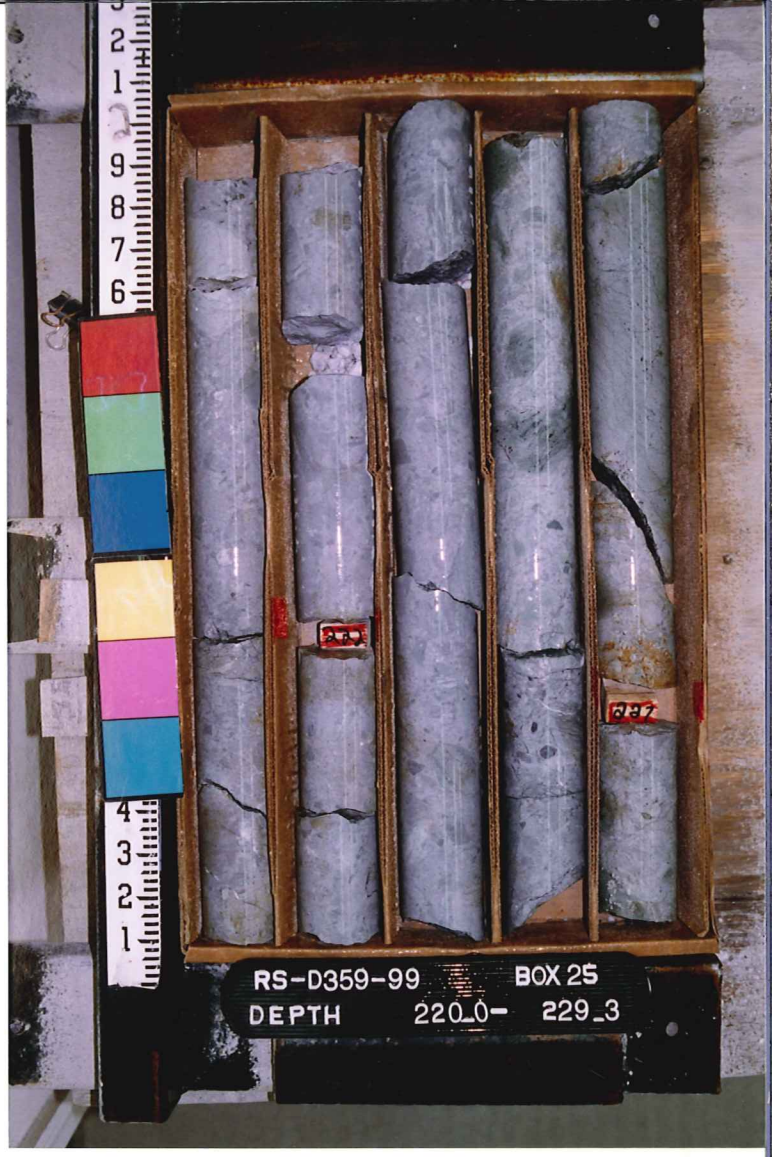

RS-D359-99 BOX 21
DEPTH 184_0- 193_5

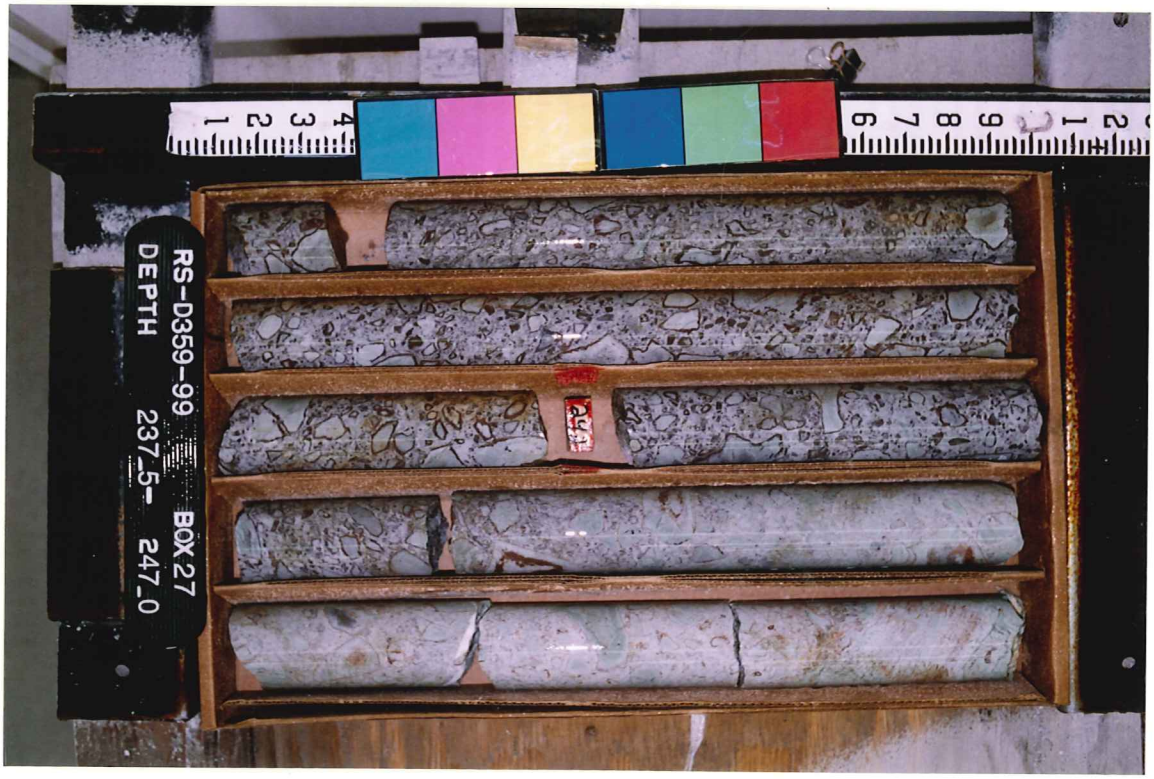
RS-D359-99 BOX 23
DEPTH 201_5- 211_5

RS-D359-99 BOX 22
DEPTH 193_5- 201_5


RS-D359-99 BOX 24
DEPTH 211_5- 220_0

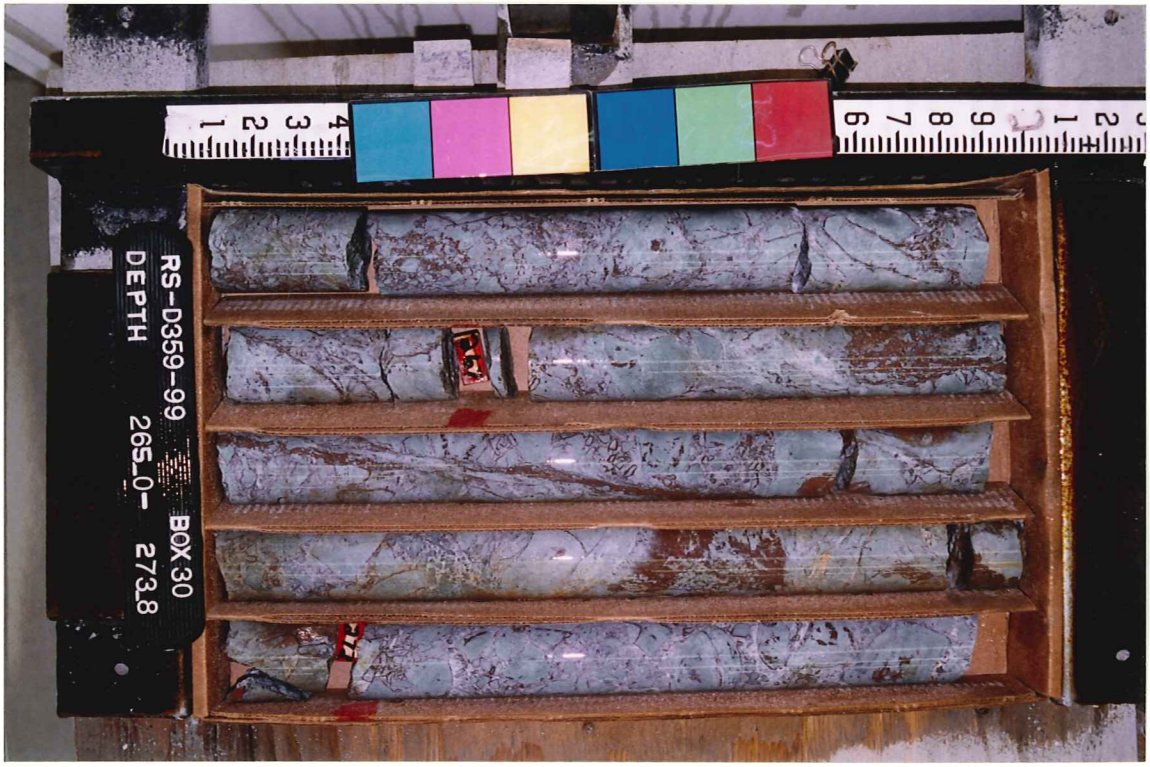
RS-D359-99 BOX 26
DEPTH 229_3- 237_5


RS-D359-99 BOX 25
DEPTH 220_0- 229_3


RS-D359-99 BOX 27
DEPTH 237_5- 247_0

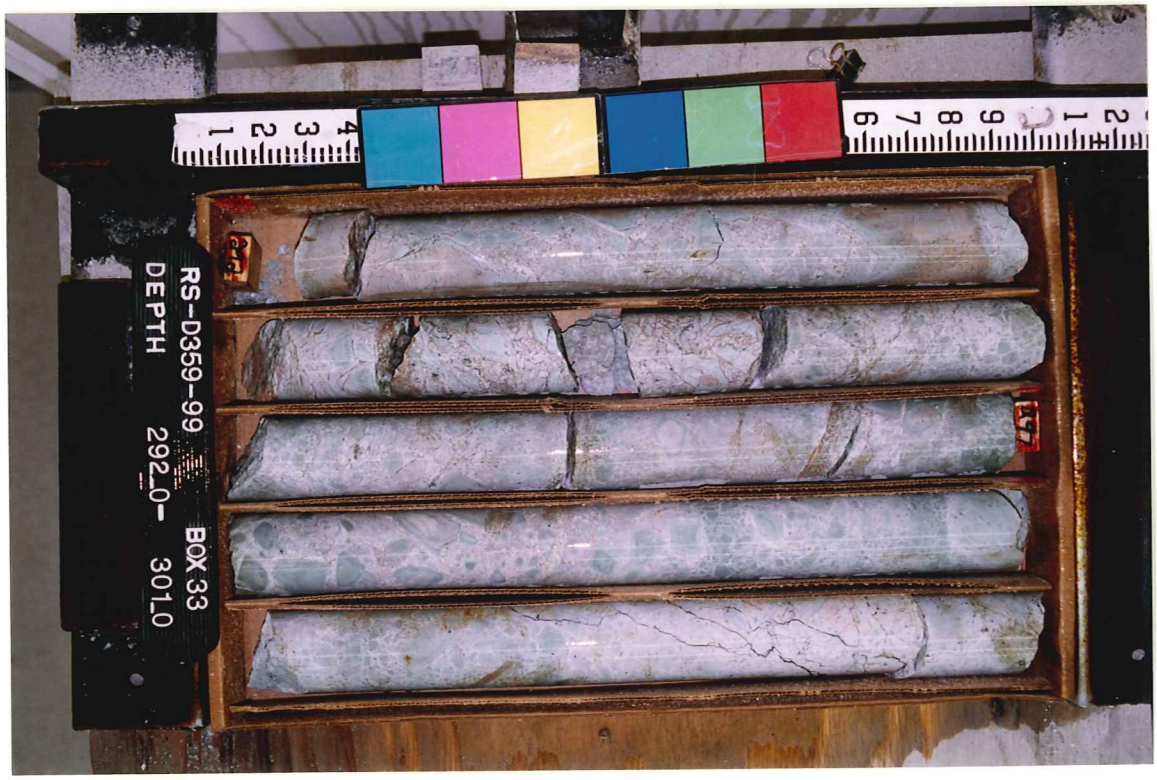
RS-D359-99 BOX 29
DEPTH 256_8- 265_0

RS-D359-99 BOX 28
DEPTH 247_0- 256_8


RS-D359-99 BOX 30
DEPTH 265_0- 273_8

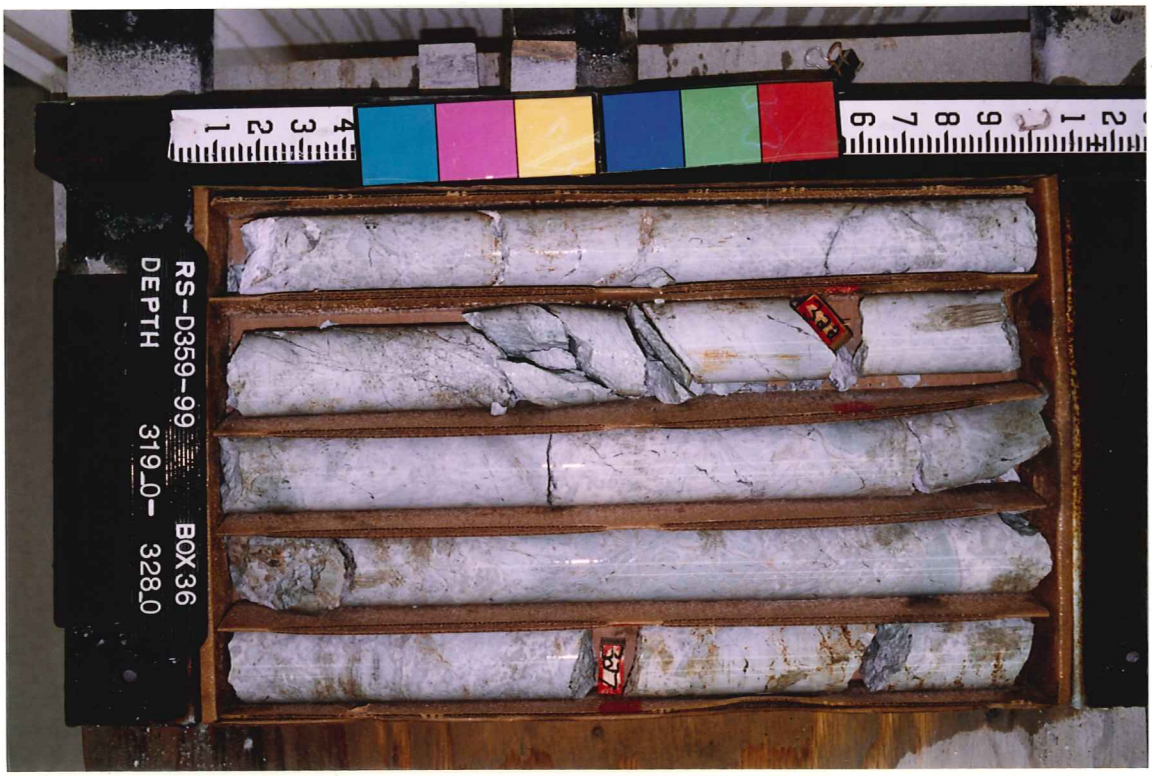
RS-D359-99 BOX 32
DEPTH 283_1 - 292_0

RS-D359-99 BOX 31
DEPTH 273_8- 283_1


RS-D359-99 BOX 33
DEPTH 292_0- 301_0

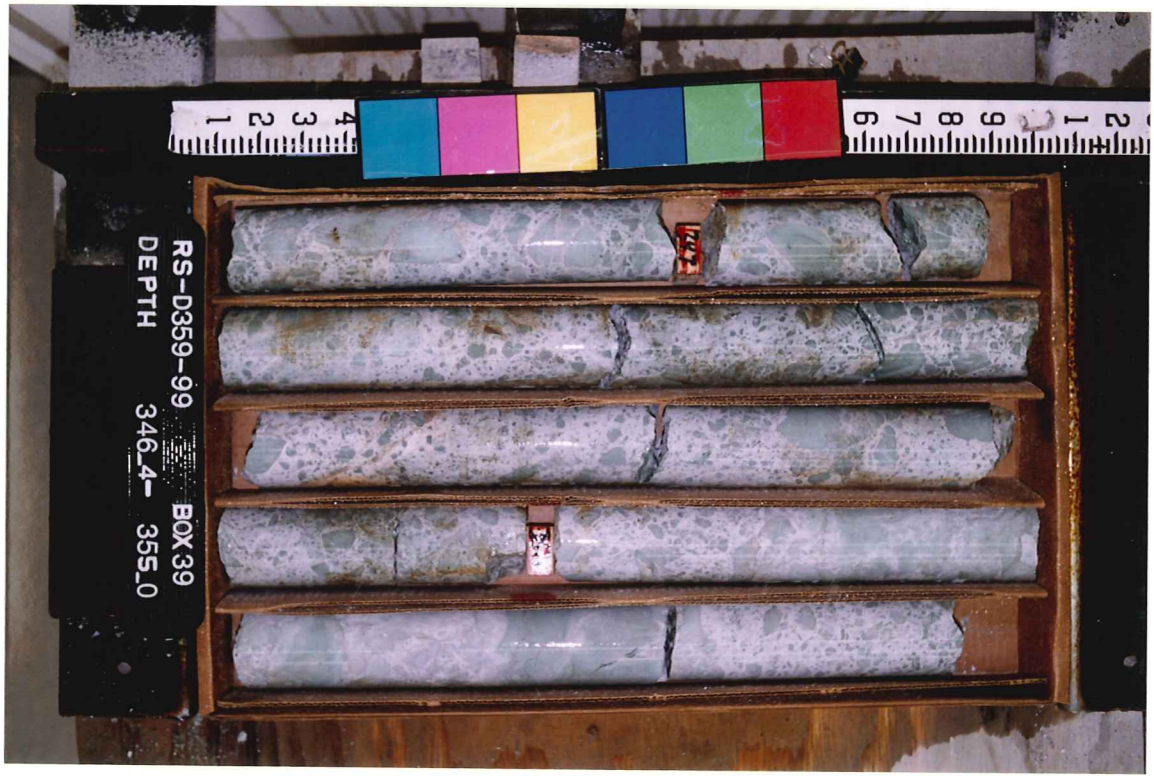
RS-D359-99 BOX 35
DEPTH 310_0- 319_0

304.2
305.3
RS-D359-99 BOX 34
DEPTH 301_0- 310_0

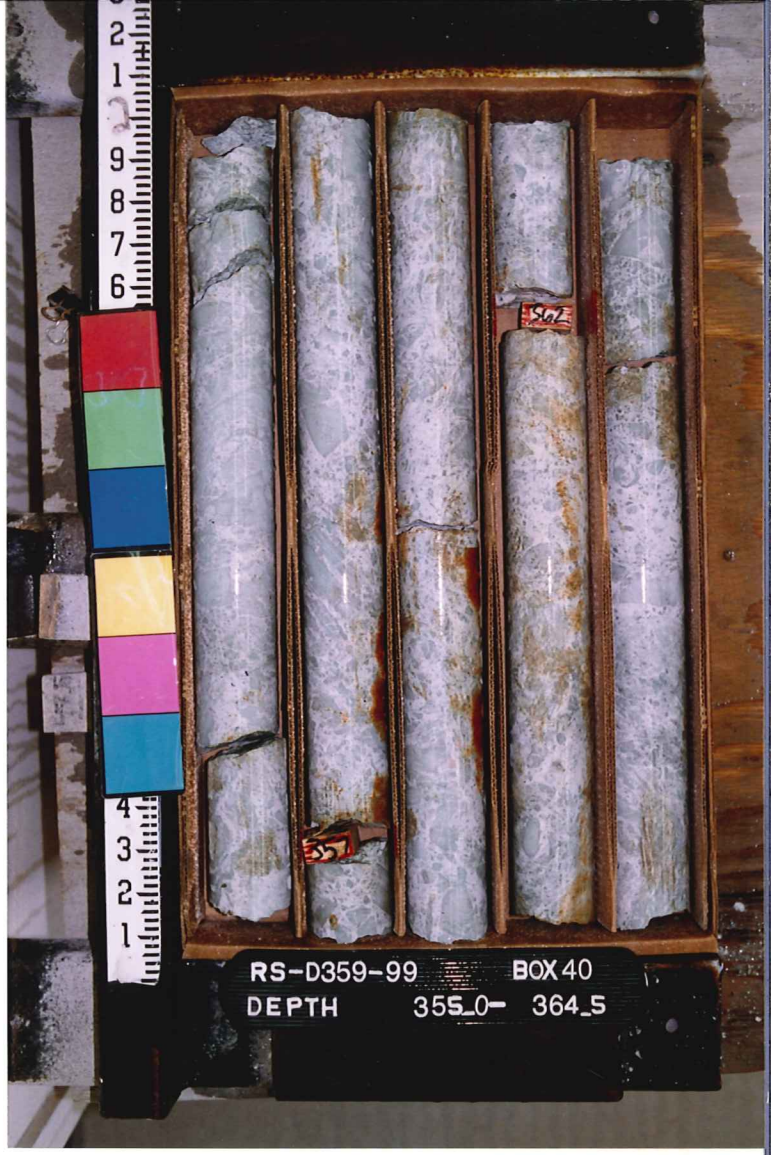

RS-D359-99 BOX 36
DEPTH 319_0- 328_0

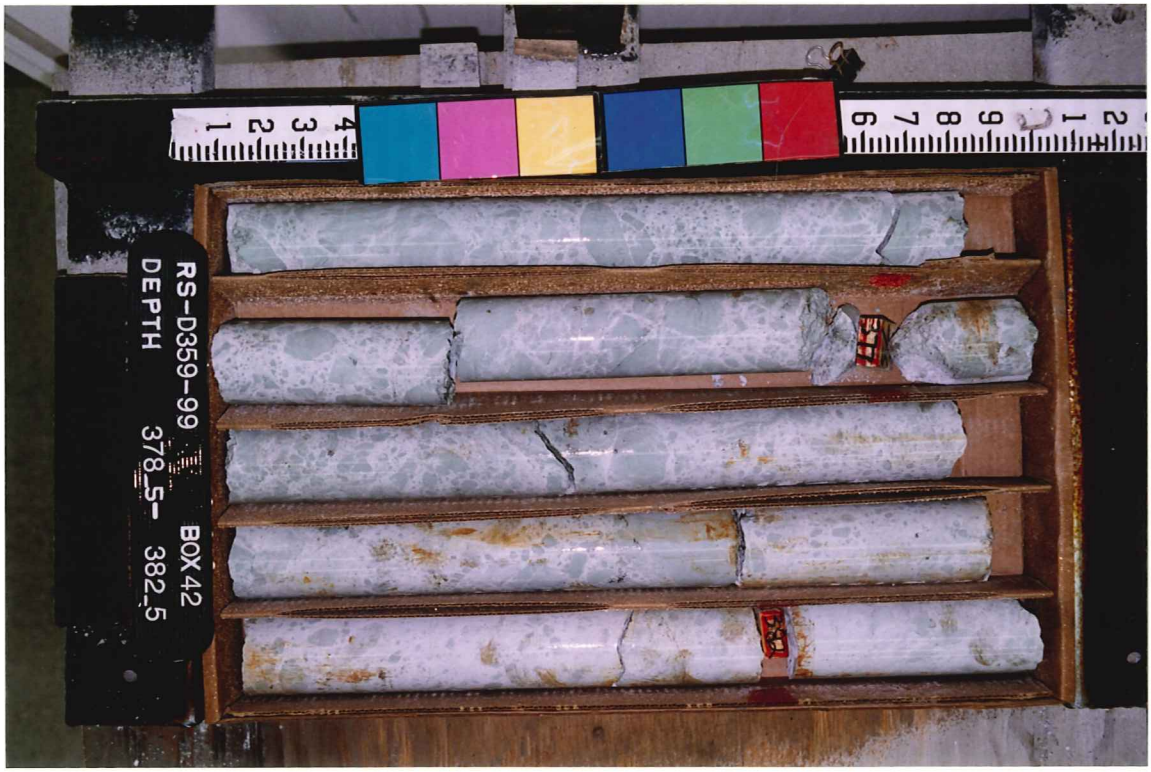
RS-D359-99 BOX 38
DEPTH 337_0- 346_4

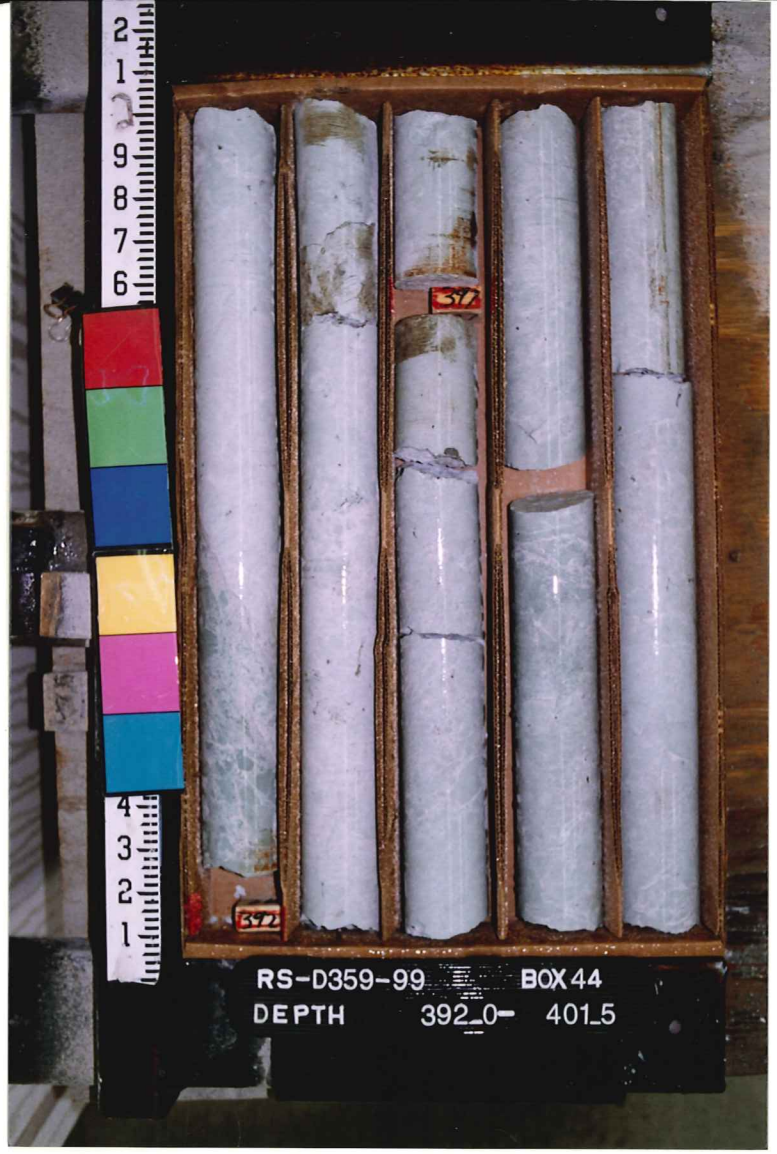
RS-D359-99 BOX 37
DEPTH 328_0- 337_0


RS-D359-99 BOX 39
DEPTH 346_4- 355_0

RS-D359-99
BOX 41
DEPTH
364_5- 378_5


RS-D359-99
BOX 40
DEPTH
355_0- 364_5


RS-D359-99
BOX 42
DEPTH
378_5- 382_5

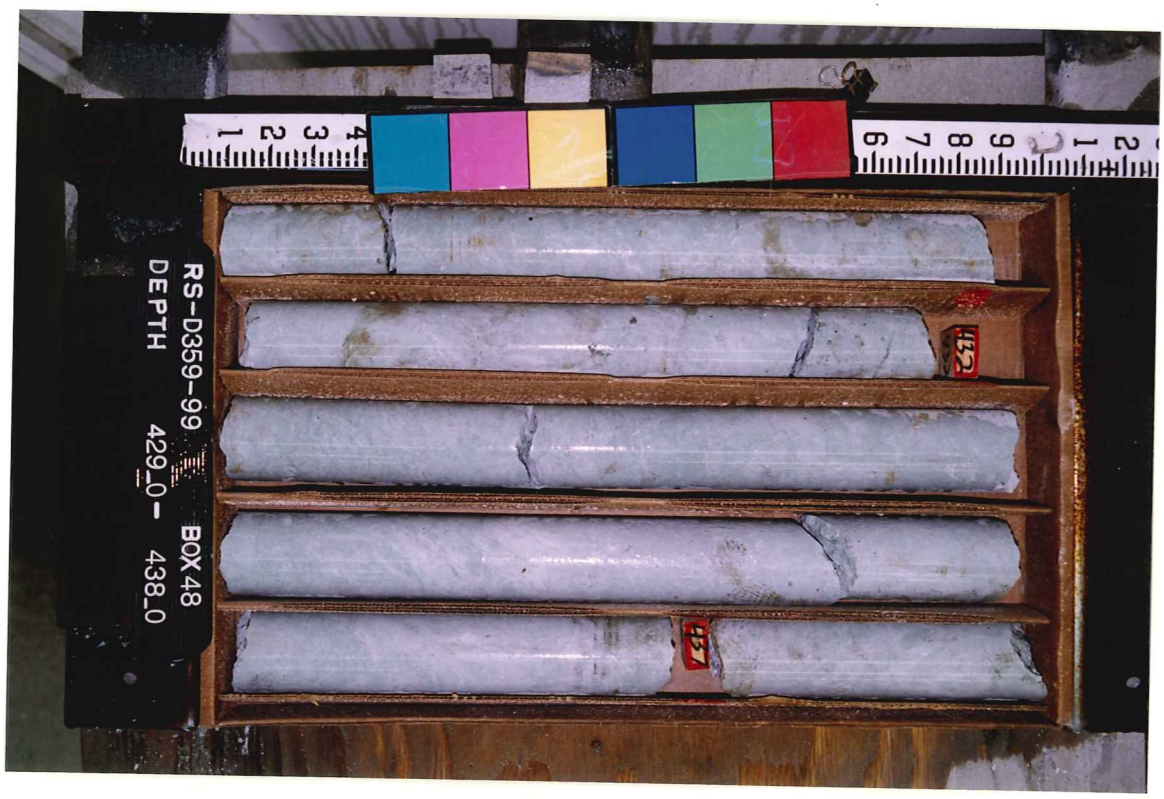

RS-D359-99 BOX 44
DEPTH 392_0- 401_5

RS-D359-99 BOX 43
DEPTH 382_5- 392_0

RS-D359-99 BOX 45
DEPTH 401_5- 410_5

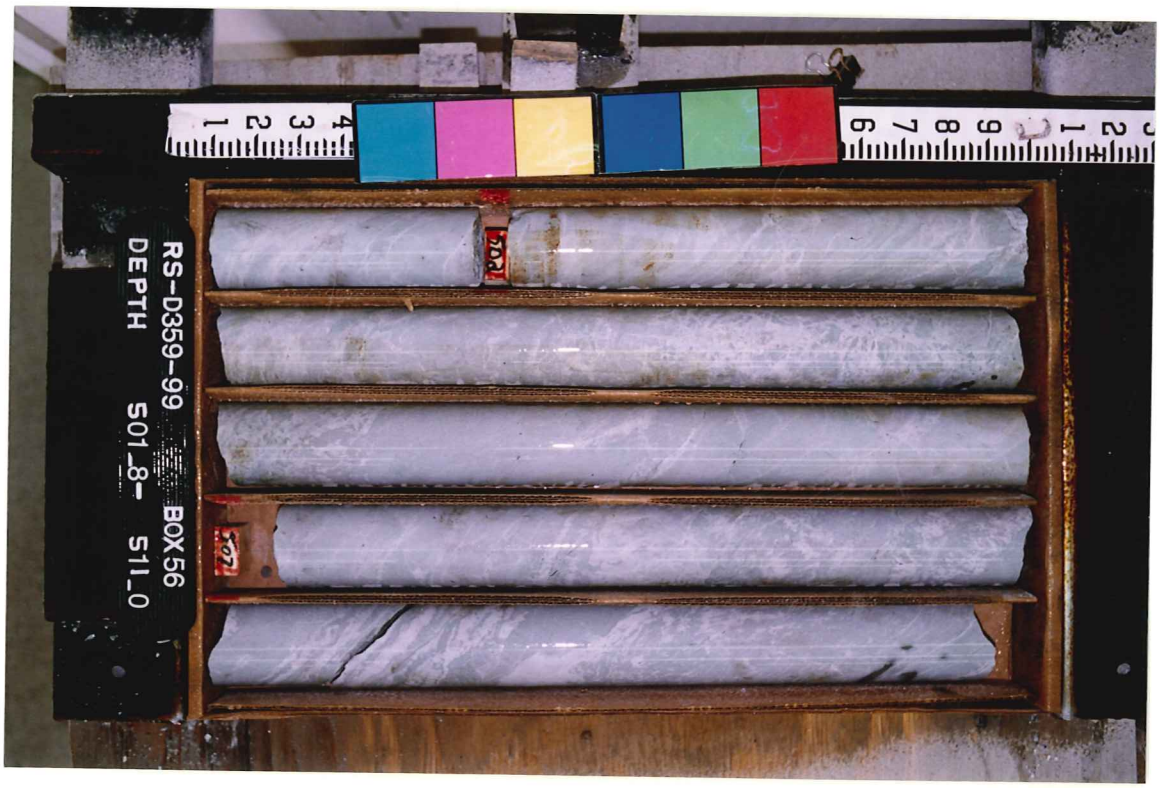
RS-D359-99 BOX 47
DEPTH 419_5- 429_0

RS-D359-99 BOX 46
DEPTH 410_5- 419_5


RS-D359-99 BOX 48
DEPTH 429_0- 438_0

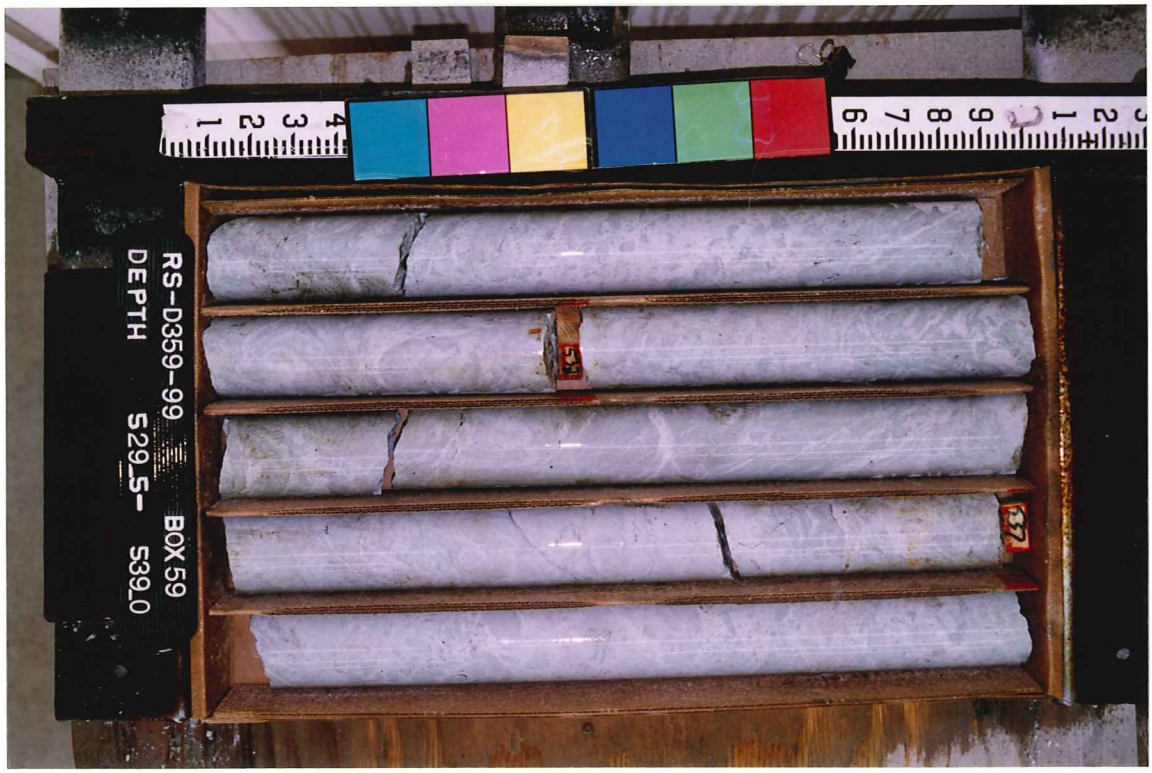
RS-D359-99 BOX55
DEPTH 492_4- 501_8

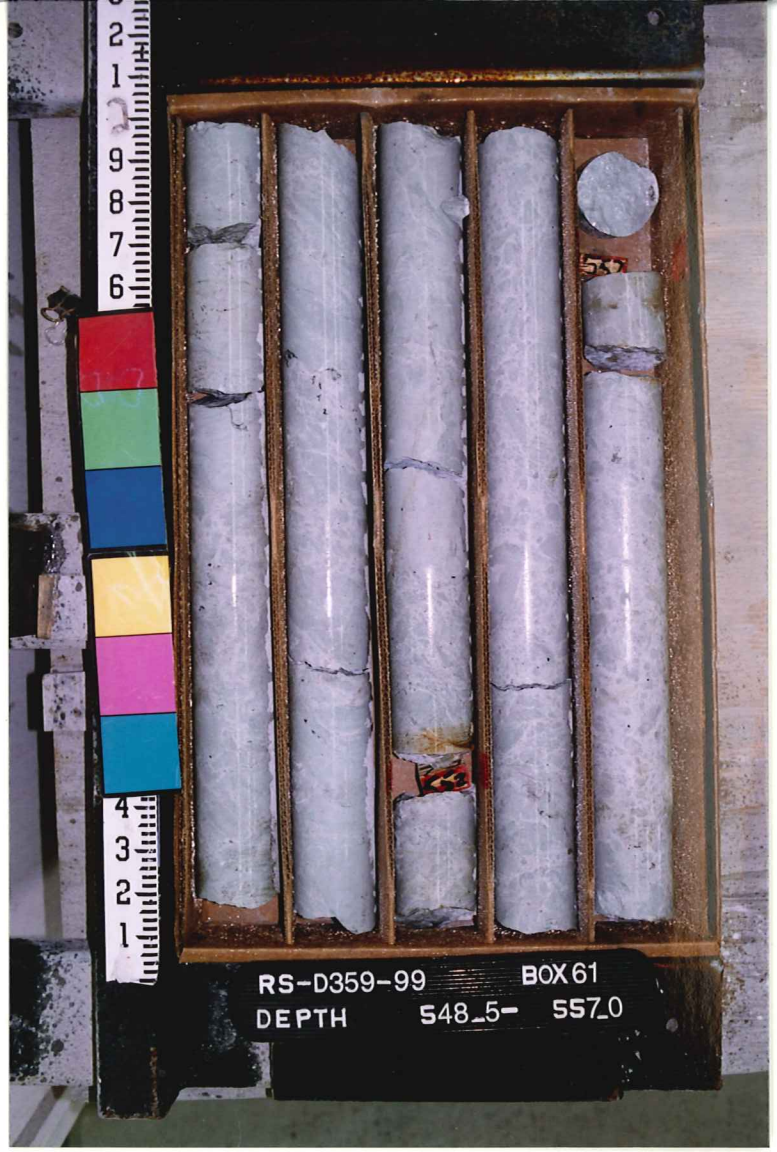
RS-D359-99 BOX50
DEPTH 447_0- 456_5


RS-D359-99 BOX56
DEPTH 501_8- 511_0

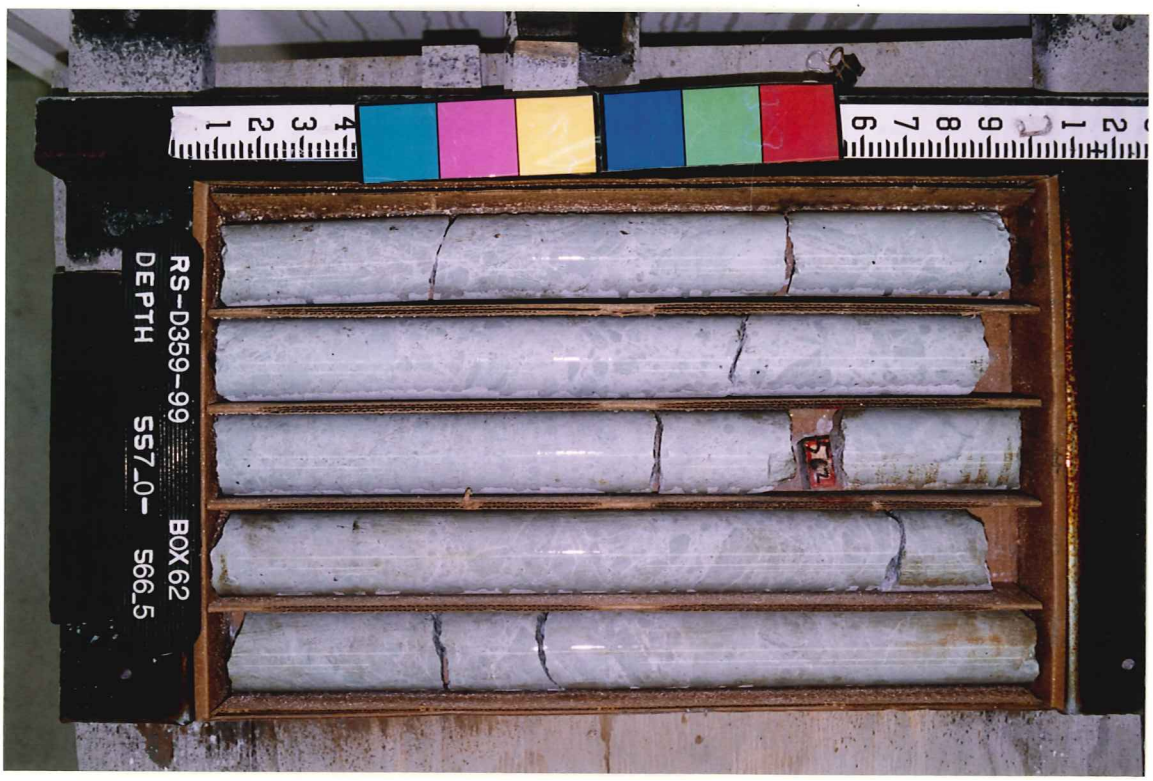
RS-D359-99 BOX 58
DEPTH 520_2- 529_5

RS-D359-99 BOX 57
DEPTH 511_0- 520_2

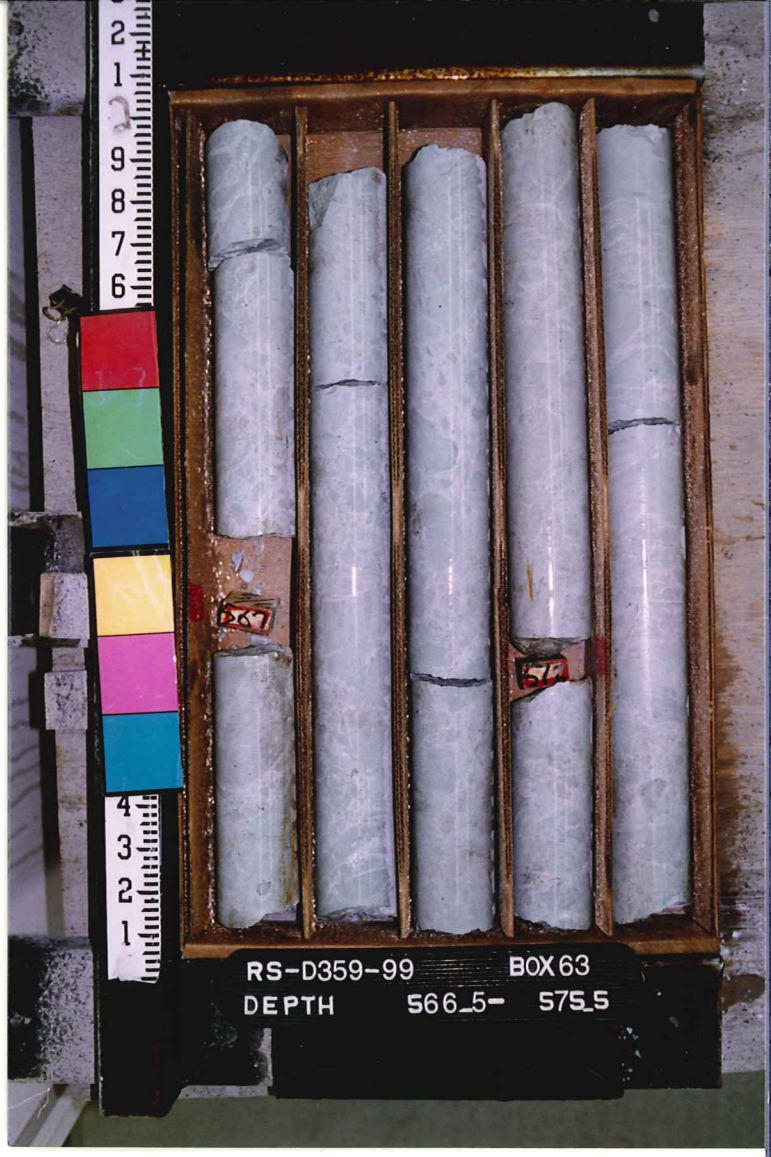

RS-D359-99 BOX 59
DEPTH 529_5- 539_0

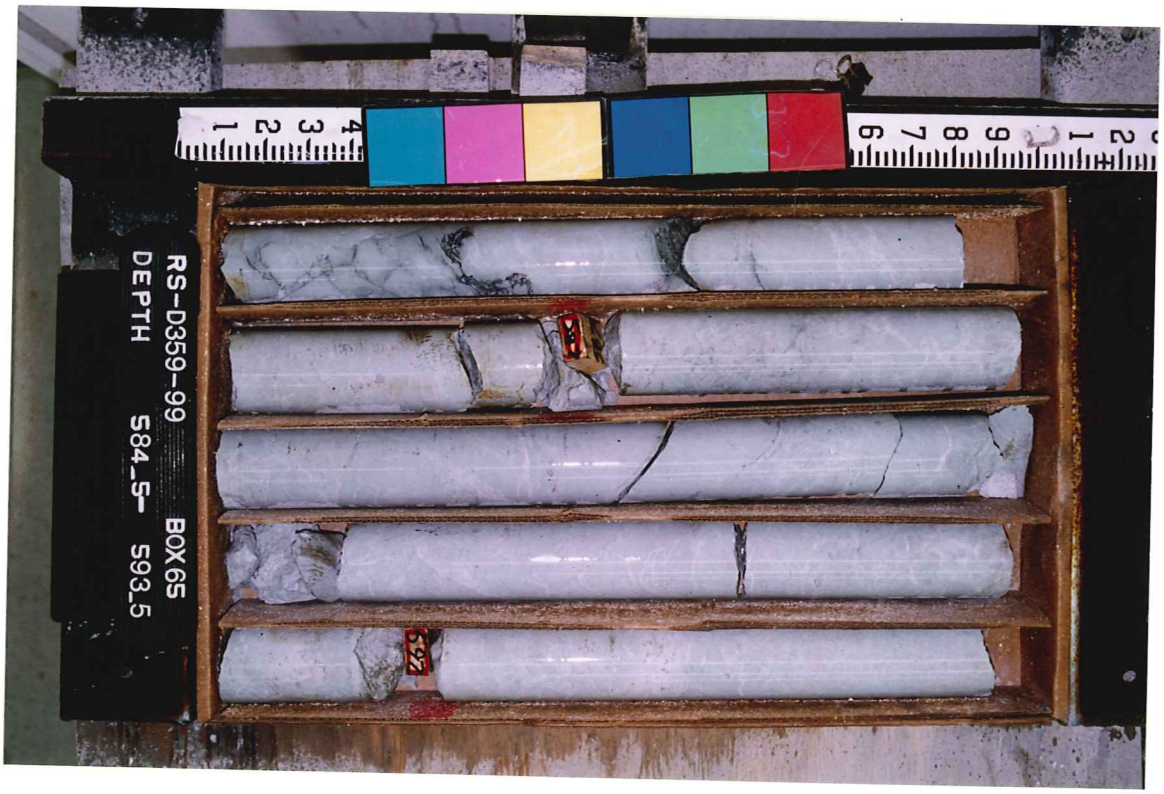

RS-D359-99 BOX 61
DEPTH 548_5- 557_0

RS-D359-99 BOX 60
DEPTH 539_0- 548_5


RS-D359-99 BOX 62
DEPTH 557_0- 566_5

RS-D359-99 BOX 64
DEPTH 575_5- 584_5


RS-D359-99 BOX 63
DEPTH 566_5- 575_5


RS-D359-99 BOX 65
DEPTH 584_5- 593_5

RS-D359-99 BOX 66
DEPTH 593_5- 602_0

WELL RSD359-99

DEPTH 600'

PICTURE NO.

INCLINATION -37°

OBS. DIR. N69.5

COR. DIR.

TOOL FACE

RUN BY G. GADDIE

DATE 7-25-99

CHECKED BY

sperry-sun

DRILLING SERVICES

60 MW
60 MW
60 MW
60 MW
40 MW
40 MW

WELL RS-D359-99

DEPTH 222'

PICTURE NO.

INCLINATION ~37°

OBS. DIR. N69W

COR. DIR.

TOOL FACE

RUN BY Joe Lavallee

DATE 7-23-99

CHECKED BY

sperry-sun

DRILLING SERVICES

60
MW
60
MW
60
MW
40
MW
40
MW

WELL RS-D359-99

DEPTH 42'

PICTURE NO.

INCLINATION -37°

OBS. DIR. N67W

COR. DIR.

TOOL FACE

RUN BY Joe Lavallee

DATE 7-25-99.

CHECKED BY

sperry-sun
DRILLING SERVICES

60 MW
60 MW
60 MW
60 MW
50 MW
40 MW
40 MW