# GRADATION SUMMARY

GROUP PR

PIT: BEAVER INVEST
NOT CORRECTED FOR OVERSIZE

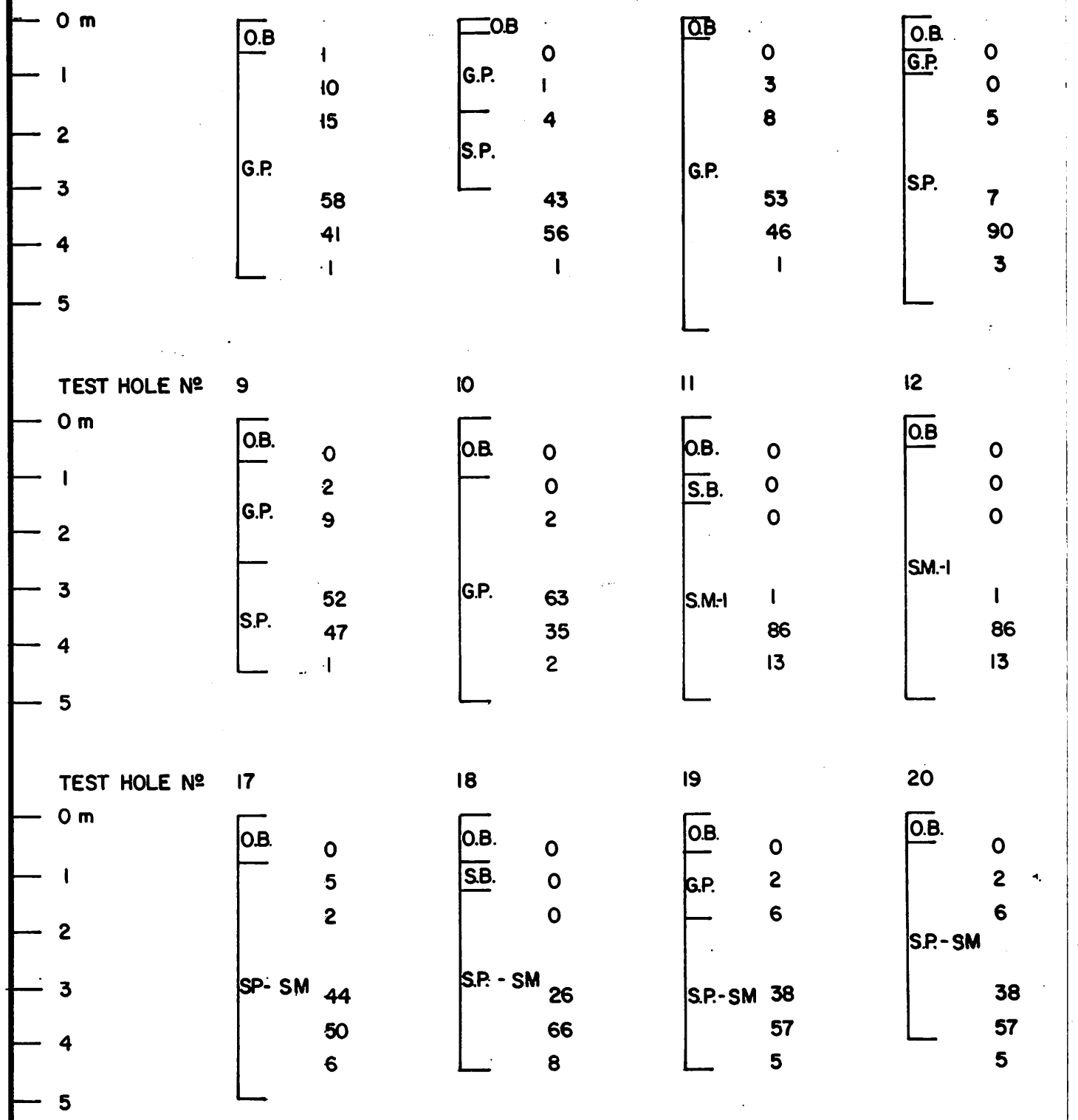
| TH | SA | CLASS | FACT | +225 | +150 | +75 | GRAV | SAND | FINE | 75.0 | 63.0 | 50.0 | 37.5 | 25.0 | 19.0 | 12.5 | 9.50 | 4.75 | 2.36 | 1.18 | .600 | .300 | .150 | .075 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87-1 | 1 | GP | 1.000 | 1 | 10 | 15 | 58 | 41 | 1 | 100 | 83 | 75 | 72 | 66 | 62 | 54 | 50 | 42 | 35 | 25 | 11 | 4 | 2 | 1.1 |
| 87-2 | 1 | GP | 1.000 | 0 | 2 | 6 | 59 | 40 | 1 | 100 | 93 | 89 | 83 | 70 | 63 | 55 | 49 | 41 | 35 | 28 | 14 | 4 | 2 | 1.4 |
| 87-2 | 1 | SP | 1.000 | 0 | 0 | 2 | 26 | 73 | 1 | 100 | 100 | 95 | 93 | 92 | 90 | 84 | 81 | 74 | 68 | 58 | 29 | 4 | 2 | 1.2 |
| 87-3 | 1 | GP | 1.000 | 0 | 3 | 8 | 53 | 46 | 1 | 100 | 100 | 94 | 89 | 77 | 69 | 61 | 55 | 47 | 41 | 30 | 15 | 4 | 2 | 1.2 |
| 87-4 | 1 | SP | 1.000 | 0 | 0 | 5 | 7 | 90 | 3 | 100 | 100 | 100 | 98 | 98 | 98 | 97 | 96 | 93 | 90 | 83 | 69 | 33 | 11 | 2.8 |
| 87-5 | 1 | GP | 1.000 | 0 | 5 | 35 | 62 | 37 | 1 | 100 | 100 | 88 | 83 | 67 | 62 | 52 | 47 | 37 | 31 | 22 | 11 | 3 | 1 | 0.9 |
| 87-6 | 1 | GP | 1.000 | 0 | 5 | 20 | 51 | 48 | 1 | 100 | 100 | 89 | 84 | 79 | 73 | 63 | 59 | 50 | 43 | 33 | 18 | 5 | 2 | 1.3 |
| 87-7 | 1 | GP | 1.000 | 0 | 5 | 50 | 57 | 42 | 1 | 100 | 92 | 87 | 81 | 75 | 69 | 57 | 53 | 43 | 35 | 23 | 12 | 3 | 1 | 0.6 |
| 87-8 | 1 | GP | 1.000 | 0 | 5 | 25 | 69 | 30 | 1 | 100 | 90 | 64 | 60 | 44 | 39 | 36 | 34 | 31 | 28 | 23 | 11 | 3 | 1 | 0.9 |
| 87-9 | 1 | GP | 1.000 | 0 | 2 | 9 | 52 | 47 | 1 | 100 | 81 | 81 | 81 | 78 | 74 | 63 | 58 | 48 | 40 | 31 | 22 | 8 | 3 | 1.4 |
| 87-10 | 1 | GP | 1.000 | 0 | 0 | 2 | 63 | 35 | 2 | 100 | 100 | 79 | 72 | 63 | 54 | 46 | 43 | 37 | 34 | 31 | 28 | 18 | 7 | 2.5 |
| 87-11 | 1 | SM1 | 1.000 | 0 | 0 | 0 | 1 | 86 | 13 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 98 | 97 | 97 | 84 | 44 | 12.7 |
| 87-13 | 1 | SP SM | 1.000 | 0 | 0 | 6 | 1 | 87 | 12 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 99 | 99 | 99 | 98 | 98 | 88 | 52 | 11.6 |
| 87-14 | 1 | SP | 1.000 | 0 | 1 | 9 | 32 | 64 | 4 | 100 | 85 | 79 | 77 | 75 | 73 | 71 | 70 | 68 | 67 | 64 | 61 | 39 | 14 | 4.1 |
| 87-15 | 1 | SM1 | 1.000 | 0 | 0 | 0 | 1 | 82 | 17 | 100 | 100 | 100 | 100 | 100 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 96 | 49 | 17.0 |
| 87-15 | 1 | GP | 1.000 | 0 | 2 | 15 | 61 | 37 | 2 | 100 | 84 | 74 | 71 | 63 | 58 | 52 | 47 | 38 | 31 | 26 | 20 | 8 | 4 | 1.7 |
| 87-16 | 1 | GP | 1.000 | 0 | 1 | 4 | 52 | 46 | 2 | 100 | 93 | 85 | 82 | 77 | 72 | 63 | 58 | 48 | 39 | 29 | 20 | 11 | 5 | 2.3 |
| 87-17 | 1 | SP SM | 1.000 | 0 | 5 | 2 | 44 | 50 | 6 | 100 | 100 | 83 | 76 | 70 | 66 | 62 | 60 | 56 | 52 | 49 | 46 | 37 | 21 | 5.8 |
| 87-18 | 1 | SP SM | 1.000 | 0 | 0 | 0 | 26 | 66 | 8 | 100 | 100 | 100 | 85 | 83 | 79 | 76 | 76 | 74 | 73 | 72 | 69 | 49 | 20 | 7.6 |
| 87-19 | 1 | SP SM | 1.000 | 0 | 2 | 6 | 38 | 57 | 5 | 100 | 100 | 78 | 78 | 71 | 69 | 68 | 66 | 63 | 61 | 58 | 57 | 51 | 25 | 5.8 |
| 87-22 | 1 | GP | 1.000 | 0 | 0 | 9 | 60 | 39 | 1 | 100 | 91 | 87 | 78 | 68 | 63 | 54 | 50 | 40 | 32 | 23 | 13 | 4 | 2 | 1.1 |
| 87-23 | 1 | SP | 1.000 | 0 | 0 | 1 | 44 | 55 | 1 | 100 | 94 | 94 | 90 | 83 | 77 | 67 | 63 | 56 | 50 | 45 | 35 | 8 | 2 | 1.2 |
| 87-24 | 1 | GP | 1.000 | 0 | 2 | 3 | 61 | 37 | 2 | 100 | 100 | 90 | 80 | 64 | 59 | 50 | 45 | 39 | 34 | 29 | 21 | 10 | 4 | 1.7 |
| 87-25 | 1 | GP | 1.000 | 0 | 2 | 10 | 56 | 42 | 2 | 100 | 92 | 76 | 74 | 66 | 61 | 55 | 51 | 43 | 38 | 29 | 19 | 9 | 4 | 1.6 |
| 87-26 | 1 | GP | 1.000 | 0 | 2 | 5 | 58 | 39 | 3 | 100 | 100 | 90 | 87 | 77 | 69 | 59 | 51 | 42 | 37 | 29 | 22 | 13 | 6 | 2.6 |
| 87-27 | 1 | GW | 1.000 | 0 | 0 | 5 | 68 | 30 | 2 | 100 | 100 | 86 | 69 | 53 | 47 | 40 | 37 | 32 | 28 | 22 | 16 | 9 | 4 | 1.8 |
| 87-28 | 1 | GP | 1.000 | 0 | 5 | 5 | 58 | 40 | 2 | 100 | 100 | 95 | 86 | 65 | 56 | 50 | 47 | 42 | 39 | 33 | 27 | 16 | 6 | 2.4 |
| 87-29 | 1 | SP | 1.000 | 0 | 0 | 1 | 16 | 82 | 2 | 100 | 100 | 100 | 94 | 92 | 89 | 87 | 86 | 84 | 82 | 77 | 61 | 25 | 5 | 1.5 |
| 87-30 | 1 | SP | 1.000 | 0 | 0 | 5 | 41 | 57 | 2 | 100 | 100 | 95 | 81 | 77 | 71 | 65 | 63 | 59 | 55 | 46 | 30 | 12 | 4 | 1.6 |
| 87-31 | 1 | SP | 1.000 | 0 | 0 | 2 | 45 | 51 | 4 | 100 | 100 | 95 | 86 | 78 | 73 | 66 | 61 | 55 | 50 | 42 | 34 | 21 | 9 | 3.7 |
| 87-32 | 1 | GP | 1.000 | 0 | 2 | 5 | 57 | 42 | 1 | 100 | 90 | 90 | 90 | 77 | 70 | 58 | 52 | 43 | 37 | 27 | 16 | 7 | 3 | 1.2 |
| 87-33 | 1 | GP | 1.000 | 0 | 0 | 1 | 54 | 44 | 2 | 100 | 87 | 78 | 78 | 72 | 66 | 59 | 54 | 46 | 43 | 39 | 32 | 14 | 4 | 2.1 |
| 87-34 | 1 | SP | 1.000 | 0 | 0 | 0 | 3 | 95 | 2 | 100 | 100 | 100 | 100 | 98 | 98 | 98 | 97 | 97 | 96 | 92 | 78 | 32 | 6 | 2.1 |
| 87-38 | 1 | SP | 1.000 | 0 | 0 | 0 | 23 | 75 | 2 | 100 | 86 | 79 | 79 | 79 | 78 | 78 | 78 | 78 | 77 | 75 | 67 | 30 | 5 | 2.1 |
| 87-39 | 1 | GP | 1.000 | 0 | 0 | 4 | 53 | 45 | 2 | 100 | 92 | 92 | 78 | 67 | 62 | 56 | 53 | 47 | 43 | 36 | 26 | 13 | 5 | 2.3 |
| 87-40 | 1 | GP | 1.000 | 0 | 0 | 2 | 54 | 45 | 1 | 100 | 90 | 84 | 71 | 67 | 60 | 53 | 50 | 46 | 43 | 37 | 27 | 11 | 2 | 1.1 |
| 87-41 | 1 | GP | 1.000 | 0 | 0 | 1 | 60 | 38 | 2 | 100 | 100 | 94 | 82 | 59 | 53 | 47 | 44 | 40 | 36 | 30 | 21 | 11 | 4 | 1.9 |
| AVERAGE | | SP | | 0 | 2 | 8 | 44 | 53 | 3 | 100 | 95 | 88 | 83 | 75 | 71 | 65 | 62 | 56 | 52 | 46 | 37 | 21 | 9 | 3.1 |

# GRADATION SUMMARY

GROUP LC

PIT: BEAVER INVEST
NOT CORRECTED FOR OVERSIZE

| TH | SA | CLASS | FACT | +225 | +150 | +75 | GRAV | SAND | FINE | 75.0 | 63.0 | 50.0 | 37.5 | 25.0 | 19.0 | 12.5 | 9.50 | 4.75 | 2.36 | 1.18 | .600 | .300 | .150 | .075 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87-2 | 1 | SP | 1.000 | 0 | 5 | 10 | 41 | 57 | 2 | 100 | 100 | 100 | 100 | 100 | 95 | 77 | 71 | 59 | 51 | 40 | 21 | 6 | 3 | 2.2 |
| 87-5 | 1 | GP | 1.000 | 0 | 5 | 35 | 49 | 49 | 2 | 100 | 100 | 100 | 100 | 99 | 91 | 71 | 62 | 51 | 42 | 30 | 17 | 6 | 3 | 1.8 |
| 87-7 | 1 | GP | 1.000 | 0 | 5 | 50 | 51 | 47 | 2 | 100 | 100 | 100 | 100 | 100 | 90 | 68 | 60 | 49 | 39 | 26 | 15 | 6 | 3 | 1.8 |
| 87-9 | 1 | SP | 1.000 | 0 | 2 | 9 | 47 | 51 | 2 | 100 | 100 | 100 | 100 | 99 | 91 | 72 | 64 | 52 | 42 | 32 | 23 | 9 | 3 | 1.5 |
| 87-15 | 1 | GP | 1.000 | 0 | 1 | 7 | 52 | 46 | 2 | 100 | 100 | 100 | 100 | 97 | 85 | 68 | 61 | 48 | 39 | 31 | 24 | 10 | 5 | 2.1 |
| 87-16 | 1 | SP | 1.000 | 0 | 2 | 6 | 44 | 53 | 3 | 100 | 100 | 100 | 100 | 98 | 89 | 74 | 68 | 56 | 46 | 35 | 25 | 14 | 7 | 3.0 |
| 87-22 | 1 | GP | 1.000 | 0 | 0 | 9 | 50 | 48 | 2 | 100 | 100 | 100 | 100 | 100 | 90 | 71 | 63 | 49 | 39 | 28 | 17 | 6 | 3 | 1.7 |
| 87-25 | 1 | SP | 1.000 | 0 | 2 | 10 | 47 | 51 | 2 | 100 | 100 | 100 | 100 | 96 | 85 | 69 | 62 | 53 | 45 | 33 | 21 | 10 | 4 | 1.7 |
| 87-27 | 1 | GP | 1.000 | 0 | 0 | 5 | 55 | 42 | 3 | 100 | 100 | 100 | 100 | 98 | 83 | 63 | 55 | 45 | 39 | 31 | 23 | 13 | 6 | 2.9 |
| 87-31 | 1 | SP | 1.000 | 0 | 0 | 2 | 42 | 54 | 4 | 100 | 100 | 100 | 100 | 100 | 91 | 73 | 67 | 58 | 51 | 42 | 34 | 22 | 10 | 4.2 |
| 87-32 | 1 | SP | 1.000 | 0 | 2 | 5 | 49 | 50 | 1 | 100 | 100 | 100 | 100 | 99 | 90 | 71 | 63 | 52 | 43 | 32 | 19 | 9 | 3 | 1.4 |
| 87-39 | 1 | GP | 1.000 | 0 | 0 | 4 | 52 | 46 | 2 | 100 | 100 | 100 | 100 | 98 | 88 | 62 | 56 | 49 | 44 | 36 | 26 | 12 | 5 | 2.1 |
| 87-41 | 1 | GP | 1.000 | 0 | 0 | 2 | 52 | 46 | 2 | 100 | 100 | 100 | 100 | 99 | 85 | 62 | 57 | 48 | 42 | 34 | 24 | 12 | 5 | 1.9 |
| AVERAGE | | SP | | 0 | 2 | 12 | 49 | 49 | 2 | 100 | 100 | 100 | 100 | 99 | 89 | 69 | 62 | 51 | 43 | 33 | 22 | 10 | 5 | 2.2 |




NOTE:
ALL TEST HOLES '1987'

GOVERNMENT OF BRITISH COLUMBIA
MINISTRY OF TRANSPORTATION & HIGHWAYS
GEOTECHNICAL & MATERIALS BRANCH

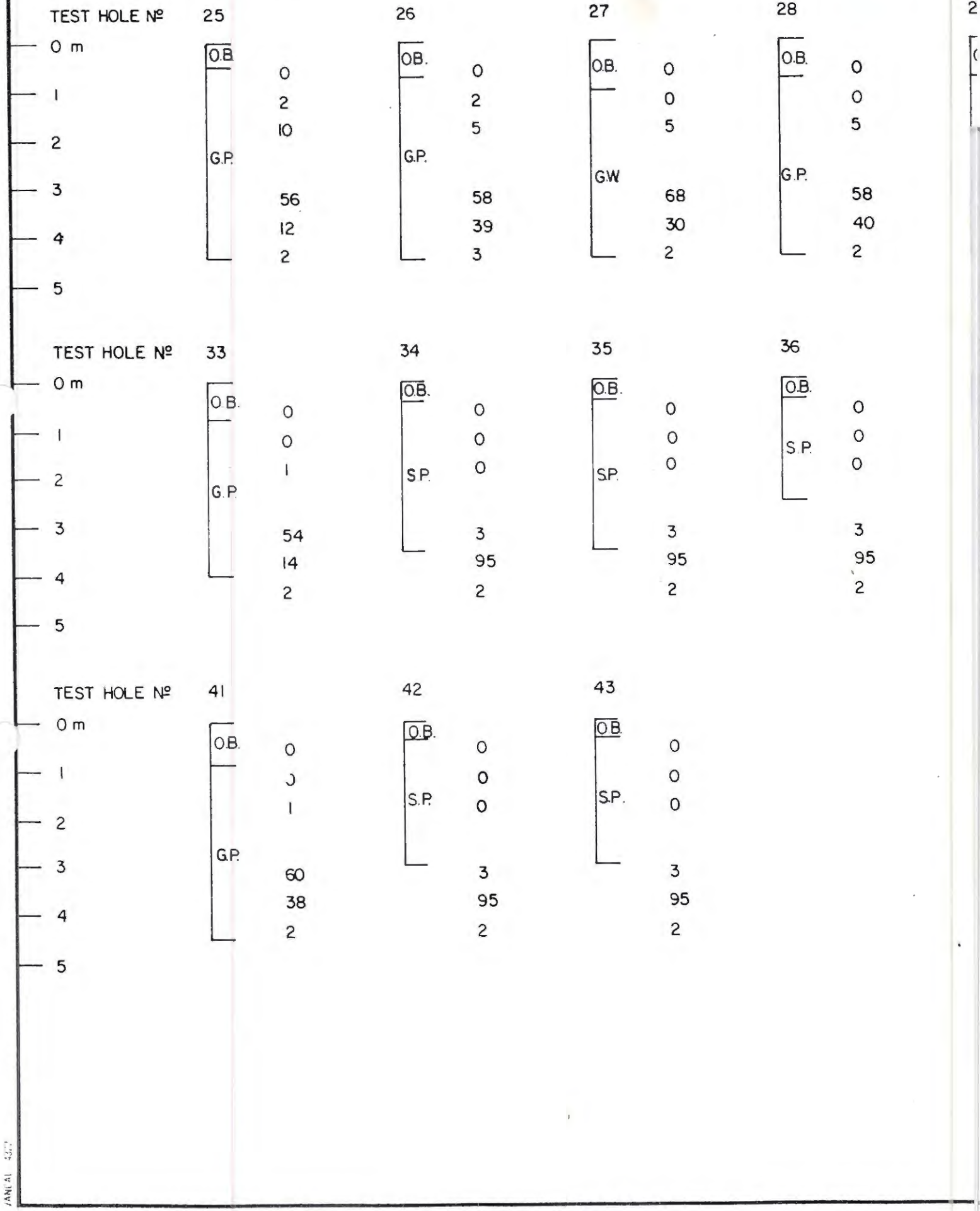
# BEAVER CREEK INVESTIGATION

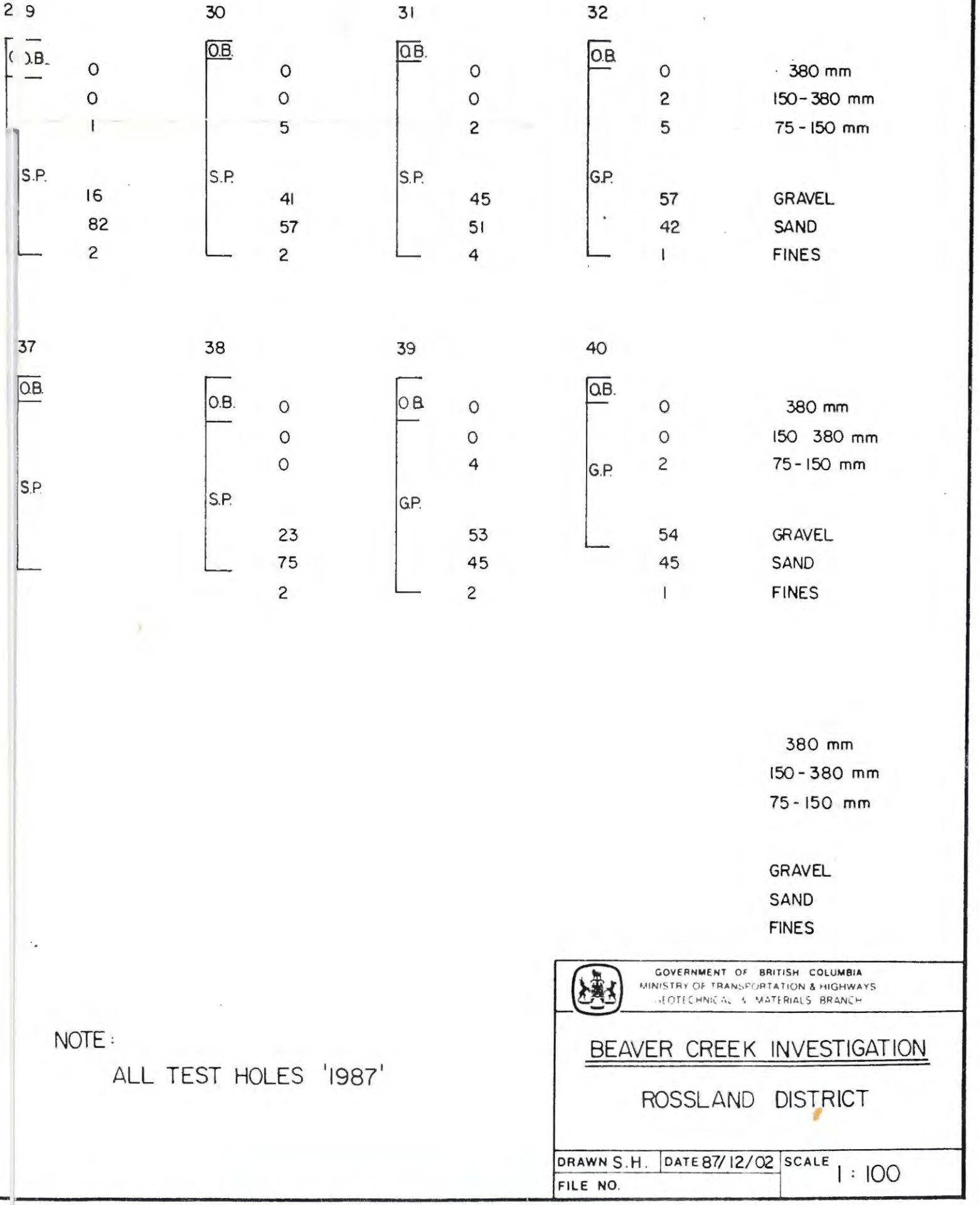
## ROSSLAND DISTRICT

| DRAWN S.H. | DATE87/12/02 | SCALE 1 : 100 |
|---|---|---|
| FILE NO. | | |

Sheet Nº 1

VANCAL - 4322




NOTE:

ALL TEST HOLES '1987'

GOVERNMENT OF BRITISH COLUMBIA
MINISTRY OF TRANSPORTATION & HIGHWAYS
GEOTECHNICAL & MATERIALS BRANCH

# BEAVER CREEK INVESTIGATION

## ROSSLAND DISTRICT

| DRAWN S.H. | DATE 87/12/02 | SCALE 1 : 100 |
|---|---|---|
| FILE NO. | | |

Ministry of Transportation and Highways

# AGGREGATE LOG

Geotechnical and Materials Branch

PROJECT BEAVER CREEK — METHOD BACKHOE

DISTRICT ROSSLAND — SAMPLED By: [illegible] — DATE 87/08/07

| TEST HOLE NUMBER | SAMPLE NUMBER | DEPTH FROM | DEPTH TO | Classification | ESTIMATED GRADATION Fines | Sand | Gravel | ESTIMATED OVERSIZE 75-150 mm | 150-380 mm | >380 mm | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 87-29 | | 0.0 | 0.8 | O B | 2 | 82 | 16 | | | | fine sand mixed in |
| | | 0.8 | 1.6 | G·P | 2 | 40 | 58 | 2 | — | — | SANDY ROUNDED GRAVEL |
| X | 3824 | 1.6 | 4.5 | S·P | 2 | 94 | 4 | — | — | — | |
| | | | | End hole @ 4.5 | | | | | | | |
| #30 | | 0.0 | 0.4 | O B | 37 | 57 | 41 | | | | |
| X | 3825 | 0.4 | 1.9 | G·P | 3 | 37 | 60 | 10 | — | — | |
| | | 1.9 | 4.5 | S·P | 3 | 90 | 7 | — | — | — | MED TO COARSE SAND |
| | | | | END HOLE @ 4.5 | | | | | | | |
| #31 | | 0.0 | 0.4 | O B | 4 | 51 | 45 | | | | |
| X | 3826 | 0.4 | 3.2 | G·P | 3 | 39 | 58 | 5 | — | — | SANDY ROUNDED CLEAN GRAVEL |
| | | 3.2 | 4.5 | S P | 3 | 88 | 9 | — | — | — | FINE SAND |
| | | | | END HOLE @ 4.5 | | | | | | | |
| #32 | | 0.0 | 0.6 | O·B | 2 | 54 | 42 | | | | |
| | X3827 | 0.6 | 4.5 | G·P | 3 | 27 | 70 | 5 | 2 | — | GOOD MIXTURE SAND IS MED TO COARSE |
| | | | | END HOLE @ 4.5 | | | | | | | |
| #33 | | 0.0 | 0.8 | O·B | 2 | 44 | 54 | | | | |
| | | 0.8 | 1.5 | S P | 2 | 96 | 2 | — | — | — | MED TO FINE |
| X | 5777 | 1.5 | 3.5 | G·P | 2 | 33 | 65 | 2 | — | — | PEA GRAVEL MAX SIZE 3"-4" |
| | | 3.5 | 4.0 | S·P | 2 | 94 | 4 | | | | MED TO FINE |
| | | | | END HOLE @ 4.0 | | | | | | | |
| 28 | | 0.0 | 0.8 | O B | 2 | 40 | 58 | | | | |
| X | 2644 | 0.8 | 4.5 | G·P | 4 | 21 | 75 | 5 | 5 | — | POSSIBLE GP-GM SAND LOOKS FINER |
| | | | | END HOLE @ 4.5 | | | | | | | |
| 38 | | 0.0 | 0.9 | O·B | 2 | 75 | 23 | | | | |
| X | 5778 | 0.9 | 1.3 | G·P | 2 | 48 | 50 | — | — | — | PEA GRAVEL SEAM |
| | | 1.3 | 4.0 | S·P | 2 | 4 | 94 | — | — | — | |
| | | | | END HOLE @ 4.0 | | | | | | | |

Ministry of Transportation and Highways

# AGGREGATE LOG

Geotechnical and Materials Branch

PROJECT BEAVER CREEK (COMINCO) METHOD BACKHOE

DISTRICT ROSSLAND SAMPLED By: [illegible] DATE 87/08/07

| TEST HOLE NUMBER | SAMPLE NUMBER | DEPTH FROM | DEPTH TO | Classification | ESTIMATED GRADATION Fines | Sand | Gravel | ESTIMATED OVERSIZE 75-150 mm | 150-380 mm | >380 mm | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | | 0.0 | 0.5 | | | | | | | | |
| | NO SAMPLE | 0.5 | 4.0 | SP | 2 | 6 | 92 | — | — | — | FINE TO MED SAND |
| | SAME AS PREVIOUS | | | | | | | | | | |
| 34 | | 0.0 | 0.8 | OB | | | | | | | |
| | X3803 | 0.8 | 3.5 | S.P | 2 | 6 | 92 | — | — | — | MED TO FINE IN BANDS. |
| | | END @ 3.5 SIDES COLLAPSING | | | | | | | | | |
| 35 | | 0.0 | 0.4 | OB | | | | | | | |
| | NO SAMPLE | 0.4 | 3.5 | SP | 3 | 5 | 92 | — | — | — | MED TO FINE |
| | SAME AS 34. | | | | | | | | | | |
| 36 | | 0.0 | 0.4 | OB | | | | | | | |
| | NO SAMPLE | 0.4 | 2.5 | SP | 3 | 5 | 92 | — | — | — | |
| | SAME | | | | | | | | | | |
| 39 | | 0.0 | 0.9 | OB | 2 | 45 | 53 | | | | MIXED WITH BOULDERY SAND |
| X | 3804 | 0.9 | 4.5 | G.P | 2 | 48 | 50 | 4 | — | — | SANDY ROUNDED GRAVEL |
| | | END HOLE @ 4.5 | | | | | | | | | |
| 40 | | 0.0 | 0.5 | | | | | | | | |
| | | 0.5 | 2.5 | G.P. | 1 3 | 45 45 | 54 52 | 2 | — | — | |
| X | 3805 | 2.5 | 3.5 | SP. | 3 | 60 | 37 | 1 | — | — | |
| | | END HOLE @ 3.5 COLLAPSING | | | | | | | | | |
| 41 | | 0.0 | 0.9 | OB | 2 | 38 | 60 | | | | |
| | 3806 | 0.9 | 4.5 | G.P | 3 | 37 | 60 | 2 | — | — | |
| | | END HOLE @ 4.5 | | | | | | | | | |
| 42 | NO SAMPLE | 0.0 | 0.4 | | | | | | | | |
| | | 0.4 | 3.0 | SP | 2 | 96 | 2 | — | — | — | SAME FINE TO MED SAND AS X3803 |
| | | END HOLE @ 3.0 | | | | | | | | | |
| 43 | NO SAMPLE | 0.0 | 0.4 | | | | | | | | |
| | | 0.4 | 3.0 | SP | 2 | 96 | 2 | — | — | — | |
| | | END HOLE @ 3.0 | | | | | | | | | |

Ministry of Transportation and Highways

# AGGREGATE LOG

Geotechnical and Materials Branch

PROJECT BEAVER CREEK/COMINCO LOTS METHOD BACKHOE RUBBER TIRE

DISTRICT ROSSLAND SAMPLED By: JMG DATE 87/08/06

| TEST HOLE NUMBER | SAMPLE NUMBER | DEPTH FROM | DEPTH TO | Classification | ESTIMATED GRADATION Fines | Sand | Gravel | ESTIMATED OVERSIZE 75-150 mm | 150-380 mm | >380 mm | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| #17 | | 0.0 | 0.8 | O.B | | | | | | | SANDY TOPSOIL |
| X | 3815 | 0.8 | 1.8 | G.P | 3 | 25 | 72 | 5 | 10 | — | SANDY GRAVEL ROUNDED 10% 6"-15" |
| | | 1.8 | 5.0 | S.P | 3 | 92 | 5 | — | — | — | |
| | | | | END HOLE @ 5.0 m | | | | | | | |
| #18 | | 0.0 | 0.8 | O.B. | | | | | | | |
| | | 0.8 | 1.3 | S.B. | | | | | | | MIXED WITH FINE SAND 6" to 10" |
| | X3816 | 1.3 | 4.5 | S.P | 2 | 92 | 5 | | | | |
| | | | | END HOLE @ 5.0 | | | | | | | |
| #19 | | 0.0 | 0.6 | OB | | | | | | | |
| | | 0.6 | 1.8 | G.P | 3 | 37 | 60 | 10 | 5 | — | FINE SANDY ROUNDED GRAVEL |
| | X3817 | 1.8 | 4.5 | SP | 3 | 80 | 17 | 2 | — | — | |
| | | | | END HOLE @ 4.5 | | | | | | | |
| #20 | | 0.0 | 0.5 | O.B. | | | | | | | |
| | NO SAMPLE | 0.5 | 4.0 | SP | | | | | | | |
| | | | | END HOLE @ 4.5 | | | | | | | NO SAMPLE SAME AS PREVIOUS |
| #21 | | 0.0 | 0.8 | O.B | | | | | | | |
| | NO SAMPLE | 0.8 | 4.5 | SP | | | | | | | SAME AS PREVIOUS |
| | | | | END HOLE @ 4.5 | | | | | | | |
| #22 | | 0.0 | 0.5 | OB | | | | | | | |
| | | 0.5 | 1.0 | G.P | 3 | 40 | 57 | 2 | — | — | CLEAN SANDY ROUNDED GRAVEL 3"- |
| X | 3818 | 1.0 | 5.0 | G.P | 3 | 30 | 67 | 15 | — | — | |
| #23 | | 0.0 | 0.6 | O.B. | | | | | | | |
| | | 0.6 | 1.8 | GP | 2 | 43 | 55 | — | — | — | FINE GRAVEL 3"- |
| X | 3819 | 1.8 | 2.6 | SP | 2 | 96 | 2 | | | | |
| | | 2.6 | 4.5 | GP | 2 | 38 | 60 | 5 | 2 | — | |
| | | | | END HOLE @ 4.5 | | | | | | | |

Ministry of Transportation and Highways

# AGGREGATE LOG

Geotechnical and Materials Branch

PROJECT BEAVER CREEK COMINCO LOTS. METHOD BACKHOE

DISTRICT ROSSLAND SAMPLED By: JMH DATE 8/08/06

| TEST HOLE NUMBER | SAMPLE NUMBER | DEPTH FROM | DEPTH TO | Classification | ESTIMATED GRADATION Fines | Sand | Gravel | ESTIMATED OVERSIZE 75-150 mm | 150-380 mm | >380 mm | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| #24 | | | | | | | | | | | |
| | | 0.0 | 0.5 | OB. | 2 | 37 | 61 | | | | |
| X | 3820 | 0.5 | 1.5 | GP | 4 | 30 | 66 | 5 | 5 | — | POSSIBLE INCREASE IN FINES OVER AREA BELOW - SAND ROUND GRAVEL |
| | | 1.5 | 3.5 | GP | 4 | 46 | 50 | 2 | — | — | |
| | | | END | HOLE @ 3.5 - | HOLE 3m | WIDE | BUT | SIDES | COLLAPSING | | |
| #25 | | 0.0 | 0.5 | OB. | 2 | 42 | 56 | | | | |
| | X3821 | 0.5 | 4.5 | GP | 3.4 | 35 | 61 | 10 | 2 | — | COARSER SAND @ 4.5 Hole from .5 - 2.0 GOOD WINTER SAND MAT'L |
| | | END | HOLE @ | 4.5' | | | | | | | |
| #26 | | 0.0 | 0.7 | OB | 3 | 39 | 58 | | | | |
| | X3822 | 0.7 | 4.5 | G.M | 3 | 37 | 60 | 5 | 2 | — | LARGE COBBLES IN FIRST 0.7 - 2.0 |
| | | | END | HOLE @ | 4.5 | | | | | | |
| #27 | | 0.0 | 1.0 | OB | 2 | 30 | 68 | | | | |
| | X3823 | 1.0 | 4.5 | G.M | 2 | 38 | 60 | 5 | — | — | SANDY ROUND GRAVEL GOOD WINTER SAND |
| | | | End hole @ 4.5 | | sides collapsing | | | | | | |

Ministry of Transportation and Highways

# AGGREGATE LOG

Geotechnical and Materials Branch

PROJECT BEAVER CREEK COMINCO LOTS METHOD BACKHOE

DISTRICT ROSSLAND SAMPLED By: G.J.G DATE 87/08/05

| TEST HOLE NUMBER | SAMPLE NUMBER | DEPTH FROM | DEPTH TO | Classification | ESTIMATED GRADATION Fines | Sand | Gravel | ESTIMATED OVERSIZE 75-150 mm | 150-380 mm | >380 mm | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| #7 | | 0.0 | 0.7 | O.B. | | | | | | | |
| | X5746 | 0.7 | 5.0 | GP | 2 | 15 | 83 | 50 | 5 | — | SANDY CLEAN ROUNDED GRAVEL VERY BONY PREDOMINANT 3"-6" |
| | | | | END HOLE @ 5.0 m | | | | | | | |
| #8 | | | | | | | | | | | |
| | | 0.0 | 0.8 | O.B. | | | | | | | |
| | X5747 | 0.8 | 2.5 | GP | 2 | 25 | 73 | 40 | 10 | — | CLEAN GRAVEL COARSE 3"-6" |
| | | 2.5 | 5.0 | GP | 2 | 35 | 63 | 15 | — | — | MAINLY 3"- |
| | | | | END HOLE @ 5.0 m | | | | | | | |
| #9 | | 0.0 | 0.7 | O.B. | | | | | | | |
| | | 0.7 | 1.0 | SP SM | 10 | | | | | | FINE SAND POSSIBLE SILT |
| | X5748 | 1.0 | 2.5 | G.P | 3 | 37 | 60 | 15 | 2 | — | SANDY GRAVEL |
| | | 2.5 | 4.5 | S.P | 2 | 60 | 38 | 2 | 2 | — | MED TO COARSE SAND |
| | | | | END HOLE @ 4.5 | | | | | | | |
| #10 | | 0.0 | 1.0 | OB | | | | | | | |
| | X5749 | 1.0 | 3.0 | G.P | 2 | 28 | 70 | 3 | - | — | 3"- rounded |
| | | 3.0 | 5.0 | S.P | 2 | 96 | 2 | 2 | — | — | |
| | | | | END HOLE @ 5.0 | | | | | | | |
| #11 | | 0.0 | 1.0 | OB | | | | | | | |
| | | 1.0 | 1.5 | SB | | | | | | | SIZE 3"-10" MIXED IN SM. |
| X | 5997 | 1.5 | 5.0 | SP | 2 | 96 | 2 | | | | MEDIUM TO FINE |
| | | | | END HOLE @ 5.0 | | | | | | | |
| #12 | | 0.0 | 0.5 | OB | | | | | | | |
| | NO SAMPLE | 0.5 | 4.5 | SP | 4 | 96 | 2 | | | | |
| SAME @ ABOVE | | | | END HOLE @ 4.5 | | | | | | | |
| #13 | | 0.0 | 0.7 | OB. | | | | | | | |
| | X3800 | 0.7 | 1.0 | G.P-GM | 7 | 33 | 60 | 10 | — | — | |
| | | 1.0 | 5.0 | SP-SM | 6 | 4 | 90 | 2 | - | — | VERY FINE SAND |
| | | | | END HOLE @ 5.0 | | | | | | | |

Ministry of Transportation and Highways

# AGGREGATE LOG

Geotechnical and Materials Branch

PROJECT Beaver Creek (Comin Co Lots) METHOD Backhoe

DISTRICT Rossland SAMPLED By: RH DATE 87/08/05

| TEST HOLE NUMBER | SAMPLE NUMBER | DEPTH FROM | DEPTH TO | Classification | ESTIMATED GRADATION Fines | Sand | Gravel | ESTIMATED OVERSIZE 75-150 mm | 150-380 mm | >380 mm | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| #14 | | 0.0 | 0.7 | O.B. | | | | | | | |
| | | 0.7 | 1.5 | GP-GM | 6 | 40 | 54 | 15 | 2 | — | BOULDERS 6"-10" 20% SAND IS FINE |
| | X5998 | 1.5 | 2.0 | GP | 3 | 55 | 42 | 4 | - | — | SANDY GRAVEL |
| | | 2.0 | 4.5 | SP | 4 | 90 | 6 | | | | FINE TO MED SAND |
| | | | | END HOLE @ 4.5 | | | | | | | |
| #15 | | 0.0 | 0.4 | O.B | | | | | | | |
| | X5999 | 0.4 | 1.6 | SP | 4 | 96 | - | | | | FINE SAND NO COARSE |
| | X3801 | 1.6 | 5.0 | GP | 4 | 18 | 78 | 15 | 2 | — | SANDY ROUND GRAVEL |
| | | | | END HOLE @ 5.0 | | | | | | | |
| #16 | | 0.0 | 0.7 | OB | | | | | | | |
| | | 0.7 | 1.2 | SP | 4 | 95 | 1 | — | — | | |
| | X3802 | 1.2 | 3.0 | GP | 3 | 30 | 67 | 10 | 5 | — | SOME LARGE COBBLES 3" to 6" SANDY GRAVEL |
| | | 3.0 | 5.0 | GP | 2 | 40 | 58 | 2 | - | - | MAINLY 3" — ROUND |
| | | | | END HOLE @ 5.0 m | | | | | | | |

Ministry of Transportation and Highways

# AGGREGATE LOG

Geotechnical and Materials Branch

PROJECT BEAVER CREEK / COMINCO LOTS METHOD RUBBER TIRED BACKHOE

DISTRICT ROSSLAND SAMPLED By: G.J.G DATE 87/08/04

| TEST HOLE NUMBER | SAMPLE NUMBER | DEPTH FROM | DEPTH TO | Classification | ESTIMATED GRADATION Fines | Sand | Gravel | ESTIMATED OVERSIZE 75-150 mm | 150-380 mm | >380 mm | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 87-01 | | 0 | 0.5 | O.B. | | | | | | | |
| | X5991 | 0.5 | 4.5 | G.P. | 2 | 28 | 70 | 15 | 10 | 1 | SANDY WELLROUNDED GRAVEL |
| | | | | END HOLE @ | 4.5 | SIDES COLLAPSING | | | | | |
| #2 | | 0 | 0.2 | O.B. | | | | | | | |
| | X5992 | 0.2 | 1.6 | G.P | 4 | 37 | 60 | 10 | 5 | — | SANDY ROUNDED GRAVEL. |
| | X5993 | 1.6 | 3.0 | S.P | 2 | 93 | 5 | 2 | — | — | MEDIUM TO COARSE |
| | | | | END HOLE @ 3.0 SIDES COLLAPSING | | | | | | | |
| #3 | | 0 | 0.3 | OB | | | | | | | |
| | X5994 | 0.3 | 5.2 | G.P | 3 | 32 | 65 | 10 | 5 | 1 | |
| | | 5.2 | 5.5 | S.P | 3 | 70 | 27 | 5 | 1 | — | MED TO COARSE |
| | | | | END HOLE @ 5.5 FULL EXTENSION BACKHOE | | | | | | | |
| #4 | ~~X5997~~ | | | | | | | | | | |
| | | 0 | 0.5 | O.B | | | | | | | |
| | | 0.5 | 0.9 | G.P | 3 | 37 | 60 | 5 | — | — | NO SAMPLE TOO MUCH OB ii SANDY ROUND GRAVEL 3"- |
| | X5995 | 0.9 | 4.5 | SP | 3 | 90 | 7 | — | — | — | MEDIUM TO COARSE MAX SIZE (SUGAR) ROCK 1/2" |
| | | 4.5 | 5.0 | SP | | | | | | | GRAVELLY SAND - START OF 3"- |
| #5 | | 0 | 0.7 | OB | | | | | | | |
| | X5995 | 0.7 | 4.5 | G.P | 3 | 17 | 80 | 35 | 5 | — | CLEAN SANDY GRAVEL (ROUNDED |
| | | | | END @ 4.5 | SIDES COLLAPSING | | | | | | |
| #6 | | 0.0 | 0.5 | O.B. | | | | | | | |
| | X5996 | 0.5 | 5.0 | G.P | 3 | 40 | 57 | 20 | 5 | — | SANDIER GRAVEL THAN PREVIOUS |