Public Works Canada | Travaux publics Canada

GR01 - 096

# GEOTECHNICAL INVESTIGATION

## SHAKWAK RELOCATION PROJECT
## ALASKA HWY km 1634.5-1664.5 (SEG.8)

## CENTERLINE DRILLING
## VOLUME II OF III

GEOTECHNICAL & MATERIAL SERVICES
WHITEHORSE, YUKON

VOLUME II

CONTENTS

MAR. 1978 CENTERLINE INVESTIGATION HOLES 78-8-N1 to 78-8-N122

Drill log summaries only

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 2-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 101

HOLE DEPTH 4.60

TYPE OF DRILL B40L-6" AUGERS

WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT TILL LIGHT GREY BROWN | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | | | 2.4 | N1 | AUGER | S645 | 11.6 | 23.7 | 14.7 | 9.0 | | | | | | | |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N2 | AUGER | S646 | 10.9 | 26.9 | 15.4 | 11.5 | | | | | | | |
| | | | 4.3 | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 2-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N2

HOLE DEPTH 3.00
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT TILL GREY BROWN | | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | | |
| 1 | | | | N3 | AUGER | S647 | 10.6 | 25.2 | 14.2 | 11.0 | | | | | | | | |
| | | | 1.4 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | END HOLE 3. | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 2-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N3

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.074 mm <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | |
| | CLAYEY SILT | | .5 | | | | | | | | | | | | | | |
| 1 | | | | N4 | AUGER | S648 | 22.6 | 36.2 | 21.5 | 14.7 | | | | | | | |
| | | | 1.1 | | | | | | | | | | | | | | |
| | 1.8 | | 1.8 | | | | | | | | | | | | | | |
| 2 | SILT | | | N5 | AUGER | S649 | 27.0 | 37.8 | | | | | | | | | |
| | | | 2.3 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 3-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N4

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.074 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT | | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | | |
| 1 | | | | N6 | AUGER | S650 | 22.5 | 35.9 | 19.9 | 16.0 | | | | | | | | |
| | | | 1.2 | | | | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | | | | | | |
| | SILT TILL | | 1.7 | | | | | | | | | | | | | | | |
| 2 | | | | N7 | AUGER | S651 | 14.6 | 27.3 | 14.9 | 12.4 | | | | | | | | |
| | | | 2.1 | | | | | | | | | | | | | | | |
| 3 | COARSER | | | | | | | | | | | | | | | | | |
| | | | 3.3 | | | | | | | | | | | | | | | |
| 4 | | | | N8 | AUGER | S652 | 11.6 | 24.9 | 14.7 | 10.2 | | | | | | | | |
| | | | 4.1 | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 3-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N5

HOLE DEPTH 4.35
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | |
| | SILT TILL | | .5 | | | | | | | | | | | | | | |
| 1 | | | | N9 | AUGER | S653 | 22.3 | 34.5 | 19.4 | 15.1 | 3.2 | 11.1 | 85.7 | | | | CL |
| | | | 1.2 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | | | 2.1 | | | | | | | | | | | | | | |
| | | | | N10 | AUGER | S654 | 14.5 | 23.5 | 17.4 | 6.1 | 7.7 | 19.9 | 72.4 | | | | CL-ML |
| | | | 2.7 | | | | | | | | | | | | | | |
| 3 | COARSER | | | | | | | | | | | | | | | | |
| 4 | END HOLE 4.35 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 3-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 06

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | | |
| | :45 | | | | | | | | | | | | | | | | | |
| | SILT | | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | | |
| 1 | | | | N11 | AUGER | S655 | 26.7 | 30.2 | 18.0 | 12.2 | | | | | | | | |
| | | | 1.5 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | 3.2 | | | | | | | | | | | | | | | |
| | | | | N12 | AUGER | S656 | 28.4 | 32.2 | 21.5 | 10.7 | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | | |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 3-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 107

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.074 mm % | <.005 mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Road fill | | .2 | | | | | | | | | | | | | | | |
| | | | .6 | N13 | AUGER | S657 | 6.6 | 19.1 | 16.0 | 3.1 | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | |
| | 1.2 | | | | | | | | | | | | | | | | | |
| | Silt | | | | | | | | | | | | | | | | | |
| 2 | | | 2.1 | | | | | | | | | | | | | | | |
| | | | 2.4 | N14 | AUGER | S658 | | 30.1 | 19.0 | 11.1 | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| | End Hole 4.6 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-194

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N8

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | |
| | SILT | | | | | | | | | | | | | | | | |
| | | | .9 | N15 | AUGER | S700 | 23.5 | 38.0 | 23.2 | 14.8 | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| | 1.5 | | 1.5 | | | | | | | | | | | | | | |
| | CLAYEY SILT (TILL) | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | | | 2.3 | N16 | AUGER | S701 | 26.2 | 48.0 | 24.1 | 23.9 | | | 95+ | | | | CL |
| 3 | SLIGHTLY COARSER | | 3.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 109

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | .3 | | | | | | | | | | | | | | |
| | SILTY TILL | | | N17 | AUGER | S702 | 17.8 | 33.1 | 21.2 | 12.0 | 18.4 | 16.9 | 64.7 | | | | CL |
| | .9 | | .8 | | | | | | | | | | | | | | |
| 1 | CLAYEY | | | | | | | | | | | | | | | | |
| | | | 1.8 | | | | | | | | | | | | | | |
| 2 | | | | N18 | AUGER | S703 | 19.9 | 31.4 | 16.7 | 14.7 | 1.8 | 15.2 | 83.0 | | | | CL |
| | | | 2.4 | | | | | | | | | | | | | | |
| 3 | 3. | | | | | | | | | | | | | | | | |
| | COARSER GRAVEL | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 10/10

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | | |
| | SILT TILL | | .6 | | | | | | | | | | | | | | | |
| 1 | | | | N19 | AUGER | S704 | 23.2 | 30.9 | 19.1 | 11.8 | 3.3 | 15.1 | | 84.6 | | | | CL |
| | | | 1.1 | | | | | | | | | | | | | | | |
| | CLAYEY | | | | | | | | | | | | | | | | | |
| 2 | | | 2.1 | | | | | | | | | | | | | | | |
| | | | | N20 | AUGER | S705 | 28.6 | 51.1 | 24.0 | 27.1 | | | | 95+ | | | | CL |
| | | | 2.6 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 10 11

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SILT TILL | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N21 | AUGER | S706 | 23.7 | 41.2 | 23.7 | 17.5 | | | 95+ | | | | CL |
| | | | 1.1 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | | | | N22 | AUGER | S707 | 13.4 | 27.4 | 17.5 | 9.9 | 10.7 | 22.5 | 66.8 | | | | CL |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 06-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N12

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | .9 | | | | | | | | | | | | | | | | |
| 1 | FINE SAND | | | | | | | | | | | | | | | | |
| | | | 1.8 | N23 | AUGER | S671 | 13.7 | | | NP | 0.3 | 23.8 | 75.9 | | | | ML |
| 2 | | | 2.4 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 3 | HIGHER SILT | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| | | | | N24 | AUGER | S672 | 15.3 | 23.3 | 15.9 | 7.4 | 2.1 | 23.0 | 74.9 | | | | CL |
| 4 | | | 4.1 | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N13

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | |
| | SAND BROWN | | | | | | | | | | | | | | | | |
| 1 | | | .90 | N25 | AUGER | S673 | 6.4 | | | NP | 0.3 | 76.6 | 23.1 | | | | SM |
| | 1.35 | | 1.35 | | | | | | | | | | | | | | |
| | SILT TILL | | 1.5 | N26 | AUGER | S674 | 24.5 | 37.1 | 23.0 | 14.1 | | | 95+ | | | | CL |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| | 2.25 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | 2.55 | | | | | | | | | | | | | | | | |
| | SAND LIGHT BROWN | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N14

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | |
| 1 | COARSER | | | N27 | AUGER | S675 | 12.1 | 22.4 | 13.6 | 8.8 | 4.4 | 32.4 | 63.2 | | | | CL |
| | | | 1.4 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | 2.1 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | 2.85 | | | | | | | | | | | | | | | | |
| 3 | FINE SAND CLEAN | | 3.0 | | | | | | | | | | | | | | |
| | | | | N28 | AUGER | S676 | 6.9 | | | NP | 1.1 | 63.2 | 35.7 | | | | SM |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N15

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | .2 | | | | | | | | | | | | | | |
| | FINE SAND | | | N29 | AUGER | S677 | 4.9 | | | NP | | 84.0 | 16.0 | | | | SM |
| | .9 | | .8 | | | | | | | | | | | | | | |
| 1 | SILT TILL | | 1.1 | | | | | | | | | | | | | | |
| | | | | N30 | AUGER | S678 | 26.1 | 39.1 | 21.0 | 18.1 | | | 95+ | | | | CL |
| | 1.65 | | 1.5 | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| 2 | 2.25 | | | | | | | | | | | | | | | | |
| | SILT TILL | | 2.6 | | | | | | | | | | | | | | |
| | | | | N31 | AUGER | S679 | 14.1 | 29.7 | 16.0 | 13.7 | 13.7 | 26.0 | 60.3 | | | | CL |
| 3 | LESS GRAVEL | | 3.0 | | | | | | | | | | | | | | |
| 4 | LESS SAND | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 6-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N16

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| 1 | SILT TILL | | | | | | | | | | | | | | | | |
| | 1.50 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| 2 | | | 1.8 | N32 | AUGER | S680 | 13.9 | 19.9 | 16.3 | 3.6 | 2.0 | 29.2 | 48.3 | 20.5 | | | ML |
| | | | 2.4 | | | | | | | | | | | | | | |
| | 2.70 | | | | | | | | | | | | | | | | |
| 3 | FINE SAND | | | | | | | | | | | | | | | | |
| | COARSER | | | | | | | | | | | | | | | | |
| 4 | | | 4.0 | N33 | AUGER | S681 | 7.1 | | | NP | 7.1 | 46.9 | 46.0 | | | | SM |
| | | | 4.3 | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. CQ-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 6-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N17

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | 0 | | | | | | | | | | | | | | |
| | | | .5 | N34 | AUGER | S682 | 5.6 | 18.6 | 14.9 | 3.7 | 27.9 | 42.9 | 29.2 | | | | SM |
| | .15 | | | | | | | | | | | | | | | | |
| 1 | SILT TILL | | 1.1 | | | | | | | | | | | | | | |
| | | | 1.5 | N35 | AUGER | S683 | 28.1 | 49.7 | 27.6 | 22.1 | | | 95+ | | | | CL |
| 2 | HIGHER SAND | | | | | | | | | | | | | | | | |
| | HIGHER GRAVEL | | 2.6 | | | | | | | | | | | | | | |
| | | | 3.0 | N36 | AUGER | S684 | 12.1 | 27.8 | 14.8 | 13.0 | 31.9 | 19.2 | 48.9 | | | | GC |
| 3 | LESS GRAVEL | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 6-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N18

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.074 mm <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVERBURDEN | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| | .6 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N37 | AUGER | S685 | 6.2 | 17.4 | 13.9 | 3.4 | 15.5 | 38.8 | 45.7 | | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| | 1.8 | | | | | | | | | | | | | | | | |
| 2 | SAND TILL DARK BROWN LESS GRAVEL | | | | | | | | | | | | | | | | |
| | 2.4 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| | | | | N38 | AUGER | S686 | 11.2 | 22.7 | 16.0 | 6.7 | 6.9 | 23.9 | 69.2 | | | | CL-ML |
| 4 | | | 4.0 | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N19

HOLE DEPTH 1.65
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL FINER | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N39 | AUGER | S687 | 8.3 | 20.7 | 16.9 | 3.8 | 1.3 | 45.6 | 53.1 | | | | ML |
| | COARSER | | 1.4 | | | | | | | | | | | | | | |
| | END HOLE 1.65 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 20

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ICE | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL | | .9 | N40 | AUGER | S688 | 14.6 | | | NP | 14.7 | 62.1 | 23.2 | | | | SM |
| | SLIGHTLY HIGHER SILTY | | 1.5 | | | | | | | | | | | | | | |
| 2 | | | 2.0 | N41 | AUGER | S689 | 10.7 | | | NP | 34.7 | 46.3 | 19.0 | | | | SM |
| | COARSER ROCK | | 2.4 | | | | | | | | | | | | | | |
| | 2.85 | | | | | | | | | | | | | | | | |
| 3 | SILTY SANDY GRAVEL COARSE | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 7-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N 21

HOLE DEPTH 6.35
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | .3 | | | | | | | | | | | | | | |
| | | | | N42 | AUGER | S690 | 10.4 | 20.5 | 15.6 | 4.9 | | | | | | | |
| | .9 | | .9 | | | | | | | | | | | | | | |
| 1 | SILT TILL 1.05 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | | | 1.7 | | | | | | | | | | | | | | |
| 2 | | | | N43 | AUGER | S691 | 12.4 | 21.4 | 16.3 | 5.1 | 4.1 | 40.4 | 55.5 | | | | CL-ML |
| | | | 2.3 | | | | | | | | | | | | | | |
| | COARSER GRAVEL | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.35 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N22

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVERBURDEN .15 | | | | | | | | | | | | | | | | | |
| | FINE SAND | | .3 | | | | | | | | | | | | | | | |
| | | | | N44 | AUGER | S692 | 8.1 | | | NP | | | | | | | | |
| | GRAVELLY | | .8 | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | |
| | 1.35 | | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | | |
| | | | 1.7 | | | | | | | | | | | | | | | |
| 2 | | | | N45 | AUGER | S693 | 19.1 | 26.9 | 18.4 | 8.5 | | | | | | | | |
| | | | 2.3 | | | | | | | | | | | | | | | |
| | COARSER GRAVEL | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| | LOW CLAY LESS SILT HIGHER SAND | | | | | | | | | | | | | | | | | |
| | 3.75 | | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 023

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| | SAND TILL | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N47 | AUGER | S694 | 24.1 | 37.9 | 21.1 | 16.9 | | | | | | | |
| | | | 1.4 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | COARSER GRAVEL | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | | | 3.3 | | | | | | | | | | | | | | |
| | | | | N48 | AUGER | S695 | 14.6 | 28.3 | 16.6 | 11.7 | 8.2 | 20.1 | 71.7 | | | | CL |
| | | | 3.8 | | | | | | | | | | | | | | |
| 4 | 3.9 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
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Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 24

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| 1 | 1.05 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| 2 | | | 2.1 | N49 | AUGER | S696 | 22.7 | 31.5 | 17.1 | 14.4 | 2.6 | 13.5 | 83.9 | | | | CL |
| | | | 2.7 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 7-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N25

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL .15 | | | | | | | | | | | | | | | | | |
| | SILT TILL .30 | | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | | |
| 1 | | | | N50 | AUGER | S697 | 28.7 | 24.6 | 22.4 | 2.1 | | | | | | | | |
| | | | 1.5 | | | | | | | | | | | | | | | |
| | 1.65 | | 1.8 | | | | | | | | | | | | | | | |
| | SILT TILL 1.80 | | | | | | | | | | | | | | | | | |
| 2 | SILT TILL | | | N51 | AUGER | S698 | 24.2 | 27.5 | 19.4 | 8.1 | | | | | | | | |
| | | | 2.3 | | | | | | | | | | | | | | | |
| | CLAYEY | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | | |
| | HIGHER MOISTURE | | | N52 | AUGER | S699 | 18.8 | 26.3 | 17.0 | 9.3 | | | | | | | | |
| 4 | | | 4.0 | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | | |
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DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 26

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | .2 | | | | | | | | | | | | | | |
| | | | .6 | N53 | AUGER | S708 | 8.4 | | | NP | 19.9 | 46.3 | 33.8 | | | | SM |
| | .60 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| 2 | | | 2.1 | | | | | | | | | | | | | | |
| | | | 2.7 | N54 | AUGER | S709 | 15.5 | 27.9 | 14.2 | 13.7 | 6.6 | 28.3 | 65.1 | | | | CL |
| 3 | HIGHER SAND | | | | | | | | | | | | | | | | |
| | 3.6 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 7-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N27

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .30 | | | | | | | | | | | | | | | | |
| | SAND TILL | | .6 | | | | | | | | | | | | | | |
| 1 | | | 1.2 | N56 | AUGER | S710 | 20.4 | | | TRACE | 1.9 | 33.4 | 53.0 | 11.7 | | | ML |
| | 1.35 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| | | | 2.4 | N57 | AUGER | S711 | 17.2 | 36.9 | 19.3 | 17.6 | 20.6 | 18.1 | 61.3 | | | | CL |
| 3 | HIGHER SAND | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1028

HOLE DEPTH 2.85
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .30 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| | | | 1.5 | | | | | | | | | | | | | | |
| | | | | N58 | AUGER | S712 | 16.1 | 33.4 | 20.7 | 12.7 | 15.8 | 23.0 | 61.2 | | | | CL |
| 2 | | | 2.1 | | | | | | | | | | | | | | |
| | COARSER GRAVEL | | | | | | | | | | | | | | | | |
| | END HOLE 2.85 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N29

HOLE DEPTH 4.20
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .30 | | | | | | | | | | | | | | | | |
| | SAND TILL | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N59 | AUGER | S713 | 19.6 | 35.2 | 19.6 | 15.6 | 4.7 | 13.0 | 82.3 | | | | CL |
| | | | 1.2 | | | | | | | | | | | | | | |
| | HIGHER SILT | | | | | | | | | | | | | | | | |
| | | | 1.8 | | | | | | | | | | | | | | |
| 2 | COARSE GRAVEL | | | N60 | AUGER | S714 | 10.5 | 26.8 | 15.0 | 11.8 | 10.3 | 36.5 | 53.2 | | | | CL |
| | | | 2.4 | | | | | | | | | | | | | | |
| 3 | GRAVELLY SAND TILL SILT TILL | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N61 | AUGER | S715 | 9.3 | 25.4 | 15.0 | 10.4 | 12.8 | 37.3 | 49.9 | | | | SC |
| | END HOLE 4.2 | | 4.1 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 30

HOLE DEPTH 4.6'
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVERBURDEN — .15 | | | | | | | | | | | | | | | | |
| | SILT TILL ORGANIC | | .3 | | | | | | | | | | | | | | |
| | | | .9 | N62 | AUGER | S716 | 19.5 | 30.2 | 24.0 | 6.2 | 10.3 | 26.3 | 63.4 | | | | CL-ML |
| 1 | | | | | | | | | | | | | | | | | |
| | — 1.50 | | | | | | | | | | | | | | | | |
| | SAND TILL | | 1.7 | | | | | | | | | | | | | | |
| 2 | | | 2.1 | N63 | AUGER | S717 | 11.7 | 27.2 | 16.9 | 10.3 | 38.4 | 19.2 | 42.4 | | | | GC |
| | — 2.40 | | | | | | | | | | | | | | | | |
| | SILTY SAND — 2.7 | | | | | | | | | | | | | | | | |
| 3 | SILTY TILL | | | | | | | | | | | | | | | | |
| | — 3.3 | | | | | | | | | | | | | | | | |
| | FINE SAND | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | 4.1 | N64 | AUGER | S718 | 8.5 | | | NP | 3.1 | 35.7 | 61.2 | | | | ML |
| | END HOLE — 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 31

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SAND TILL | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N65 | AUGER | S719 | 26.9 | | | NP | 18.9 | 25.7 | 55.4 | | | | ML |
| | 1.35 | | 1.35 | | | | | | | | | | | | | | |
| | SANDY GRAVEL ORGANIC | | 1.7 | | | | | | | | | | | | | | |
| 2 | | | | N66 | AUGER | S720 | 10.8 | | | NP | 29.4 | 49.7 | 15.3 | 5.6 | | | SM |
| | 2.25 | | 2.25 | | | | | | | | | | | | | | |
| | SILTY SAND GREY BLUE | | 2.6 | | | | | | | | | | | | | | |
| 3 | | | | N67 | AUGER | S721 | 23.3 | | | NP | 1.6 | 36.9 | 61.5 | | | | OL |
| | HIGHER SILT | | 3.0 | | | | | | | | | | | | | | |
| 4 | LESS SILT HIGHER SAND | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N32

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074mm >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SAND GRAVEL MED ORGANIC | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N68 | AUGER | S722 | 2.0 | | | NP | 74.4 | 20.5 | 5.1 | | | | GP-GM |
| | 1.5 | | | | | | | | | | | | | | | | |
| | COARSE | | | | | | | | | | | | | | | | |
| 2 | | | 2.1 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
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Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 33

HOLE DEPTH 4.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | CONSISTENCY LIMITS: PLASTIC LIMIT % | CONSISTENCY LIMITS: PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | MECHANICAL ANALYSIS: SAND % | MECHANICAL ANALYSIS: <.074mm >.005mm % | MECHANICAL ANALYSIS: <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .60 SAND TILL | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N69 | AUGER | S723 | 23.1 | | | NP | 7.7 | 24.6 | 67.7 | | | | ML |
| | 1.65 GRAVELLY SAND TILL | | 1.5 | | | | | | | | | | | | | | |
| 2 | | | 2.4 | | | | | | | | | | | | | | |
| | 2.40 SAND TILL GREY BLUE | | | N70 | AUGER | S724 | 14.4 | | | NP | 11.1 | 40.6 | 48.3 | | | | SM |
| 3 | 3.00 SILT TILL GREY BLUE | | 2.9 3.0 | N71 | AUGER | S725 | 17.8 | 20.6 | 16.9 | 3.7 | 6.5 | 19.9 | 73.6 | | | | ML |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | END HOLE @ 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N34

HOLE DEPTH 4.20
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .90 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL (FINE) | | | | | | | | | | | | | | | | |
| | | | 1.5 | N72 | AUGER | S726 | 23.1 | | | NP | 2.7 | 17.3 | 80.0 | | | | ML |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| | 2.25 | | 2.4 | | | | | | | | | | | | | | |
| | FINE SAND | | | N73 | AUGER | S727 | 20.6 | | | NP | | 20.8 | 79.2 | | | | ML |
| 3 | SILTY | | 3.0 | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N74 | AUGER | S728 | 22.8 | | | NP | 0.1 | 18.3 | 81.6 | | | | ML |
| | END HOLE 4.2 | | 4.2 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 7-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N 35

HOLE DEPTH 6.1
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| | | | 1.4 | | | | | | | | | | | | | | |
| 2 | | | | N75 | AUGER | S729 | 2.6 | | | NP | 59.7 | 32.2 | 8.1 | | | | GP-GM |
| | | | 2.1 | | | | | | | | | | | | | | |
| 3 | HIGHER MOISTURE | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | ORGANIC | | 4.9 | | | | | | | | | | | | | | |
| 5 | | | | N76 | AUGER | S730 | 10.8 | | | NP | 46.3 | 41.5 | 8.8 | 3.4 | | | GM |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 7-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N35

HOLE DEPTH 6.1
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | ORGANIC | | 5.5 | N76 | AUGER | S730 | 10.8 | | | NP | 46.3 | 41.5 | 8.8 | 3.4 | | | GM |
| 6 | END HOLE 6.1 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

DRWG NO 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 36

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVERBURDEN .15 | | | | | | | | | | | | | | | | |
| | SAND ORGANIC | | | | | | | | | | | | | | | | |
| | .60 | | .6 | | | | | | | | | | | | | | |
| 1 | GRAVELLY SAND ORGANIC | | | N77 | AUGER | S731 | 11.4 | | | NP | 39.6 | 47.0 | 13.4 | | | | SM |
| | | | 1.2 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | END HOLE 3. | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N37

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | .3 | | | | | | | | | | | | | | |
| | GRAVELLY SAND | | | N78 | AUGER | S732 | 3.2 | | | NP | 20.5 | 61.1 | 18.4 | | | | SM |
| 1 | | | .9 | | | | | | | | | | | | | | |
| | FINER | | | | | | | | | | | | | | | | |
| 2 | COARSER | | | | | | | | | | | | | | | | |
| 3 | 3. | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL | | | | | | | | | | | | | | | | |
| | 3.75 | | | | | | | | | | | | | | | | |
| 4 | GRAVELLY SAND | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 8-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N38

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | .2 | | | | | | | | | | | | | | |
| | ORGANIC .60 | | .6 | N79 | AUGER | S733 | 9.5 | | | NP | 1.5 | 42.4 | 56.1 | | | | ML |
| 1 | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL COARSE 1.8 | | | | | | | | | | | | | | | | |
| | SILTY TILL 1.95 | | | | | | | | | | | | | | | | |
| 2 | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 3 | SLIGHTLY FINER GRAVEL | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N80 | AUGER | S734 | 4.7 | | | NP | 50.3 | 31.8 | 17.9 | | | | GM |
| | END HOLE 4.6 | | 4.6 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 039

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVERBURDEN .15 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND .60 | | | | | | | | | | | | | | | | |
| | GRAVEL COARSE | | | | | | | | | | | | | | | | |
| 1 | FINER | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | SANDY GRAVEL MED - COARSE | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N81 | AUGER | S772 | 2.4 | | | NP | 70.9 | 20.7 | 8.4 | | | | GP-GM |
| | END HOLE 4.6 | | 4.6 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N40

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .60 | | .6 | | | | | | | | | | | | | | |
| 1 | GRAVELLY SAND TILL | | | N82 | AUGER | S770 | 2.6 | | | NP | 35.9 | 47.8 | 11.4 | 4.9 | | | SM |
| | 1.5 | | 1.2 | | | | | | | | | | | | | | |
| 2 | SANDY GRAVEL MED - COARSE | | | | | | | | | | | | | | | | |
| | 2.25 | | | | | | | | | | | | | | | | |
| 3 | GRAVELLY SAND TILL FINER | | | | | | | | | | | | | | | | |
| | | | 3.8 | | | | | | | | | | | | | | |
| 4 | | | | N83 | AUGER | S771 | 4.9 | | | NP | 36.9 | 42.4 | 20.7 | | | | SM |
| | END HOLE 4.6 | | 4.6 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO. 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N41

HOLE DEPTH 3.9
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | .75 | | .5 | | | | | | | | | | | | | | |
| 1 | GRAVELLY SAND TILL | | | N84 | AUGER | S773 | 4.1 | | | NP | 57.7 | 35.5 | 6.8 | | | | GP-GM |
| | 1.35 | | 1.2 | | | | | | | | | | | | | | |
| | SILTY TILL 1.5 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 2 | 1.95 SAND TILL | | | | | | | | | | | | | | | | |
| | 2.4 | | 2.4 | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | N85 | AUGER | S774 | 5.6 | | | NP | 40.6 | 37.7 | 21.7 | | | | GM |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | 3.3 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL (COARSE) | | | | | | | | | | | | | | | | |
| | END HOLE 3.9 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: W42

HOLE DEPTH 4.35
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | GRAVELLY SAND TILL ORGANIC | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N86 | AUGER | ST75 | 3.6 | | | NP | 47.0 | 42.4 | 10.6 | | | | GP-GM |
| | | | 1.5 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | COARSER | | | | | | | | | | | | | | | | |
| | 3.6 | | | | | | | | | | | | | | | | |
| 4 | SANDY GRAVEL (COARSE) | | | | | | | | | | | | | | | | |
| | END HOLE 4.35 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 68-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: W 43

HOLE DEPTH 4.2

TYPE OF DRILL B40L-6" AUGERS

WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm <.074 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVERBURDEN .15 | | | | | | | | | | | | | | | | |
| | ORG SILT .30 | | | | | | | | | | | | | | | | |
| | SILTY GRAVEL SAND .45 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL (COARSE) | | | | | | | | | | | | | | | | |
| 1 | FINER GRAVEL | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | COARSER | | | | | | | | | | | | | | | | |
| 4 | END HOLE 4.2 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 8-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N 44

HOLE DEPTH 4.2
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVER BURDEN .15 | | | | | | | | | | | | | | | | |
| | SILT ORGANIC | | .3 | | | | | | | | | | | | | | |
| | | | | N87 | AUGER | S776 | 9.6 | | | NP | 21.1 | 31.0 | 47.9 | | | | SM |
| 1 | 1.05 | | 1.05 | | | | | | | | | | | | | | |
| | SAND TILL (FINE) | | | | | | | | | | | | | | | | |
| | | | 1.8 | | | | | | | | | | | | | | |
| 2 | LESS SILT | | | N88 | AUGER | S777 | 10.8 | | | NP | 3.2 | 23.6 | 73.2 | | | | OL |
| | | | 2.3 | | | | | | | | | | | | | | |
| 3 | 3 | | | | | | | | | | | | | | | | |
| | GRAVELLY SILTY SAND ORGANIC | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N89 | AUGER | S778 | 5.3 | | | NP | 49.3 | 23.0 | 27.7 | | | | GM |
| | END HOLE 4.2 | | 4.2 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N45

HOLE DEPTH 2.4
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | .2 | | | | | | | | | | | | | | |
| | | | .6 | N90 | AUGER | S779 | 4.2 | | | NP | 6.6 | 62.0 | 31.4 | | | | SM |
| | .60 SAND TILL | | | | | | | | | | | | | | | | |
| 1 | | | .9 | | | | | | | | | | | | | | |
| | | | 1.5 | N91 | AUGER | S780 | 2.2 | | | NP | 14.4 | 63.7 | 13.3 | 8.6 | | | SM |
| 2 | 2.1 GRAVELLY SAND | | | | | | | | | | | | | | | | |
| | END HOLE 2.4 REFUSAL | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 8-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N46

HOLE DEPTH 2.55
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND | | | | | | | | | | | | | | | | |
| | COARSER GRAVEL | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N92 | AUGER | 5781 | 1.8 | | | NP | 62.3 | 29.2 | 8.5 | | | | GP-GM |
| | | | 1.5 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | END HOLE 2.55 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: D47

HOLE DEPTH 2.4
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SAND TILL | | .6 | | | | | | | | | | | | | | |
| 1 | COARSER GRAVEL | | 1.1 | N93 | AUGER | 5782 | 8.3 | | | NP | 17.1 | 50.9 | 32.0 | | | | SM |
| 2 | GRAVELLY SAND / SAND GRAVEL | | | | | | | | | | | | | | | | |
| | END HOLE 2.4 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 10 48

HOLE DEPTH 2.85
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | | |
| | .60 | | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | | |
| 1 | COARSER | | 1.1 | | | | | | | | | | | | | | | |
| | | | 1.5 | N94 | AUGER | S783 | 1.7 | | | NP | 30.6 | 54.0 | 15.4 | | | | | SM |
| 2 | | | | | | | | | | | | | | | | | | |
| | END HOLE 2.85 | | | | | | | | | | | | | | | | | |
| | REFUSAL | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N49

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.074 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | | |
| 1 | COARSER | | | N95 | AUGER | S784 | 5.5 | | | NP | 32.2 | 48.0 | 19.8 | | | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | | |
| | 1.65 | | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | END HOLE 3. | | | | | | | | | | | | | | | | | |
| | LOST BIT | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N50

HOLE DEPTH 3.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL<br>FINER<br>COARSER | | | | | | | | | | | | | | | | |
| 2 | | | 1.8 | N95A | AUGER | S785 | 6.4 | | | NP | 28.3 | 48.9 | 22.8 | | | | SM |
| | | | 2.6 | | | | | | | | | | | | | | |
| | 2.85 | | | | | | | | | | | | | | | | |
| 3 | SANDY GRAVEL<br>COARSE | | | | | | | | | | | | | | | | |
| | END HOLE 3.6 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N51

HOLE DEPTH 4.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .30 | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | |
| 1 | SAND TILL | | | N97 | AUGER | S811 | 6.6 | | | NP | 18.1 | 55.0 | 26.9 | | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N98 | AUGER | S812 | 5.4 | | | NP | 42.2 | 36.9 | 20.9 | | | | GM |
| | | | 4.3 | | | | | | | | | | | | | | |
| | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N52

HOLE DEPTH 1.5
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL<br>SAND TILL | | .3 | | | | | | | | | | | | | | |
| | | | .9 | N99 | AUGER | S813 | 3.6 | | | NP | 2.9 | 61.8 | 35.3 | | | | SM |
| 1 | END HOLE 1.5<br>REFUSAL | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 053

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .30 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N100 | AUGER | 5814 | 4.0 | | | NP | 6.1 | 60.8 | 33.1 | | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| 2 | COARSER | | | | | | | | | | | | | | | | |
| 3 | END HOLE 3. | | | | | | | | | | | | | | | | |
| | HAND DRILLED | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8

HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 054

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | | |
| | GRADELLY SAND TILL | | | | | | | | | | | | | | | | | |
| 1 | 1.05 | | | | | | | | | | | | | | | | | |
| | SAND | | | | | | | | | | | | | | | | | |
| | 1.35 | | | | | | | | | | | | | | | | | |
| | SILT TILL | | 1.5 | | | | | | | | | | | | | | | |
| | | | 1.8 | N101 | AUGER | SB15 | 41.6 | | | NP | 0.8 | 10.5 | 88.7 | | | | | OL |
| | 1.95 | | | | | | | | | | | | | | | | | |
| 2 | GRAVEL SAND TILL | | 2.1 | | | | | | | | | | | | | | | |
| | | | 2.6 | N102 | AUGER | SB16 | 15.8 | | | NP | 13.3 | 44.4 | 42.3 | | | | | SM |
| | 2.55 | | | | | | | | | | | | | | | | | |
| | LESS SILT | | | | | | | | | | | | | | | | | |
| 3 | HIGHER SILT COARSER GRAVEL | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N55

HOLE DEPTH 2.4
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074mm >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 SAND TILL | | | | | | | | | | | | | | | | |
| 1 | 1.05 GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | | | 1.5 | N103 | AUGER | SB17 | 1.8 | | | NP | 50.6 | 36.0 | 13.4 | | | | GM |
| 2 | | | 2.1 | | | | | | | | | | | | | | |
| | END HOLE REFUSAL 2.4 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N56

HOLE DEPTH 2.85
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .30 SAND TILL | | .6 | | | | | | | | | | | | | | |
| 1 | | | 1.2 | N104 | AUGER | S819 | 6.9 | | | NP | 9.9 | 54.2 | 35.9 | | | | SM |
| | COARSER GRAVEL | | | | | | | | | | | | | | | | |
| 2 | FINER | | | | | | | | | | | | | | | | |
| | | | 2.3 | N105 | AUGER | S818 | 1.9 | | | NP | 22.8 | 53.2 | 24.0 | | | | SM |
| | END HOLE REFUSAL 2.85 | | 2.85 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 8-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: NJS7

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074mm V.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .60 | | .6 | | | | | | | | | | | | | | |
| 1 | SAND TILL HIGHER SILT | | 1.1 | N106 | AUGER | S820 | 13.1 | | | NP | 17.0 | 35.7 | 31.2 | 16.1 | | | SM |
| 2 | COARSE GRADEL FINER | | 2.4 | | | | | | | | | | | | | | |
| 3 | FAIRLY CONSISTENT | | 3.0 | N107 | AUGER | S821 | 15.2 | | | TRACE | 8.8 | 37.2 | 54.0 | | | | ML |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 9-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N58

HOLE DEPTH 4.32
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .46 | | | | | | | | | | | | | | | | |
| | SAND TILL | | .8 | | | | | | | | | | | | | | |
| 1 | | | 1.2 | N108 | AUGER | S822 | 16.4 | | | NP | 2.7 | 36.4 | 60.9 | | | | OL |
| | LESS SILT COARSER ROCK | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | .5 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL GRAVELLY SAND | | 3.3 | | | | | | | | | | | | | | |
| 4 | | | 4.0 | N109 | AUGER | S823 | 5.0 | | | NP | 46.8 | 29.0 | 24.2 | | | | GM |
| | END HOLE 4.32 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

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Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 9-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N59

HOLE DEPTH 1.8
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | REFUSAL | | | | | | | | | | | | | | | | |
| | .30 GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | | | .8 | | | | | | | | | | | | | | |
| 1 | | | | N110 | AUGER | S824 | 5.5 | | | NP | 24.2 | 46.9 | 28.9 | | | | SM |
| | | | 1.4 | | | | | | | | | | | | | | |
| | COARSER END HOLE 1.8 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 10-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 60

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .6 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | .9 | | | | | | | | | | | | | | |
| 1 | COARSE | | | N111 | AUGER | S825 | 4.8 | | | NP | 47.3 | 33.5 | 19.2 | | | | GM |
| | 1.65 | | 1.5 | | | | | | | | | | | | | | |
| | SANDY GRAVEL MED - COARSE | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | END HOLE 3.00 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 10-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N61

HOLE DEPTH 4.2
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N112 | AUGER | S826 | 5.2 | | | NP | 22.7 | 54.5 | 22.8 | | | | SM |
| | | | 1.1 | | | | | | | | | | | | | | |
| | 1.35 | | | | | | | | | | | | | | | | |
| | SAND TILL | | 1.70 | | | | | | | | | | | | | | |
| | | | | N113 | AUGER | S827 | 15.7 | | | NP | 5.6 | 52.3 | 42.1 | | | | SM |
| 2 | 1.95 | | 1.95 | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | COARSER LESS SILT | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N114 | AUGER | S828 | 6.2 | | | NP | 23.4 | 56.5 | 20.1 | | | | SM |
| | END HOLE 4.2 | | 4.2 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 10-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N 62

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | .3 | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | N115 | AUGER | S829 | 5.2 | | | NP | 21.8 | 54.6 | 23.6 | | | | SM |
| 1 | | | .9 | | | | | | | | | | | | | | |
| | COARSER | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | 3.00 | | | | | | | | | | | | | | | | |
| | GRAVEL COARSE | | | | | | | | | | | | | | | | |
| | 3.75 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 10-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 63

HOLE DEPTH 4

TYPE OF DRILL B40L-6" AUGERS

WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074 mm >.005 mm % | <.005 mm % | DRY DENSITY LBS. / CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS / FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .30 | | | | | | | | | | | | | | | | |
| | SAND TILL COARSER | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| | END HOLE 1.2 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 10-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N64

HOLE DEPTH 1.5
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SILT TILL .6 | | .60 | | | | | | | | | | | | | | |
| | SAND TILL | | | N116 | AUGER | 5830 | 6.0 | | | NP | 9.1 | 61.8 | 16.5 | 12.6 | | | SM |
| 1 | 1.05 | | 1.05 | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | END HOLE 1.5 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
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Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 10-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N65

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm <.074 mm % | <.005 mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | .9 SAND TILL | | | | | | | | | | | | | | | | |
| 1 | | | 1.1 | | | | | | | | | | | | | | |
| | COARSER ROCK LESS SILT | | 1.5 | N117 | AUGER | S831 | 12.7 | | | NP | 35.0 | 28.8 | 36.2 | | | | GM |
| | 1.65 GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | 2.85 SANDY GRAVEL MED | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | HIGHER SAND | | 4.0 | N118 | AUGER | S832 | 3.6 | | | TRACE | 66.1 | 22.5 | 11.4 | | | | GP-GM |
| | END HOLE 4.6 | | 4.6 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 10-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N66

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL<br>SAND TILL<br>GREY BROWN HIGHER SILT | | | | | | | | | | | | | | | | |
| | | | .8 | | | | | | | | | | | | | | |
| 1 | | | 1.2 | N119 | AUGER | S833 | 15.1 | | | NP | 3.3 | 47.2 | 49.5 | | | | SM |
| | 1.80 | | | | | | | | | | | | | | | | |
| 2 | SAND TILL BROWN | | | | | | | | | | | | | | | | |
| | 2.4 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 3 | FINER GRAVEL | | 3.0 | | | | | | | | | | | | | | |
| | | | 3.7 | N120 | AUGER | S834 | 4.9 | | | NP | 29.1 | 47.9 | 23.0 | | | | SM |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 10-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 67

HOLE DEPTH 1.65
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .5 SAND TILL | | | | | | | | | | | | | | | | |
| | SLIGHTLY HIGH SILT | | .8 | | | | | | | | | | | | | | |
| 1 | | | | N121 | AUGER | S835 | 12.1 | | | NP | 5.7 | 46.0 | 48.3 | | | | SM |
| | COARSER | | 1.4 | | | | | | | | | | | | | | |
| | END HOLE 1.65 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 10-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 68

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .6 | | .6 | | | | | | | | | | | | | | |
| | SAND TILL COARSER | | | N122 | AUGER | S836 | 5.0 | | | NP | 16.7 | 54.4 | 28.9 | | | | SM |
| 1 | | | 1.2 | | | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL MED-COARSE | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | 3 | | | | | | | | | | | | | | | | |
| | SAND TILL HIGHER SAND FINER | | 3.3 | N123 | AUGER | S837 | 12.1 | | | NP | 7.8 | 54.3 | 37.9 | | | | SM |
| | | | 3.8 | | | | | | | | | | | | | | |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 10-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: NJ69

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| 1 | GRAVELLY SAND TILL COARSER | | | | | | | | | | | | | | | | |
| 2 | 2.1 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL MED - COARSE | | 2.4 | N124 | AUGER | S838 | 1.7 | | | NP | 52.1 | 39.0 | 8.9 | | | | GP-GM |
| 3 | END HOLE 3. | | 3.0 | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 10-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: D 70

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | COARSER | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N125 | AUGER | S839 | 6.1 | | | NP | 8.9 | 35.1 | 56.0 | | | | ML |
| | GRAVELLY SAND TILL 1.5 | | 1.1 | | | | | | | | | | | | | | |
| 2 | FINER | | | | | | | | | | | | | | | | |
| | HIGHER SAND LESS GRAVEL | | 2.4 | | | | | | | | | | | | | | |
| 3 | END HOLE 3. | | | N126 | AUGER | S840 | 2.1 | | | NP | 28.7 | 54.0 | 11.3 | 6.0 | | | SM |
| | | | 3.0 | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 071

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074mm >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL BROWN | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | ORGANIC | | .8 | | | | | | | | | | | | | | |
| 1 | HIGHER SILT | | 1.2 | N127 | AUGER | S861 | 11.9 | | | NP | 15.8 | 46.0 | 38.2 | | | | SM |
| | GRAVELLY SAND TILL | | 1.8 | | | | | | | | | | | | | | |
| 2 | ORGANIC | | 2.4 | N128 | AUGER | S862 | 10.7 | | | TRACE | 23.0 | 39.4 | 37.6 | | | | SM |
| | COARSER GRAVEL | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | HIGHER SAND + GRAVEL LESS SILT | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 72

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .75 | | .8 | | | | | | | | | | | | | | |
| 1 | SILT TILL | | | N129 | AUGER | S863 | 34.0 | | | NP | | 10.7 | 89.3 | | | | ML |
| | HIGHER SAND | | 1.4 | | | | | | | | | | | | | | |
| 2 | 2.1 | | 2.1 | | | | | | | | | | | | | | |
| | SAND TILL | | | N130 | AUGER | S864 | 12.3 | 22.5 | 17.3 | 5.2 | 14.1 | 38.0 | 47.9 | | | | SC-SM |
| 3 | HIGHER SILT COARSER GRAVEL | | 2.7 | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 73

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .9 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL | | | | | | | | | | | | | | | | |
| | 1.65 | | | | | | | | | | | | | | | | |
| | SILT TILL | | | | | | | | | | | | | | | | |
| | 1.95 | | | | | | | | | | | | | | | | |
| 2 | SAND TILL | | | | | | | | | | | | | | | | |
| | | | 2.4 | N131 | AUGER | S865 | 9.1 | | | NP | 24.8 | 43.7 | 31.5 | | | | SM |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | 3.15 | | 3.2 | | | | | | | | | | | | | | |
| | SILT TILL GREY | | | N132 | AUGER | S866 | 23.6 | 30.9 | 26.3 | 4.6 | 2.3 | 23.4 | 74.3 | | | | CL-ML |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | BROWN | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 74

HOLE DEPTH .9

TYPE OF DRILL B40L-6" AUGERS

WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL (SAND TILL) HIGHER GRAVEL | | | | | | | | | | | | | | | | | |
| 1 | END HOLE REFUSAL .9 | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 75

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm <.074 mm % | <.005 mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SANDY GRAVEL | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| | GRAVEL COARSE | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | END HOLE 3. | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 76

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL SANDY TILL GREY | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| 1 | DARK GREY HIGHER SILT ORGANIC | | 1.1 / 1.5 | N133 | AUGER | SB6T | 16.6 | | | NP | 10.6 | 44.1 | 45.3 | | | | SM |
| 2 | | | 2.4 / 2.9 | N134 | AUGER | SB68 | 17.2 | | | NP | 14.6 | 34.7 | 50.7 | | | | ML |
| 3 | END HOLE 3. REFUSAL BOULDER | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 77

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL<br>COARSER<br>GRAVELLY SAND<br>SANDY GRAVEL | | | | | | | | | | | | | | | | |
| 1 | | | .9<br>1.5 | N135 | AUGER | S869 | 4.2 | | | NP | 58.5 | 29.1 | 12.4 | | | | GM |
| | 1.65 | | | | | | | | | | | | | | | | |
| | SILTY TILL<br>HIGHER SAND | | 2.0 | | | | | | | | | | | | | | |
| 2 | | | 2.55 | N136 | AUGER | S870 | 17.7 | | | TRACE | 25.6 | 34.6 | 23.9 | 15.9 | | | SM |
| | 2.55<br>GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | FINER | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 78

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| 1 | COARSER | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | | | 2.4 | N137 | AUGER | S871 | 3.2 | | | NP | 53.8 | 36.1 | 10.1 | | | | GW-GM |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | 3.3 | | | | | | | | | | | | | | | | |
| | SILT | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | | | | N138 | AUGER | S872 | 7.5 | | | TRACE | 52.3 | 29.2 | 18.5 | | | | GM |
| | | | 4.3 | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 13-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1079

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | SLIGHTLY COARSE | | | | | | | | | | | | | | | | |
| 1 | 1.2 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL | | | | | | | | | | | | | | | | |
| | MED COARSE | | | | | | | | | | | | | | | | |
| | FINER | | | | | | | | | | | | | | | | |
| 2 | 1.95 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | 2.1 | N139 | AUGER | S873 | 3.9 | | | NP | 27.2 | 49.7 | 23.1 | | | | SM |
| | COARSER | | 2.9 | | | | | | | | | | | | | | |
| 3 | 3.3 | | | | | | | | | | | | | | | | |
| | HIGHER SAND | | | | | | | | | | | | | | | | |
| | SLIGHTLY FINER | | | | | | | | | | | | | | | | |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 14-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: 80

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | SLIGHTY HIGHER SILT | | .9 | | | | | | | | | | | | | | |
| 1 | FINER | | | N140 | AUGER | S874 | 9.1 | | | NP | 11.4 | 50.5 | 30.1 | | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| | | | 1.8 | | | | | | | | | | | | | | |
| 2 | | | | N141 | AUGER | S875 | 7.6 | | | TRACE | 7.2 | 47.9 | 44.9 | | | | SM |
| | | | 2.3 | | | | | | | | | | | | | | |
| 3 | 3. | | | | | | | | | | | | | | | | |
| | SILT TILL | | 3.0 | | | | | | | | | | | | | | |
| | | | | N142 | AUGER | S876 | 10.1 | 21.4 | 15.7 | 5.6 | 10.0 | 37.0 | 53.0 | | | | CL-ML |
| | | | 3.8 | | | | | | | | | | | | | | |
| 4 | COARSER | | | | | | | | | | | | | | | | |
| | 4.05 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N81

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm <.074 mm % | <.005 mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | .5 | | | | | | | | | | | | | | |
| | .9 | | .9 | N143 | AUGER | S877 | 12.7 | | | NP | 6.4 | 49.4 | 44.2 | | | | SM |
| 1 | SAND TILL SLIGHTLY COARSER GRAVEL | | | | | | | | | | | | | | | | |
| | | | 1.5 | | | | | | | | | | | | | | |
| | FINE | | 2.1 | N144 | AUGER | S878 | 11.3 | | | NP | 5.9 | 48.2 | 45.9 | | | | SM |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | COARSER | | | | | | | | | | | | | | | | |
| 4 | HIGHER SAND LESS SILT | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 68-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1082

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | .8 | | | | | | | | | | | | | | |
| 1 | HIGHER SILT | | | N145 | AUGER | S879 | 9.4 | | | TRACE | 8.3 | 46.7 | 45.0 | | | | SM |
| | | | 1.4 | | | | | | | | | | | | | | |
| | 1.65 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| | | | | N146 | AUGER | S880 | 7.5 | 21.5 | 16.5 | 5.0 | 12.8 | 42.3 | 28.8 | 16.1 | | | SC-SM |
| | | | 2.4 | | | | | | | | | | | | | | |
| | COARSER | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 10 83

HOLE DEPTH 1.65
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | |
| 1 | COARSER | | | N147 | AUGER | S881 | | | | NP | 8.0 | 66.9 | 25.1 | | | | SM |
| | END HOLE 1.65 | | 1.5 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N84

HOLE DEPTH 3.'
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVER BURDEN .15 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL .3 | | | | | | | | | | | | | | | | |
| | ORGANIC SILT | | | | | | | | | | | | | | | | |
| | .9 | | | | | | | | | | | | | | | | |
| 1 | SILT TILL BROWN | | | | | | | | | | | | | | | | |
| | 1.35 | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL | | | | | | | | | | | | | | | | |
| 2 | | | 2.1 | N148 | AUGER | S882 | 11.0 | | | NP | 47.3 | 33.9 | 18.8 | | | | GM |
| | END HOLE 3. | | 3.0 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
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Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1085

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| 1 | HIGHER SILT | | 1.1 | | | | | | | | | | | | | | |
| | | | 1.5 | N149 | AUGER | S883 | 9.2 | 21.9 | 17.7 | 4.2 | 5.8 | 48.7 | 45.5 | | | | SC-SM |
| 2 | | | | | | | | | | | | | | | | | |
| | COARSER | | | | | | | | | | | | | | | | |
| 3 | 3.15 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 4 | | | 4.0 | | | | | | | | | | | | | | |
| | | | | N150 | AUGER | S884 | 7.7 | | | TRACE | 17.6 | 45.4 | 37.0 | | | | SM |
| | END HOLE 4.6 | | 4.6 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 14-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: 86

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| 1 | HIGER SILT | | | | | | | | | | | | | | | | |
| | | | 1.5 | N151 | AUGER | S885 | 7.6 | | | TRACE | 4.2 | 50.7 | 45.1 | | | | SM |
| 2 | | | 2.1 | | | | | | | | | | | | | | |
| 3 | END HOLE REFUSAL 3. | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1087

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .9 | | .9 | | | | | | | | | | | | | | |
| 1 | GRAVELLY SANDY TILL COARSER | | | N152 | AUGER | S886 | 6.8 | | | NP | 10.6 | 49.9 | 39.5 | | | | SM |
| | 1.5 | | 1.4 | | | | | | | | | | | | | | |
| | GRAVELLY SANDY TILL FINER GRAVEL | | 1.8 | | | | | | | | | | | | | | |
| 2 | | | | N153 | AUGER | S887 | 3.7 | 19.0 | 15.8 | 3.2 | 44.9 | 35.3 | 19.8 | | | | GM |
| | | | 2.6 | | | | | | | | | | | | | | |
| 3 | HIGHER SILT | | | | | | | | | | | | | | | | |
| | 3.75 | | | | | | | | | | | | | | | | |
| 4 | GRAVELLY SILT TILL | | 4.0 | | | | | | | | | | | | | | |
| | HIGHER SILT | | | N154 | AUGER | S888 | 8.7 | 24.0 | 16.3 | 7.7 | 18.4 | 38.2 | 43.4 | | | | SC |
| | END HOLE 4.6 | | 4.4 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1088

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .6 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N155 | AUGER | S889 | 11.2 | | | NP | 11.6 | 49.9 | 38.5 | | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| 2 | LESS SILT | | | | | | | | | | | | | | | | |
| 3 | HIGHER SILT | | | | | | | | | | | | | | | | |
| | | | 3.3 | | | | | | | | | | | | | | |
| | | | | N156 | AUGER | S890 | 8.9 | 19.6 | 17.8 | 1.8 | 6.5 | 47.9 | 28.9 | 16.7 | | | SM |
| 4 | | | 4.0 | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1089

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| 1 | 1.2 | | 1.2 | | | | | | | | | | | | | | |
| | SAND TILL | | | N157 | AUGER | S891 | 11.2 | 20.2 | 16.8 | 3.4 | 13.4 | 45.9 | 40.7 | | | | SM |
| | COARSER — SLIGHTLY HIGHER MOISTURE | | 1.7 | | | | | | | | | | | | | | |
| 2 | | | 2.3 | | | | | | | | | | | | | | |
| | | | | N158 | AUGER | S892 | 16.2 | | | NP | 4.8 | 49.3 | 45.9 | | | | SM |
| | | | 2.7 | | | | | | | | | | | | | | |
| 3 | LESS COARSE GRAVEL — SLIGHTLY LESS | | 3.3 | | | | | | | | | | | | | | |
| | | | | N159 | AUGER | S893 | 11.0 | | | TRACE | 36.7 | 29.7 | 33.6 | | | | GM |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N90

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SAND TILL BROWN | | .8 | | | | | | | | | | | | | | |
| 1 | | | | N160 | AUGER | S894 | 9.1 | | | NP | 5.7 | 51.1 | 43.2 | | | | SM |
| | 1.20 | | 1.2 | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL LIGHT BROWN | | | | | | | | | | | | | | | | |
| | 1.5 SAND TILL | | | | | | | | | | | | | | | | |
| 2 | HIGER SIIT | | | | | | | | | | | | | | | | |
| | | | 2.4 | | | | | | | | | | | | | | |
| | | | | N161 | AUGER | S895 | 9.9 | 19.3 | 17.5 | 1.8 | 9.0 | 43.8 | 47.2 | | | | SM |
| 3 | SIIGHTY LESS GRAVEL | | 3.0 | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 14-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 091

HOLE DEPTH

TYPE OF DRILL B40L-6" AUGERS

WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | 3.3 | | | | | | | | | | | | | | | | |
| | SAND TILL | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N162 | AUGER | S896 | 6.4 | 19.1 | 14.8 | 4.3 | 2.3 | 49.1 | 48.6 | | | | SC-SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | END HOLE | | | | | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1092

HOLE DEPTH 1.8
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | .8 | | | | | | | | | | | | | | |
| 1 | | | 1.2 | N163 | AUGER | 5897 | 6.3 | 19.6 | 14.4 | 5.2 | 4.9 | 48.9 | 46.2 | | | | SC-SM |
| | 1.35 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | END HOLE 1.8 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. CO-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1093

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .7 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL | | | | | | | | | | | | | | | | |
| | 1.35 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | 2.4 | | 2.4 | | | | | | | | | | | | | | |
| | LESS GRAVEL | | | N164 | AUGER | S898 | 6.4 | | | NP | 21.6 | 39.6 | 38.8 | | | | SM |
| 3 | END HOLE 3.00 | | 3.0 | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 15-03-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: 1094

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <0.074 mm >0.005 mm % | <0.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 | | | | | | | | | | | | | | | | |
| | GRAVELLY SANDY TILL | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | |
| | COARSER | | | | | | | | | | | | | | | | |
| 2 | | | 2.1 | | | | | | | | | | | | | | |
| | | | | N165 | AUGER | S899 | 9.0 | | | TRACE | 12.6 | 40.8 | 46.6 | | | | SM |
| | | | 2.6 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | 4.0 | | | | | | | | | | | | | | |
| | | | | N166 | AUGER | S900 | 4.1 | 21.1 | 16.7 | 4.4 | 47.8 | 30.2 | 16.9 | 5.1 | | | GC-GM |
| | 4.6 | | 4.6 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1095

HOLE DEPTH 2.85
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N167 | AUGER | S901 | 7.1 | | | NP | 13.3 | 45.2 | 41.5 | | | | SM |
| | 1.2 | | 1.2 | | | | | | | | | | | | | | |
| | GRAVELLY SAND COARSE | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | SANDY GRAVEL MED COARSE | | | | | | | | | | | | | | | | |
| | END HOLE 2.85 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 1096

HOLE DEPTH 2.4
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | .8 | | | | | | | | | | | | | | |
| 1 | | | | N168 | AUGER | S902 | 6.9 | | | TRACE | 10.5 | 46.7 | 42.8 | | | | SM |
| | | | 1.4 | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL 1.5 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | END HOLE 2.4 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N97

HOLE DEPTH 1.65
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | | | 0.3 | N-169 | AUGER | 903 | 7.0 | | | TRACE | 6.4 | 48.1 | 45.5 | | | | SM |
| | .75 | | 0.8 | | | | | | | | | | | | | | |
| 1 | SAND TILL | | | | | | | | | | | | | | | | |
| | END HOLE 1.65 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 69-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-28 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: W98

HOLE DEPTH 4.35
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| 1 | 1.20 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | | | 1.8 | N-170 | AUGER | S-931 | 7.0 | | | NP | 5.0 | 45.7 | 49.3 | | | | SM |
| 2 | SLIGHTLY COARSER | | 2.3 | | | | | | | | | | | | | | |
| 3 | 3. | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | | | 3.5 | N171 | AUGER | 905 | 4.3 | | | NP | 24.7 | 45.9 | 29.4 | | | | SM |
| 4 | | | 4.1 | | | | | | | | | | | | | | |
| | END HOLE 4.35 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N99

HOLE DEPTH 3.
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | | |
| | .6 | | | | | | | | | | | | | | | | | |
| | SAND TILL | | 0.9 | N172 | AUGER | 906 | 9.1 | | | NP | 2.9 | 46.5 | 50.6 | | | | | ML |
| 1 | | | 1.4 | | | | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | END HOLE 3. | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: W 100

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| 1 | GRAVELLY SAND TILL HIGH MOISTURE HIGHER SILT | | 0.9 | N173 | AUGER | 907 | 8.2 | | | NP | 13.4 | 64.9 | 21.7 | | | | SM |
| | 1.65 | | 1.5 | | | | | | | | | | | | | | |
| | SAND TILL BLUE GREY | | 1.8 | | | | | | | | | | | | | | |
| 2 | | | | N174 | AUGER | 908 | 14.5 | | | NP | 7.0 | 57.5 | 35.5 | | | | SM |
| | | | 2.6 | | | | | | | | | | | | | | |
| 3 | SLIGHTLY COARSER LESS MOISTURE GREY | | | | | | | | | | | | | | | | |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DPWC NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N101

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVER BURDEN .15 | | | | | | | | | | | | | | | | |
| | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | HIGHER SILT | | | | | | | | | | | | | | | | |
| 1 | 1.05 | | | | | | | | | | | | | | | | |
| | SAND TILL GREY-BLUE | | 1.1 | | | | | | | | | | | | | | |
| | | | 1.5 | N-175 | AUGER | S-932 | 14.4 | | | NP | 11.1 | 59.0 | 29.9 | | | | SM |
| | HIGHER SILT | | | | | | | | | | | | | | | | |
| 2 | HIGHER MOISTURE | | | | | | | | | | | | | | | | |
| | | | 2.3 | | | | | | | | | | | | | | |
| | | | 2.7 | N-176 | AUGER | S-933 | 11.3 | 16.8 | 14.1 | 2.7 | 18.0 | 40.8 | 41.2 | | | | SM |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 102 N

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | <.074mm >.005mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| 1 | SAND TILL BROWN | | | | | | | | | | | | | | | | |
| | 1.35 | | | | | | | | | | | | | | | | |
| | SAND TILL GREY | | | | | | | | | | | | | | | | |
| | | | 1.7 | N177 | AUGER | 909 | 15.3 | | | TRACE | 3.8 | 45.7 | 50.5 | | | | ML |
| 2 | | | 2.3 | | | | | | | | | | | | | | |
| | | | 3.0 | N-178 | AUGER | 910 | 9.8 | 18.6 | 15.7 | 2.9 | 23.0 | 38.9 | 26.3 | 11.8 | | | SM |
| 3 | | | 3.7 | | | | | | | | | | | | | | |
| | LESS SILT | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N103

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm <.074 mm % | <.005 mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| | | | 0.9 | | | | | | | | | | | | | | |
| 1 | | | | N-179 | AUGER | 911 | 5.4 | | | NP | 6.8 | 63.3 | 29.9 | | | | SM |
| | HIGHER MOISTURE HIGHER SILT | | 1.5 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| | | | | N-180 | AUGER | S-934 | 12.3 | | | TRACE | 5.9 | 46.9 | 47.2 | | | | SM |
| | | | 2.4 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | SLIGHTLY HIGHER MOISTURE | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 104 N

HOLE DEPTH 4.6

TYPE OF DRILL B40L-6" AUGERS

WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVER BURDEN<br>ORGANIC SILT<br>BLACK | | | | | | | | | | | | | | | | |
| 1 | SILT TILL<br>DARK GREY | | 1.2<br>1.7 | N-181 | AUGER | S-935 | 14.4 | 22.1 | 18.2 | 3.9 | 8.7 | 26.9 | 64.4 | | | | ML |
| 2 | HIGHER SAND 2.<br>SAND TILL<br>GREY<br>HIGH MOISTURE | | 2.3<br>2.7 | N 182 | AUGER | 912 | 11.4 | | | TRACE | 14.9 | 36.8 | 48.3 | | | | SM |
| 3 | COARSER GRAVEL | | | | | | | | | | | | | | | | |
| 4 | END HOLE 4.6 | | | | | | | | | | | | | | | | |
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Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: 105

HOLE DEPTH
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm <.074 mm % | <.005 mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .175 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL | | | | | | | | | | | | | | | | |
| | HIGHER MOISTURE HIGHER SILT | | 1.1 | | | | | | | | | | | | | | |
| | | | 1.5 | N183 | AUGER | 913 | 14.5 | | | NP | 13.6 | 42.0 | 44.4 | | | | SM |
| | | | 1.8 | | | | | | | | | | | | | | |
| 2 | LESS GRAVEL | | | N-184 | AUGER | S-936 | 10.5 | | | TRACE | 12.0 | 46.2 | 41.8 | | | | SM |
| | | | 2.3 | | | | | | | | | | | | | | |
| | COARSER | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | | | 3.8 | | | | | | | | | | | | | | |
| 4 | SLIGHTLY LESS SILT LESS COARSE GRAVEL | | 4.1 | N185 | AUGER | 914 | 11.0 | | | NP | 10.7 | 46.0 | 43.3 | | | | SM |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 15-03-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N106

HOLE DEPTH 4.6
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm % | <.074mm <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .3 SAND TILL DARK BROWN | | | | | | | | | | | | | | | | |
| | .6 GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| 1 | LESS GRAVEL HIGHER SILT | | | | | | | | | | | | | | | | |
| 1.8 | | | | | | | | | | | | | | | | | |
| 2 | | | | N186 | AUGER | S-915 | 10.8 | 18.2 | 14.5 | 3.7 | 3.5 | 47.4 | 49.1 | | | | SM |
| 2.3 | | | | | | | | | | | | | | | | | |
| 3 | HIGHER MOISTURE | | | | | | | | | | | | | | | | |
| 3.3 | | | | | | | | | | | | | | | | | |
| | | | | N-187 | AUGER | S-937 | 10.4 | | | NP | 29.8 | 33.1 | 37.1 | | | | SM |
| 4 | | | | | | | | | | | | | | | | | |
| 4.0 | | | | | | | | | | | | | | | | | |
| | END HOLE 4.6 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

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Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 107

HOLE DEPTH 4.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ORGANIC SILT | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SAND TILL | | 0.6 | | | | | | | | | | | | | | |
| 1 | | | | N-188 | AUGER | S-938 | 11.2 | | | NP | 19.1 | 36.3 | 44.6 | | | | SM |
| | | | 1.1 | | | | | | | | | | | | | | |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| | | | | N-189 | AUGER | S-939 | 10.6 | | | NP | 28.4 | 31.6 | 40.0 | | | | SM |
| | | | 2.3 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| | | | 3.7 | | | | | | | | | | | | | | |
| | | | | N-190 | AUGER | S-940 | 10.9 | | | NP | 25.5 | 32.4 | 28.1 | | | | SM |
| 4 | | | 4.0 | | | | | | | | | | | | | | |
| | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N108

HOLE DEPTH 2.25
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm % | <.074 mm <.005 mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | SILTY GRAVELLY SAND | | | | | | | | | | | | | | | | |
| | .75 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL | | 0.9 | N-191 | AUGER | S-941 | 11.1 | | | NP | 7.4 | 45.0 | 47.6 | | | | SM |
| | | | 1.4 | | | | | | | | | | | | | | |
| 2 | REFUSAL @ 2.25 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 109

HOLE DEPTH 2.10

TYPE OF DRILL B40L-6" AUGERS

WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL<br>SILTY GRAVELLY SAND | | | | | | | | | | | | | | | | |
| | .60 | | | | | | | | | | | | | | | | |
| 1 | SAND TILL | | 0.9 | N-192 | AU6. | S-942 | 10.0 | | | NP | 6.8 | 49.3 | 43.9 | | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| 2 | REFUSAL @ 2.10 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 110

HOLE DEPTH 3.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT TILL | | | | | | | | | | | | | | | | |
| | | | 0.2 | N-193 | AUGER | S-943 | 19.1 | 28.4 | 17.2 | 5.2 | | 20.1 | 79.9 | | | | CL-ML |
| | .75 | | 0.5 | | | | | | | | | | | | | | |
| 1 | SAND TILL | | 0.9 | N-194 | AUGER | S944 | 8.7 | | | TRACE | 25.1 | 35.2 | 39.7 | | | | SM |
| | | | 1.4 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| | | | 2.9 | N-195 | AUGER | S945 | 7.8 | | | TRACE | 31.7 | 30.2 | 38.1 | | | | GM |
| 3 | | | 3.3 | | | | | | | | | | | | | | |
| | REFUSAL @ 3.60 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N 111

HOLE DEPTH 4.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SAND TILL | | | | | | | | | | | | | | | | |
| 1 | | | 0.9 | N-196 | AUGER | S-946 | 7.9 | 18.0 | 13.6 | 4.4 | 22.4 | 35.7 | 41.9 | | | | SC-SM |
| | | | 1.4 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | 3.0 | N-197 | AUGER | S-947 | 8.2 | 19.6 | 15.2 | 4.4 | 22.6 | 33.5 | 43.9 | | | | SC-SM |
| | | | 3.5 | | | | | | | | | | | | | | |
| 4 | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8

HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N112

HOLE DEPTH 4.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | |
| 1 | SILTY SAND TILL | | | N198 | AUGER | 5948 | 15.1 | 21.7 | 19.2 | 2.5 | 5.9 | 39.6 | 54.5 | | | | ML |
| | | | 1.1 | | | | | | | | | | | | | | |
| | | | 1.8 | | | | | | | | | | | | | | |
| 2 | | | | N199 | AUGER | 5949 | 12.5 | 18.9 | 15.0 | 3.9 | 6.3 | 41.3 | 52.4 | | | | ML |
| | | | 2.3 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
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Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 — HOLE LOCATION:

DATE DRILLED: 16-3-78 — DRILL TECHNICIAN: J.G. — PLOTTED BY: R.S. — HOLE ELEVATION: — HOLE NO.: N 113

HOLE DEPTH 4.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL<br>GRAVELLY SILTY SAND | | | | | | | | | | | | | | | | |
| 1 | 1.05 | | | | | | | | | | | | | | | | |
| | SILT TILL | | 1.1 | N200 | AUGER | S950 | 38.3 | | | NP | 1.2 | 34.5 | 44.9 | 19.4 | | | OL |
| | | | 1.5 | N201 | AUGER | S951 | 27.1 | 30.2 | 25.0 | 5.2 | 4.7 | 22.6 | 72.7 | | | | CL-ML |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| | 2.40 | | | | | | | | | | | | | | | | |
| | SAND TILL | | | | | | | | | | | | | | | | |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | | | | N202 | AUGER | S952 | 14.0 | | | NP | 8.8 | 44.3 | 46.9 | | | | SM |
| | | | 3.8 | | | | | | | | | | | | | | |
| 4 | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N114

HOLE DEPTH
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT TILL ORGANIC | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SILT TILL | | .90 | | | | | | | | | | | | | | |
| 1 | | | | N203 | AUGER | S953 | 19.6 | 29.0 | 20.3 | 8.7 | 2.2 | 14.5 | 83.3 | | | | CL |
| | | | 1.4 | | | | | | | | | | | | | | |
| | 1.65 | | 1.8 | | | | | | | | | | | | | | |
| 2 | SAND TILL | | | N204 | AUGER | S954 | 9.3 | | | NP | 13.5 | 13.3 | 73.2 | | | | ML |
| | | | 2.3 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N115

HOLE DEPTH
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT TILL ORGANIC | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | SAND TILL | | .6 | | | | | | | | | | | | | | |
| 1 | | | | N205 | AUGER | 5955 | 13.1 | | | NP | 27.7 | 28.6 | 43.7 | | | | SM |
| | | | 1.2 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | | | | N206 | AUGER | 5956 | 9.4 | 19.2 | 14.2 | 5.0 | 20.2 | 32.1 | 47.7 | | | | SC-SM |
| | | | 3.7 | | | | | | | | | | | | | | |
| 4 | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N116

HOLE DEPTH 3.00
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ICE | | | | | | | | | | | | | | | | |
| | .30 | | | | | | | | | | | | | | | | |
| 1 | ORGANIC SILT | | | | | | | | | | | | | | | | |
| | 1.35 | | | | | | | | | | | | | | | | |
| | SAND TILL | | 1.5 | N207 | AUGER | S957 | 12.3 | | | NP | 16.3 | 39.0 | 44.7 | | | | SM |
| 2 | | | 2.0 | | | | | | | | | | | | | | |
| 3 | END HOLE @ 3.00 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N117

HOLE DEPTH 3.15
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005 mm <.074 mm % | <.005 mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | | | | | | | | | | |
| | SAND TILL | | .2 – .8 | N208 | AUGER | S958 | 7.1 | | | NP | 11.1 | 48.0 | 40.9 | | | | SM |
| 1 | | | | | | | | | | | | | | | | | |
| 2 | | | 2.4 | | | | | | | | | | | | | | |
| | | | | N209 | AUGER | S959 | 5.2 | | | NP | 15.6 | 44.9 | 39.5 | | | | SM |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | REFUSAL @ 3.15 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
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DRWG. NO. 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N118

HOLE DEPTH 3.30
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SAND TILL | | | | | | | | | | | | | | | | |
| | | | .9 | | | | | | | | | | | | | | |
| 1 | | | | N210 | AUGER | S960 | 7.4 | | | NP | 15.7 | 41.3 | 27.8 | 15.2 | | | SM |
| | | | 1.5 | | | | | | | | | | | | | | |
| | 1.80 | | | | | | | | | | | | | | | | |
| 2 | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | | | 2.4 | | | | | | | | | | | | | | |
| | | | | N211 | AUGER | S961 | 7.5 | | | NP | 15.8 | 39.3 | 44.9 | | | | SM |
| 3 | | | 3.0 | | | | | | | | | | | | | | |
| | REFUSAL @ 3.30 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. 60-194

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N119

HOLE DEPTH 3.00
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | SILT TILL | | | | | | | | | | | | | | | | |
| | | | .8 | | | | | | | | | | | | | | |
| 1 | | | 1.2 | N212 | AUGER | S962 | 12.1 | 19.5 | 15.4 | 4.2 | 16.4 | 27.2 | 56.4 | | | | CL-ML |
| | 1.80 | | | | | | | | | | | | | | | | |
| 2 | SAND TILL | | | | | | | | | | | | | | | | |
| 3 | REFUSAL @ 3.00 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N120

HOLE DEPTH 4.60
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS. CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ORGANIC SILT | | | | | | | | | | | | | | | | |
| | .45 | | | | | | | | | | | | | | | | |
| | | | .6 | | | | | | | | | | | | | | |
| 1 | SAND TILL | | | N213 | AUGER | S963 | 19.4 | | | NP | 4.3 | 39.9 | 55.8 | | | | ML |
| | | | 1.2 | | | | | | | | | | | | | | |
| | 1.65 | | | | | | | | | | | | | | | | |
| 2 | SILT TILL | | | | | | | | | | | | | | | | |
| | | | 2.3 | | | | | | | | | | | | | | |
| | | | | N214 | AUGER | S964 | 13.0 | 21.0 | 15.1 | 5.9 | 10.8 | 25.3 | 63.9 | | | | CL-ML |
| | | | 2.7 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| | END HOLE @ 4.60 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
## WHITEHORSE, Y.T.

# SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N121

HOLE DEPTH 2.25
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | ROAD FILL | | | | | | | | | | | | | | | | |
| | GRAVELLY SILTY SAND | | .8 | | | | | | | | | | | | | | |
| 1 | | | 1.5 | N215 | AUGER | S965 | 7.6 | | | NP | 4.6 | 48.7 | 46.7 | | | | SM |
| | 1.65 | | | | | | | | | | | | | | | | |
| 2 | GRAVELLY SAND TILL | | | | | | | | | | | | | | | | |
| | REFUSAL @ 2.25 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG. NO. CQ-104

Public Works Canada

# MATERIALS QUALITY CONTROL LABORATORY
WHITEHORSE, Y.T.

## SUBSURFACE TESTING REPORT

PROJECT: SHAKWAK SEGMENT 8 | HOLE LOCATION:

DATE DRILLED: 16-3-78 | DRILL TECHNICIAN: J.G. | PLOTTED BY: R.S. | HOLE ELEVATION: | HOLE NO.: N122

HOLE DEPTH 3.00
TYPE OF DRILL B40L-6" AUGERS
WATER LEVEL

| DEPTH (M.) | SOIL DESCRIPTION | N.R.C. PERMAFROST CLASSIFICATION | SAMPLE IDENTIFICATION DATA: SAMPLE DEPTH (FT.) | SAMPLE NUMBER (FIELD) | SAMPLE TYPE | LABORATORY NUMBER | NATURAL MOISTURE CONTENT % | CONSISTENCY LIMITS: LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | MECHANICAL ANALYSIS: GRAVEL % | SAND % | >.005mm <.074mm % | <.005mm % | DRY DENSITY LBS./CU. FT. | STANDARD PENETRATION RESISTANCE BLOWS/FT. | UNIFIED CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | OVERBURDEN | | | | | | | | | | | | | | | | |
| | .20 | | .2 | | | | | | | | | | | | | | |
| | GRAVEL | | | N216 | AUGER | S966 | 5.5 | | | NP | 45.5 | 41.5 | 13.0 | | | | GM |
| 1 | | | .8 | | | | | | | | | | | | | | |
| | 1.65 | | | | | | | | | | | | | | | | |
| | | | 1.8 | | | | | | | | | | | | | | |
| 2 | GRAVELLY SAND TILL | | | N217 | AUGER | S967 | 8.5 | | | NP | 27.0 | 37.2 | 35.8 | | | | SM |
| | | | 2.4 | | | | | | | | | | | | | | |
| 3 | END HOLE @ 3.00 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |

DRWG NO 60-104