

GEOTECHNICAL INVESTIGATIONS

**Highway Construction
Km 1738.3 to 1750.2 Highway #1
Yukon, 2002-2003
Volume 4 of 4**



**Community and Transportation Services
Transportation Engineering Branch**

Geotechnical Services

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HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION
Km 1738.3 to 1750.2
YUKON 2002-2003

ALASKA HIGHWAY #1

Highway Construction
Km 1738.3 to 1750.2
Alaska Highway #1
Yukon 2002-2003
Volume 4 of 4

This Data Package prepared for project viewing:

March, 2002

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

CONTENTS

Volume 1 of 4

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING ALASKA HIGHWAY

Subsurface Exploration and Testing Report Sheets are provided.

The reports for the centreline holes are arranged according to project location, starting at Km 1775+500 and increasing to Km 1786+500.

TEST HOLES 1292 to 1326	shown with prefix 541-
TEST HOLES 1327 to 1333	shown with prefix 542-
TEST HOLES 1334 to 1369	shown with prefix 543-
TEST HOLES 1370 to 1400	shown with prefix 544-
TEST HOLES 287 to 332	shown with prefix 611-
TEST HOLES 333 to 353	shown with prefix 612-

NOTE:

Centreline Test Hole locations indicated on the Subsurface Exploration and Testing Report Sheets are approximate. Actual Test Hole locations, located by GPS survey or field survey, are as shown on project plans.

CONTENTS (continued)

Volume 2 of 4

CENTRELINE TESTING ALASKA HIGHWAY

Laboratory Testing Result Sheets are provided.

The reports for the centreline holes are arranged according to test hole number, starting at 541-1292 and increasing to 612-353.

TEST HOLES 1292 to 1326

shown with prefix 541-

TEST HOLES 1327 to 1333

shown with prefix 542-

TEST HOLES 1334 to 1369

shown with prefix 543-

TEST HOLES 1370 to 1400

shown with prefix 544-

TEST HOLES 287 to 332

shown with prefix 611-

TEST HOLES 333 to 353

shown with prefix 612-

NOTE:

Centreline Test Hole locations indicated on the Subsurface Exploration and Testing Report Sheets are approximate. Actual Test Hole locations, located by GPS survey or field survey, are as shown on project plans.

CONTENTS (continued)**Volume 3 of 4****GRANULAR SOURCE Km 1738.8 RHS & LHS ALASKA HIGHWAY**

Location plans and subsurface exploration and testing report sheets are provided.

Auger Testing

2001	TEST HOLES 344 & 345	shown with prefix 612-
2001	TEST HOLES 1891 to 1904	shown with prefix 622-

Backhoe Testing

2001	TEST PITS 1699 to 1713	shown with prefix 630-
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CONTENTS (continued)**Volume 4 of 4****GRANULAR SOURCE Km 1750.0 LHS ALASKA HIGHWAY**

Location plans, photographs, and subsurface exploration and testing report sheets are provided.

Auger Testing

1985	TEST HOLES 32 and 37 to 40	shown with prefix 777-
2001	TEST HOLES 1948 to 1964	shown with prefix 625-

Backhoe Testing

1985	TEST PITS 108 to 112	shown with prefix 808-
1988	TEST PITS 1 to 21	shown with prefix 029-
1988	TEST PITS 22 to 39	shown with prefix 030-
2002	TEST PITS 1 to 25	shown with prefix 631-

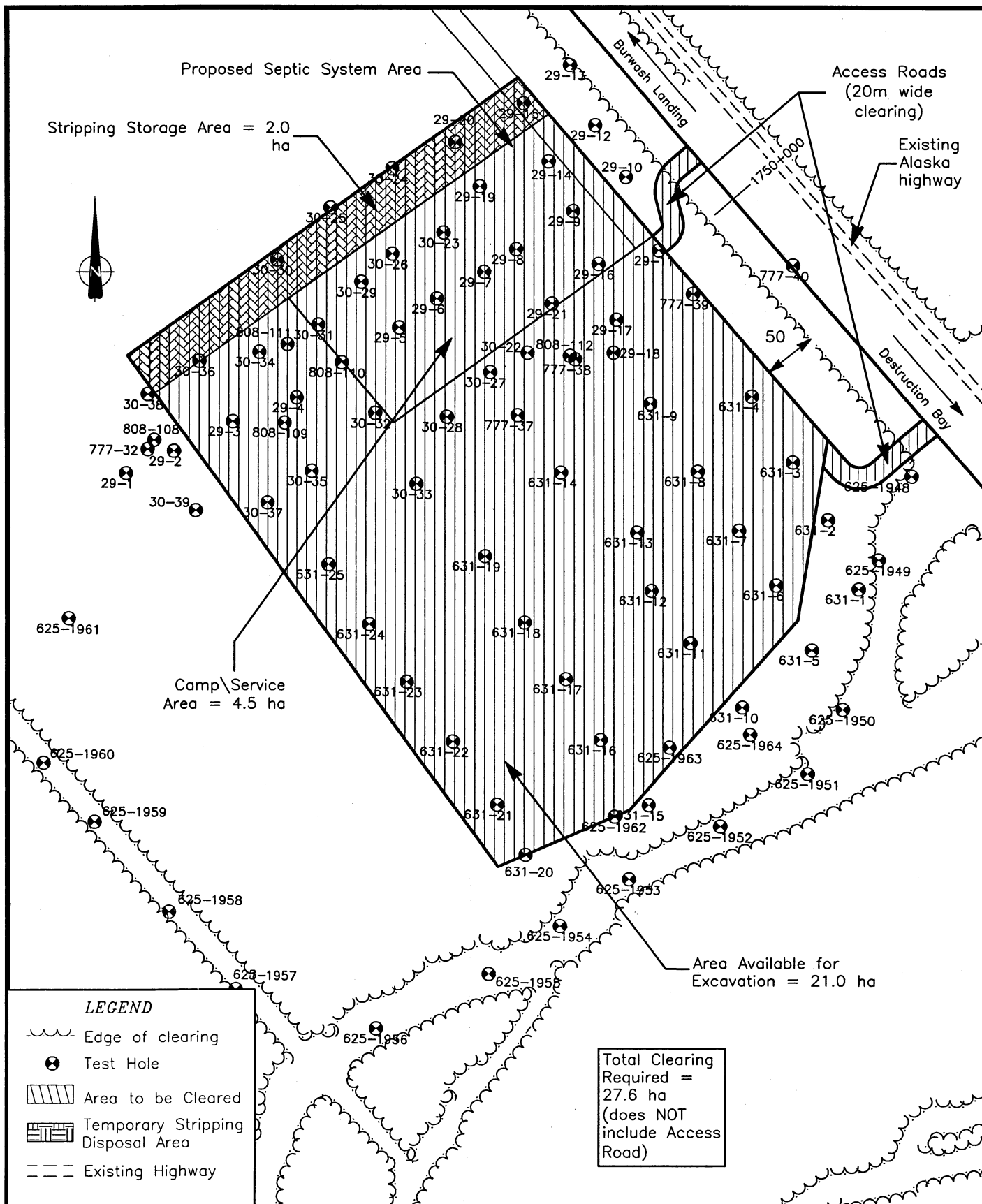
HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1738.3 to 1750.2
YUKON 2002-2003

ALASKA HIGHWAY #1

GRANULAR SOURCE TESTING
Km 1750.0 LHS
ALASKA HIGHWAY



Yukon
Infrastructure

Transportation Engineering Branch

SITE PLAN

CAMP/SERVICE & GRANULAR
BORROW SOURCE
km 1750, LEWIS CREEK
ALASKA HWY., YUKON

designed: B. STANLEY

drawn: KLJ

app'd:

date: 2002-04-03

scale: 1:5,000

drwg: 011750SP

Pit 115 G-04
Km 1750 LHS Alaska Highway

1985
Test Hole Logs

SUBSURFACE EXPLORATION AND TESTING REPORT 777-32

PROJECT/SECTION		HOLE No. 85-52	
HOLE LOCATION		ELEV.	DEPTH TO G.W.L.
DATE DRILLED 85-05-31	DRILL UNIT 830 6" AUGER	TECHNICIAN D.S.	

DEPTH (m.)	DESCRIPTION OF MATERIAL	SAMPLE DATA							0 - % MOISTURE CONTENT X - % < .074 mm			
		PERMAFROST CLASS. or G.W.L.	SAMPLE TYPE	FIELD No.	LAB No.	UNIFIED CLASSIFICATION	% GRAVEL	% SAND	% < .005 mm	STD PENETRATION BLOWS/300 mm	PLASTIC LIMIT	LIQUID LIMIT
1	WELL-GRADED GRAVEL WITH SAND - GRAY											
		AP	97	224	GW	6.3	35.8	—			0 x	26
2	ROCKY - SLOW DRILLING WELL-GRADED GRAVEL - GRAY											
		AP	98	225	GW	8.2	14.2	—			0 x	26
3	WELL-GRADED GRAVEL WITH SILT AND SAND - GRAY											
		AP	99	226	GW	5.7	36.4	—			0 x	26
	REFUSAL											
4												
5												
6												
7												
8												
9												
10												



SUBSURFACE EXPLORATION AND TESTING REPORT 777-37

PROJECT/SECTION

HOLE No.

~~85-37~~

HOLE LOCATION

ELEV.

DEPTH TO G.W.L.

DATE DRILLED 85-05-31

DRILL UNIT 830

6" AUGER

TECHNICIAN

D.S.

DEPTH (m.)	DESCRIPTION OF MATERIAL	SAMPLE DATA								0 - % MOISTURE CONTENT x - % < .074mm																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		PERMAFROST CLASS. or G.W.L.	SAMPLE TYPE	FIELD No.	LAB No.	UNIFIED CLASSIFICATION	% GRAVEL	% SAND	% < .005mm	STD. PENETRATION BLOWS/300mm	PLASTIC LIMIT — LIQUID LIMIT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
1	POORLY GRADED GRAVEL WITH SAND -DK. GREY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</

SUBSURFACE EXPLORATION AND TESTING REPORT

777-38

[illegible]

SUBSURFACE EXPLORATION AND TESTING REPORT

777-39

PROJECT/SECTION					HOLE No. 85-39				
HOLE LOCATION				ELEV.		DEPTH TO G.W.L.			
DATE DRILLED 85-05-31			DRILL UNIT 830 - 6" AUGER			TECHNICIAN D.S.			

DEPTH (m)	DESCRIPTION OF MATERIAL	PERMAFROST CLASS. or G.W.L.	SAMPLE TYPE	FIELD No.	LAB No.	SAMPLE DATA				STD. PENETRATION BLOWS/300mm	0 - % MOISTURE CONTENT X - % < .074mm PLASTIC LIMIT — LIQUID LIMIT	
						UNIFIED CLASSIFICATION	% GRAVEL	% SAND	% < .005mm			
1	WELL-SORTED GRAVEL WITH SAND - brown		A/P 119	245	GW	LS	88.3	—				
2												
3	- dk. grey		A/P 120	246	GW	LS	82.2	—				
4	WELL-SORTED GRAVEL WITH SILT AND SAND - dk. grey		A/P 121	247	GW	LS	84.3	—				
5	END HOLE											
6												
7												
8												
9												
10												

SUBSURFACE EXPLORATION AND TESTING REPORT

777-40

PROJECT/SECTION		HOLE No.
HOLE LOCATION		ELEV.
DATE DRILLED 85-05-31		DEPTH TO G.W.L.
DRILL UNIT 830 - 6" AUGER		TECHNICIAN J.S.

DEPTH (m.)	DESCRIPTION OF MATERIAL	SAMPLE DATA								0 - % MOISTURE CONTENT X - % < .074 mm	
		PERMAFROST CLASS. or G.W.L.	SAMPLE TYPE	FIELD No.	LAB No.	UNIFIED CLASSIFICATION	% GRAVEL	% SAND	% < .005 mm	STD PENETRATION BLOWS/300 mm	PLASTIC LIMIT — LIQUID LIMIT
1	WELL-GRADED SAND WITH SILT AND GRAVEL -dk. grey										
		A/P	122	248	SW-SM	45.1	45.8	—		0 x	NP
2											
3	WELL-GRADED GRAVEL WITH SILT AND SAND -dk. grey										
		A/P	123	249	SW-GM	59.7	34.6	—		0 x	NP
4	WELL-GRADED SAND WITH SILT AND GRAVEL -dk. grey										
		A/P	124	250	SW-SM	41.9	48.5	—		0 x	NP
5	END HOLE										
6											
7											
8											
9											
10											

Pit 115 G-04
Km 1750 LHS Alaska Highway

2001
Test Hole Logs

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1948	
ENGINEERING CAPITAL		LEWIS CREEK CHANNL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID						
0.0	SANDY GRAVEL -moist											0.0
1.0	SILTY SAND (SM) -with organics -grindy drilling from surface -moist		1428				SM					1.0
2.0	SILTY GRAVEL WITH SAND (GM) -black -moist -smooth drilling - odd grindy											2.0
3.0			1429				GM					3.0
4.0												4.0
5.0	END HOLE @ 4.5m Note: previously excavated to build berm											5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1949	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -grey -damp to moist -moderately rough grindy drilling							0.0
1.0								1.0
2.0			1430			GP		2.0
3.0	-damp below 3.0m							3.0
4.0			1431			GP-GM		4.0
5.0	END HOLE @ 4.5m							5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1950	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -grey -damp -rough drilling from surface										0.0
1.0											1.0
2.0	ORGANICS - WOOD -smooth penetration										2.0
3.0	SANDY SILT (ML) -brown -moist -smooth drilling										3.0
4.0											4.0
5.0	END HOLE @ 4.5m Note: Approx 30m rt of existing channel										5.0
6.0											6.0

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Transportation Engineering

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COMPLETION DEPTH: 4.5 m
COMPLETE: 01/09/25

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1951	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -rough drilling from surface							0.0
1.0								1.0
2.0			1434			GP-GM		2.0
3.0	-not as rough drilling below 2.8m							3.0
4.0			1435			GP-GM		4.0
5.0	END HOLE @ 4.5m							5.0
6.0								6.0

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	REVIEWED BY:	COMPLETE: 01/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1952	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	SANDY GRAVEL -grindy drilling from surface							0.0
1.0	SANDY SILT (ML) -brown -wet -smooth drilling							1.0
			1436	● ▲		ML	■ ◆	
2.0								2.0
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -moist -grindy drilling							3.0
4.0			1437	● ▲		GP-GM	◆ ■	4.0
5.0	END HOLE @ 4.5m							5.0
6.0								6.0

Government of Yukon Transportation Engineering		LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
		REVIEWED BY:	COMPLETE: 01/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1953						
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361						
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)						
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80		DEPTH (m)
0.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -rough drilling									0.0
1.0									1.0	
2.0			1438 ▲		GP-GM		◆	■	2.0	
3.0									3.0	
4.0			1439 ▲		GP-GM		◆	■	4.0	
5.0	END HOLE @ 4.5m									5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 4.5 m				
				REVIEWED BY:		COMPLETE: 01/09/25				
				Fig. No:		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1954	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				PLASTIC	M.C.	LIQUID							PERCENT GRAVEL ■
				20	40	60	80		20	40	60	80	
0.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -moist -rough grinding drilling												0.0
1.0													1.0
2.0			1440					GP					2.0
3.0													3.0
4.0			1441					GP-GM					4.0
5.0	END HOLE @ 4.5m												5.0
6.0													6.0

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		REVIEWED BY:	COMPLETE: 01/09/25
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1955	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	SANDY GRAVEL -brown -damp												0.0
1.0													1.0
2.0	SANDY SILT (ML) -moist to wet -smooth drilling		1442					ML					2.0
3.0													3.0
4.0	SILTY SAND WITH GRAVEL (SM) -brown -wet -smooth drilling		1443					SM					4.0
5.0	END HOLE @ 4.5m												5.0
6.0													6.0

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	REVIEWED BY:	COMPLETE: 01/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1956	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)		
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL				
0.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -rough drilling from surface to 2.75m			20	40	60	80			20	40	60	80	0.0
1.0														1.0
2.0														2.0
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -not as coarse -smoother drilling													3.0
4.0														4.0
5.0	END HOLE @ 4.5m													5.0
6.0														6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1957	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
				20	40	60			80	20	
0.0	SILTY GRAVEL WITH SAND (GM) -brown - grey -damp -smooth drilling to 2.0m										0.0
1.0											1.0
2.0											2.0
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -minor grindy drilling										2.0
3.0											3.0
4.0	-more grindy drilling below 3.5m										4.0
4.0											4.0
4.5	END HOLE @ 4.5m										4.5
5.0											5.0
6.0											6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1958	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC M.C. LIQUID					PERCENT SAND		PERCENT GRAVEL	
				20	40	60			20	40	60	
0.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -brown -moist -grindy drilling from 0.5m											0.0
1.0												1.0
2.0			1448				GM					2.0
3.0												3.0
4.0			1449				SM					4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1959	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	ORGANIC											0.0
	SILTY SAND WITH GRAVEL (SM)											
	-brown											
	-moist											
	-minor grinding drilling											
1.0												1.0
			1450					SM				
2.0												2.0
3.0												3.0
4.0			1451					SM				4.0
5.0												5.0
6.0												6.0
	END HOLE @ 4.5m											

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1960	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	SILTY SAND WITH GRAVEL (SM) -brown -damp -smooth tight drilling											0.0
1.0												1.0
2.0	-odd grinding drilling below 2.0m											2.0
3.0	-minor grindy drilling below 3.0m											3.0
4.0			1452				SM					4.0
4.0			1453				SM					4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1961	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)		
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL				
0.0	POORLY GRADED GRAVEL WITH SAND (GP) -saturated -rough drilling from surface to 3.0m			20	40	60	80			20	40	60	80	0.0
1.0														1.0
2.0														2.0
3.0	-smooth easy penetration below 3.0m													3.0
4.0														4.0
5.0	END HOLE @ 4.5m Note: 50m upchain of # 1960 - moving water same toward grid area													5.0
6.0														6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAS SEG 11		TEST HOLE NO: 625-1962	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)												
	-brown												
	-damp												
	-rough drilling from surface to 3.5m												
1.0												1.0	
2.0												2.0	
3.0												3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

END HOLE @ 4.5m

LOGGED BY: G.C.

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 01/09/25

Government of Yukon

Transportation Engineering

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAS SEG 11		TEST HOLE NO: 625-1963	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -rough drilling from surface to 4.5m							0.0
1.0								1.0
2.0			1458			GP		2.0
3.0								3.0
4.0			1459			GP		4.0
5.0	END HOLE @ 4.5m							5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 625-1964	
ENGINEERING CAPITAL		LEWIS CREEK CHANNEL		Project No: 092-202101-0361	
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)			
				PLASTIC		M.C.			LIQUID		PERCENT SAND		PERCENT GRAVEL		
				20	40	60			80	20	40		60	80	20
0.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -rough drilling from surface to 2.8m												0.0		
1.0													1.0		
2.0			1460				GP						2.0		
3.0	SILTY SAND WITH GRAVEL (SM) -brown -moist -smooth drilling												3.0		
4.0			1461				SM						4.0		
5.0	END HOLE @ 4.5m												5.0		
6.0													6.0		

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/25
	Fig. No:	Page 1 of 1

Pit 115 G-04
Km 1750 LHS Alaska Highway

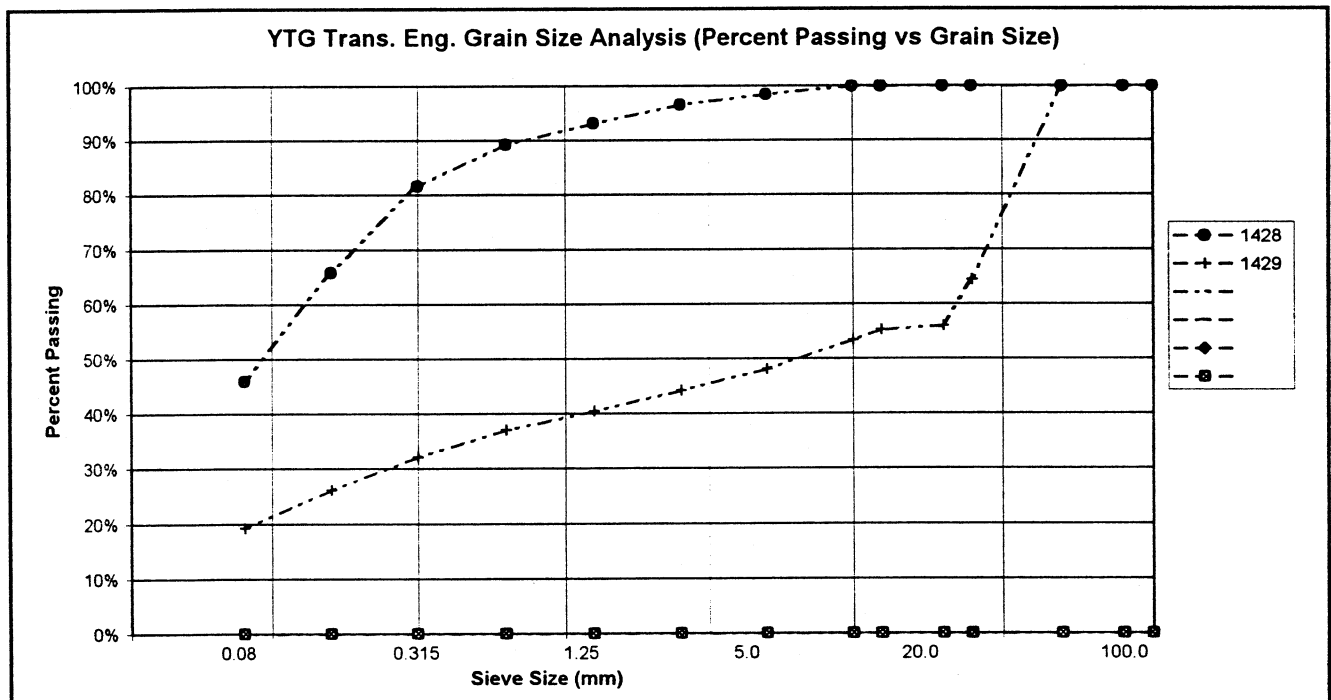
2001
Sample Test Results

PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1948

DATE COMP: 2001/09/25

FIELD NO:	1428	1429				
LAB NO:	2208	2209				
DEPTH:	1.0-1.5	2.5-3.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	100%	64%				
20.0	100%	56%				
12.5	100%	55%				
10.0	100%	53%				
5.0	98%	48%				
2.5	97%	44%				
1.25	93%	40%				
0.630	89%	37%				
0.315	82%	32%				
0.160	66%	26%				
0.080	46%	19%				
M.C.(%)	31%	10%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	2	52				
% SAND:	52	29				
% FINES:	46	19				
CLASSIFICATION	SILTY SAND (SM)	SILTY GRAVEL WITH SAND (GM)				



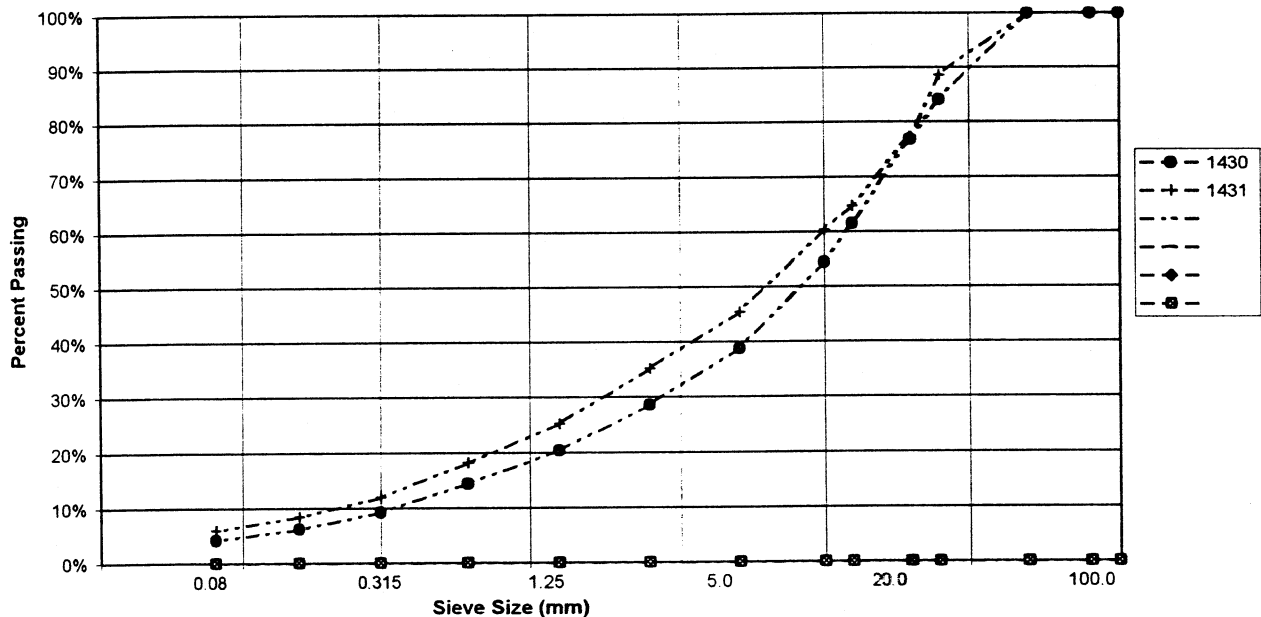
PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1949

DATE COMP: 2001/09/25

FIELD NO:	1430	1431				
LAB NO:	2210	2211				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	84%	89%				
20.0	77%	77%				
12.5	61%	65%				
10.0	54%	60%				
5.0	39%	45%				
2.5	29%	35%				
1.25	20%	25%				
0.630	14%	18%				
0.315	9%	12%				
0.160	6%	8%				
0.080	4%	6%				
M.C.(%)	2%	2%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	61	55				
% SAND:	35	39				
% FINES:	4	6				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

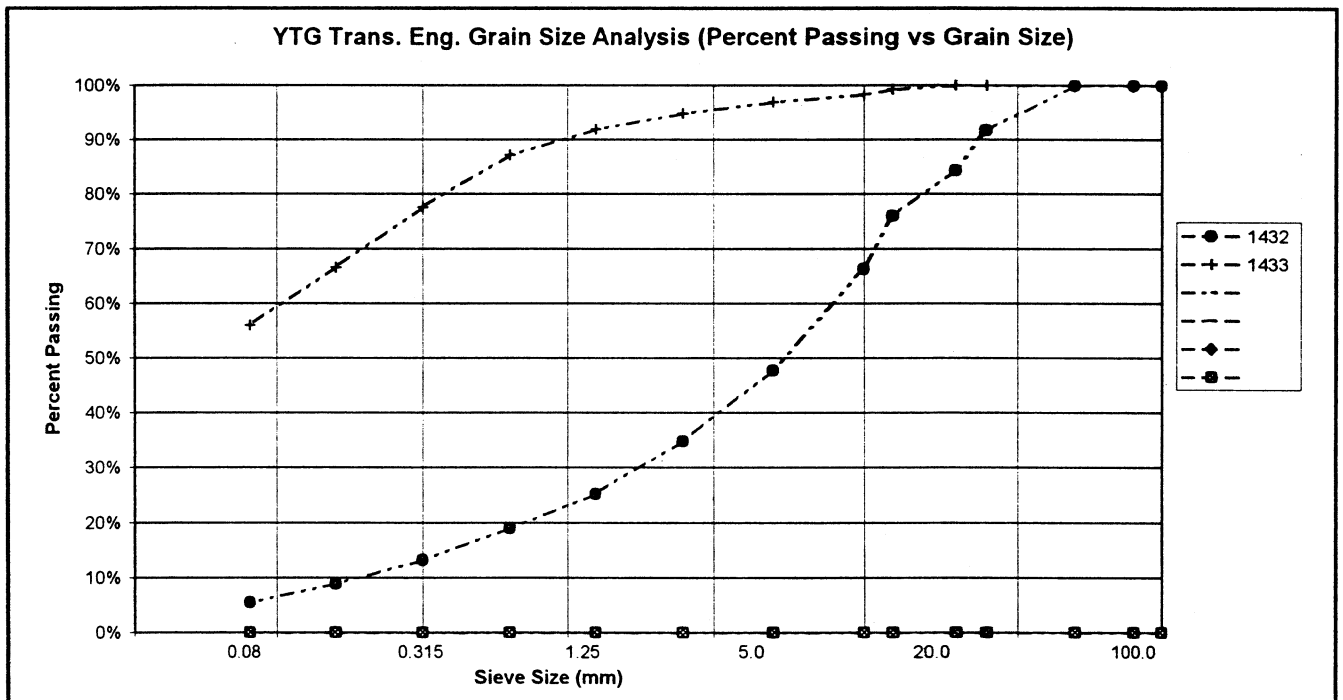


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1950

DATE COMP: 2001/09/25

FIELD NO:	1432	1433				
LAB NO:	2212	2213				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	92%	100%				
20.0	84%	100%				
12.5	76%	99%				
10.0	66%	98%				
5.0	48%	97%				
2.5	35%	95%				
1.25	25%	92%				
0.630	19%	87%				
0.315	13%	78%				
0.160	9%	67%				
0.080	6%	56%				
M.C.(%)	2%	22%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	52	3				
% SAND:	42	41				
% FINES:	6	56				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SANDY SILT (ML)				

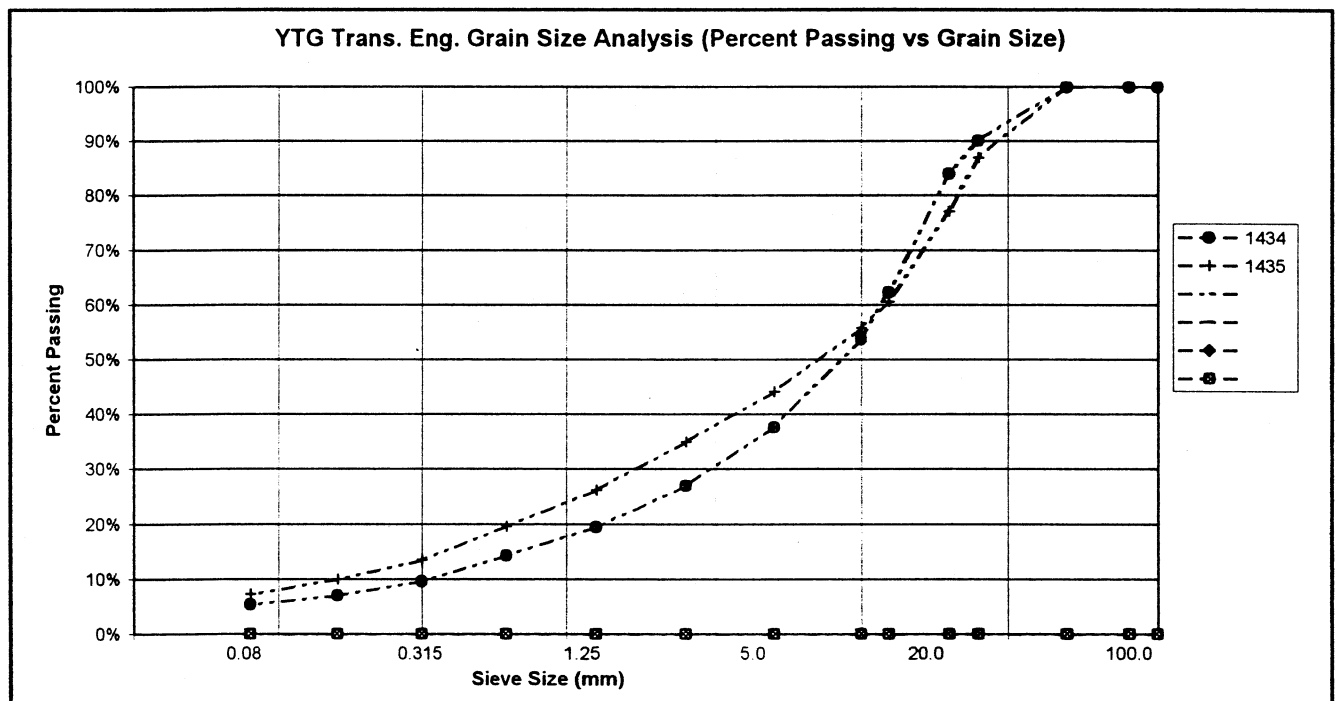


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1951

DATE COMP: 2001/09/25

FIELD NO:	1434	1435				
LAB NO:	2214	2215				
DEPTH:	1.0-2.0	3.5-4.0				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	90%	87%				
20.0	84%	77%				
12.5	62%	61%				
10.0	54%	56%				
5.0	38%	44%				
2.5	27%	35%				
1.25	19%	26%				
0.630	14%	20%				
0.315	10%	13%				
0.160	7%	10%				
0.080	5%	7%				
M.C.(%)	3%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	62	56				
% SAND:	32	37				
% FINES:	5	7				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

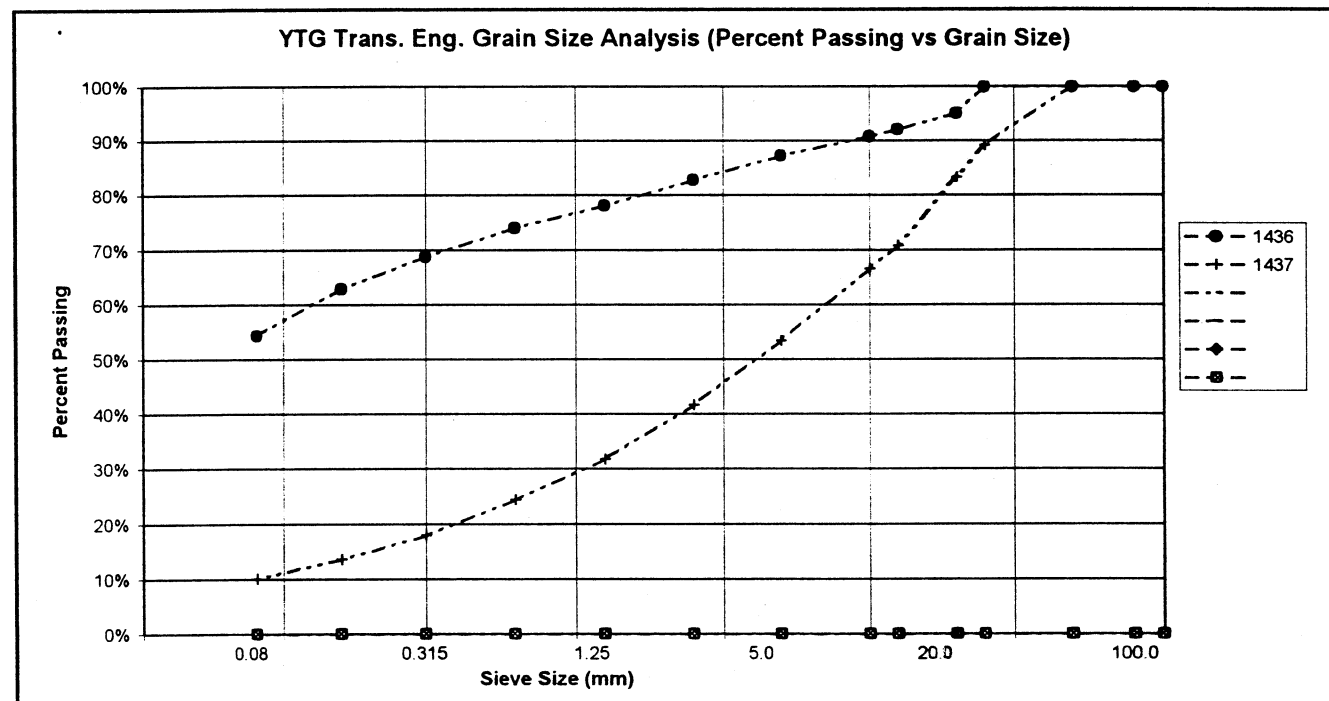


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1952

DATE COMP: 2001/09/25

FIELD NO:	1436	1437				
LAB NO:	2216	2217				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	100%	89%				
20.0	95%	83%				
12.5	92%	71%				
10.0	91%	67%				
5.0	87%	53%				
2.5	83%	42%				
1.25	78%	32%				
0.630	74%	24%				
0.315	69%	18%				
0.160	63%	14%				
0.080	54%	10%				
M.C.(%)	26%	5%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	13	47				
% SAND:	33	43				
% FINES:	54	10				
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

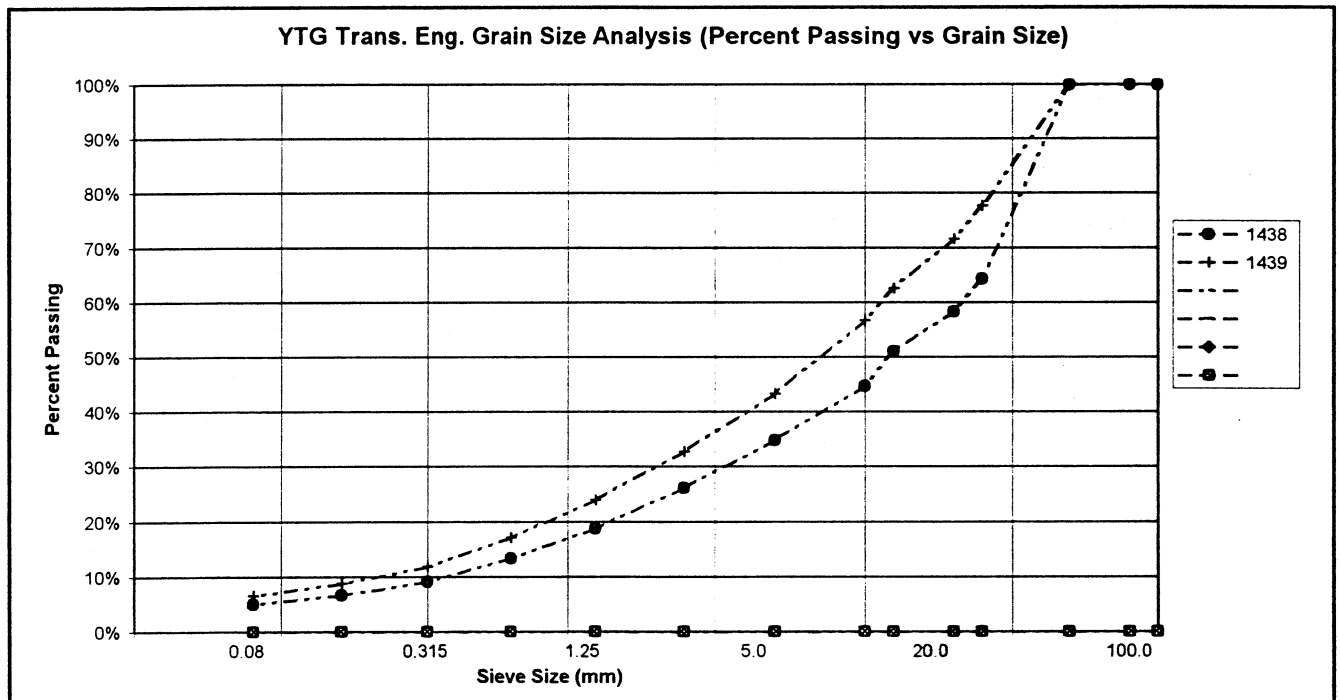


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1953

DATE COMP: 2001/09/25

FIELD NO:	1438	1439				
LAB NO:	2218	2219				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	64%	78%				
20.0	58%	72%				
12.5	51%	63%				
10.0	45%	57%				
5.0	35%	43%				
2.5	26%	33%				
1.25	19%	24%				
0.630	13%	17%				
0.315	9%	12%				
0.160	7%	9%				
0.080	5%	7%				
M.C.(%)	2%	2%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	65	57				
% SAND:	30	37				
% FINES:	5	7				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				



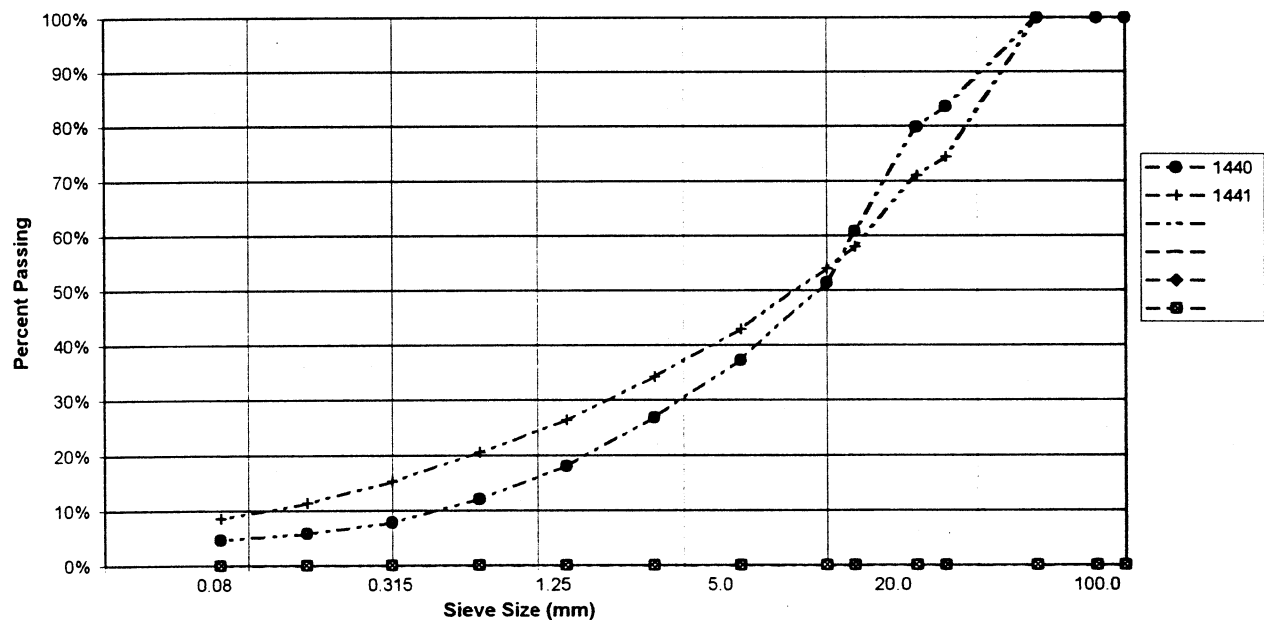
PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1954

DATE COMP: 2001/09/25

FIELD NO:	1440	1441				
LAB NO:	2220	2221				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	84%	74%				
20.0	80%	71%				
12.5	61%	58%				
10.0	51%	54%				
5.0	37%	43%				
2.5	27%	34%				
1.25	18%	26%				
0.630	12%	21%				
0.315	8%	15%				
0.160	6%	11%				
0.080	5%	9%				
M.C.(%)	2%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	63	57				
% SAND:	33	34				
% FINES:	5	9				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

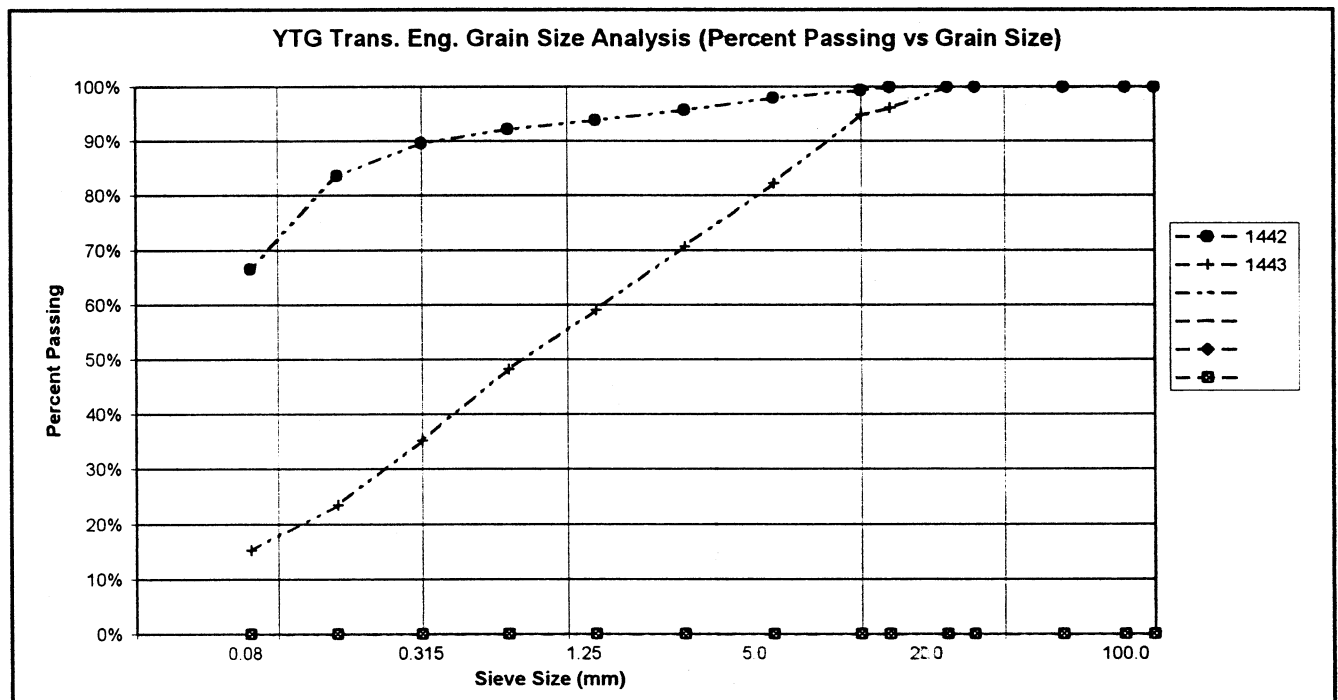


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1955

DATE COMP: 2001/09/25

FIELD NO:	1442	1443				
LAB NO:	2222	2223				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	100%	100%				
20.0	100%	100%				
12.5	100%	96%				
10.0	99%	95%				
5.0	98%	82%				
2.5	96%	71%				
1.25	94%	59%				
0.630	92%	48%				
0.315	90%	35%				
0.160	84%	23%				
0.080	67%	15%				
M.C.(%)	29%	12%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	2	18				
% SAND:	31	67				
% FINES:	67	15				
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)				

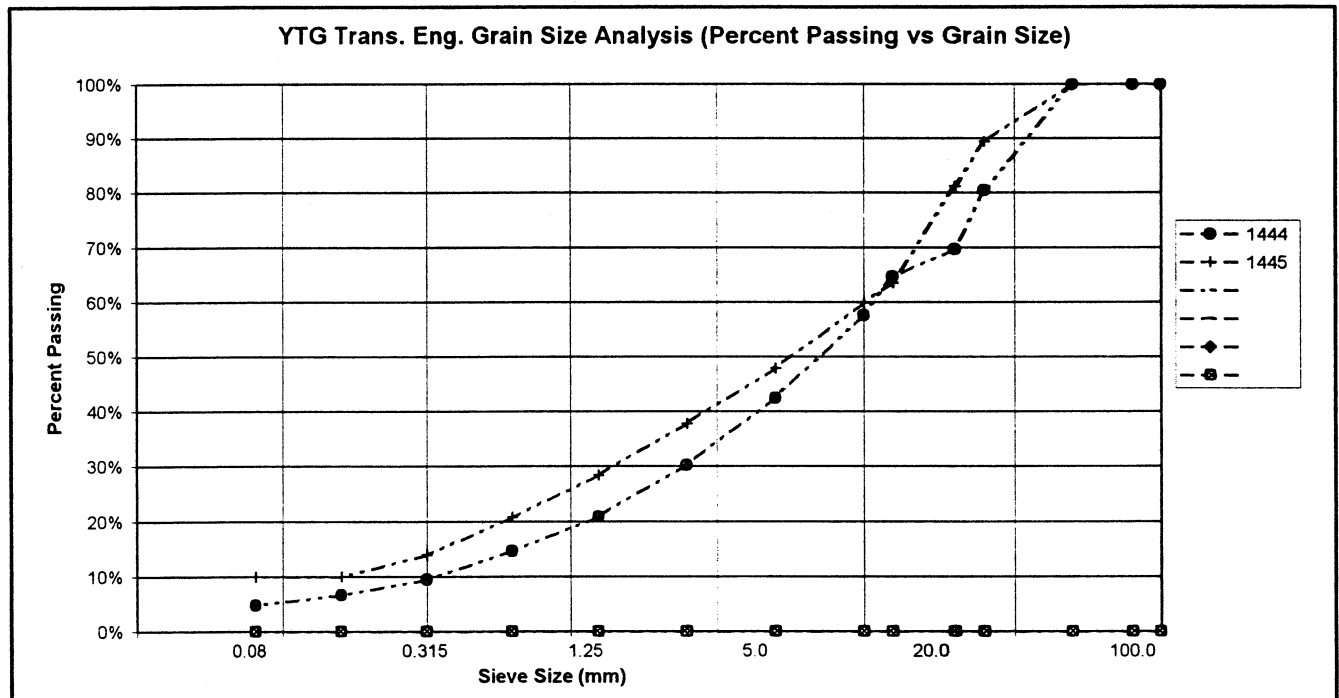


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1956

DATE COMP: 2001/09/25

FIELD NO:	1444	1445				
LAB NO:	2224	2225				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	81%	89%				
20.0	70%	81%				
12.5	65%	64%				
10.0	58%	60%				
5.0	42%	48%				
2.5	30%	38%				
1.25	21%	28%				
0.630	15%	21%				
0.315	10%	14%				
0.160	7%	10%				
0.080	5%	10%				
M.C.(%)	2%	2%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	58	52				
% SAND:	38	38				
% FINES:	5	10				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

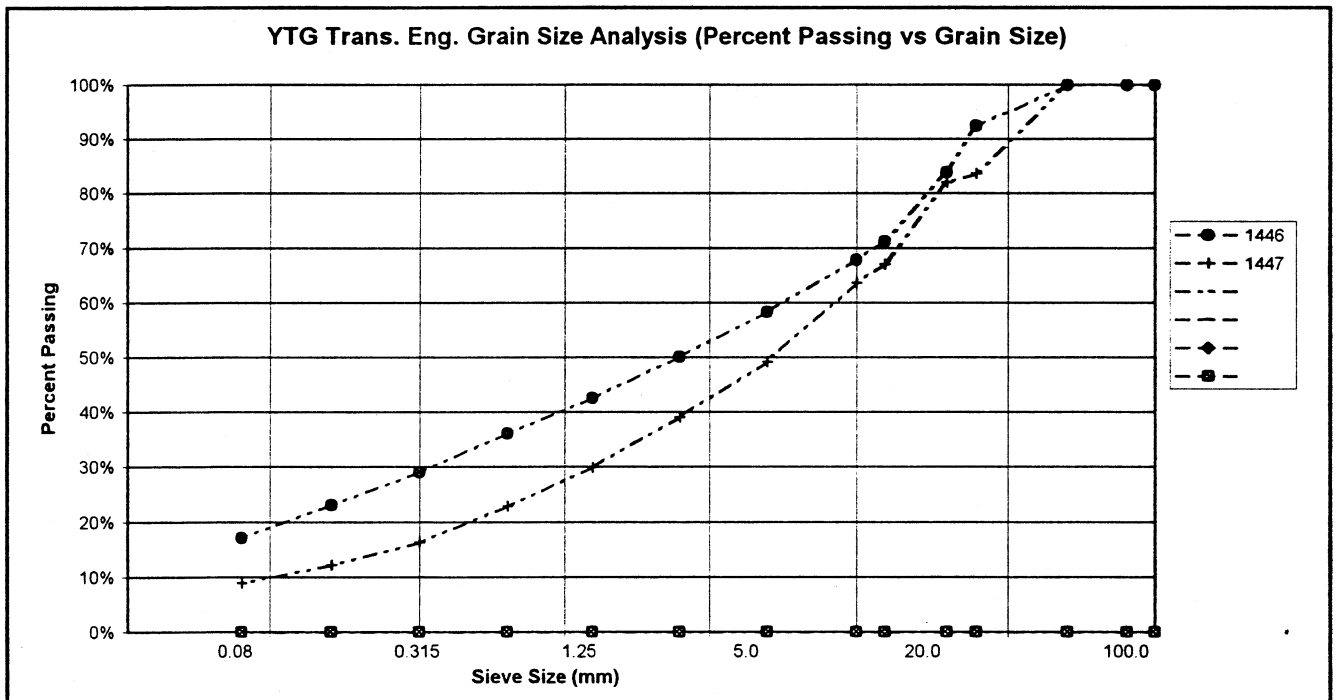


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1957

DATE COMP: 2001/09/25

FIELD NO:	1446	1447				
LAB NO:	2226	2227				
DEPTH:	1.0-2.0	3.5-4.0				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	92%	84%				
20.0	84%	82%				
12.5	71%	67%				
10.0	68%	64%				
5.0	58%	49%				
2.5	50%	39%				
1.25	43%	30%				
0.630	36%	23%				
0.315	29%	16%				
0.160	23%	12%				
0.080	17%	9%				
M.C.(%)	7%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	42	51				
% SAND:	41	40				
% FINES:	17	9				
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

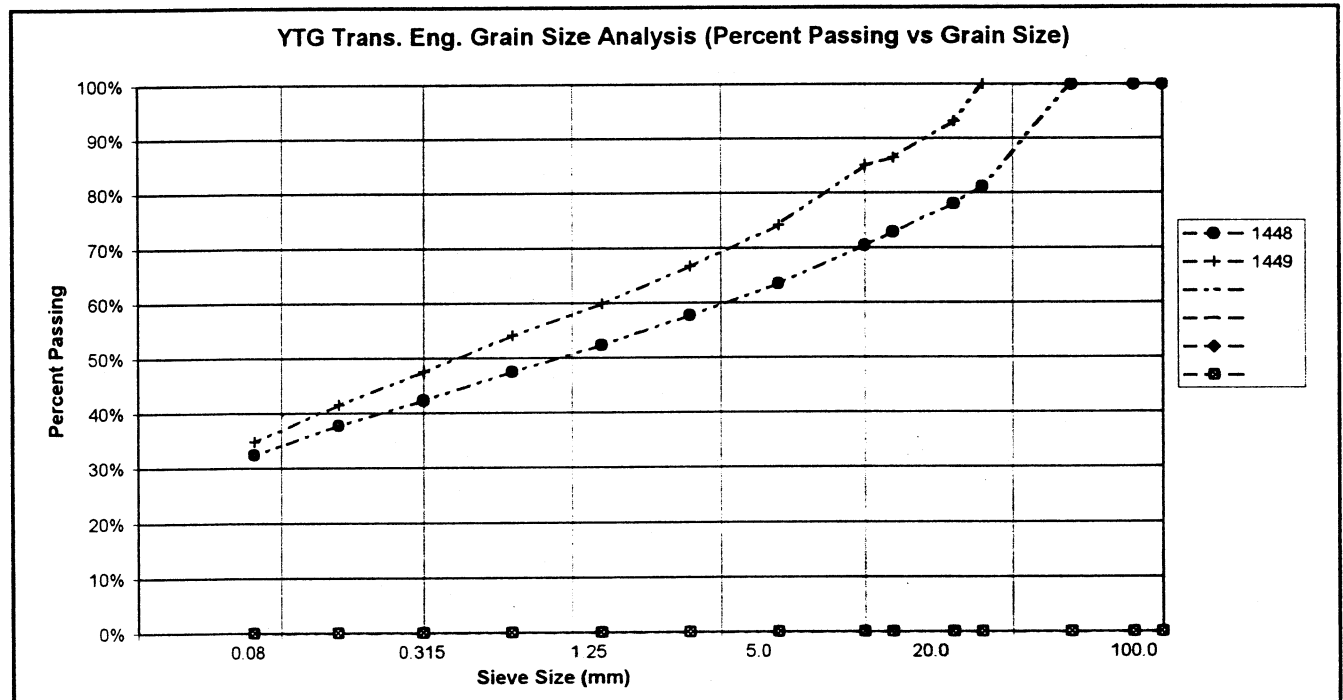


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1958

DATE COMP: 2001/09/25

FIELD NO:	1448	1449				
LAB NO:	2228	2229				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	81%	100%				
20.0	78%	93%				
12.5	73%	87%				
10.0	70%	85%				
5.0	63%	74%				
2.5	58%	67%				
1.25	52%	60%				
0.630	47%	54%				
0.315	42%	48%				
0.160	38%	42%				
0.080	32%	35%				
M.C.(%)	6%	6%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	37	26				
% SAND:	31	39				
% FINES:	32	35				
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)				

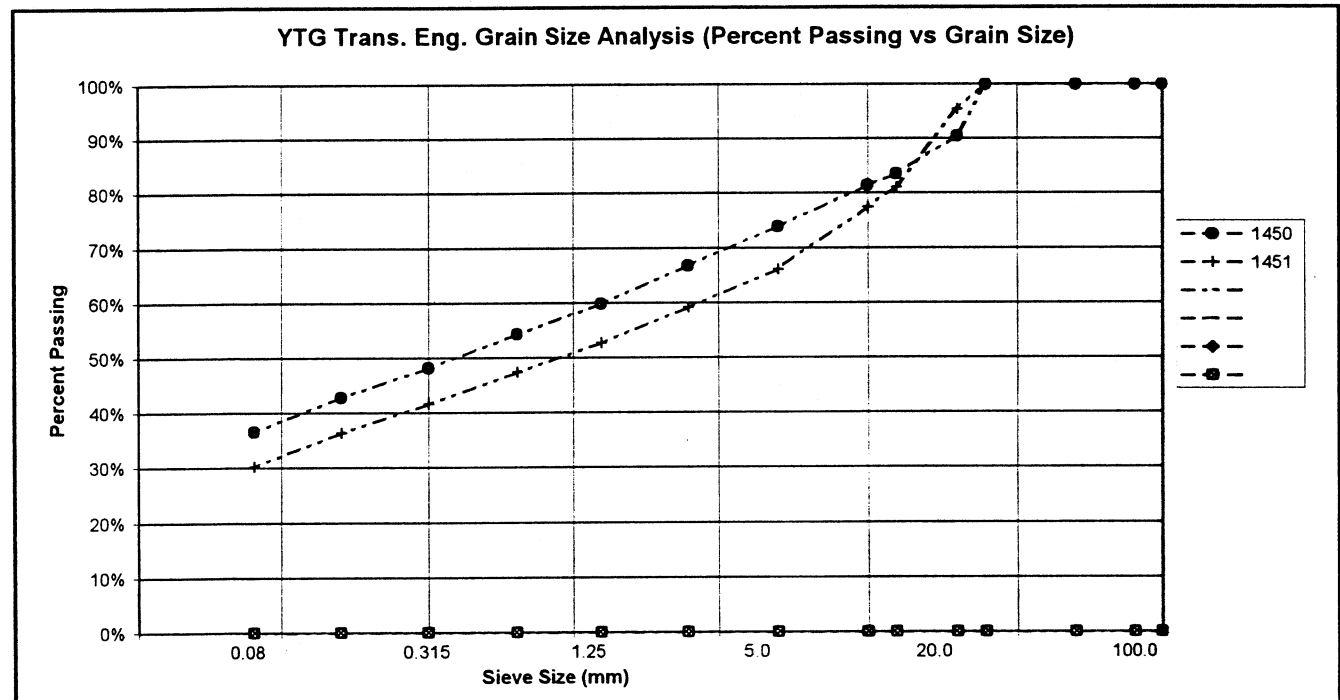


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1959

DATE COMP: 2001/09/25

FIELD NO:	1450	1451				
LAB NO:	2230	2231				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	100%	100%				
20.0	90%	95%				
12.5	84%	81%				
10.0	81%	78%				
5.0	74%	66%				
2.5	67%	59%				
1.25	60%	53%				
0.630	54%	47%				
0.315	48%	42%				
0.160	43%	36%				
0.080	37%	30%				
M.C.(%)	7%	5%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	26	34				
% SAND:	37	36				
% FINES:	37	30				
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)				



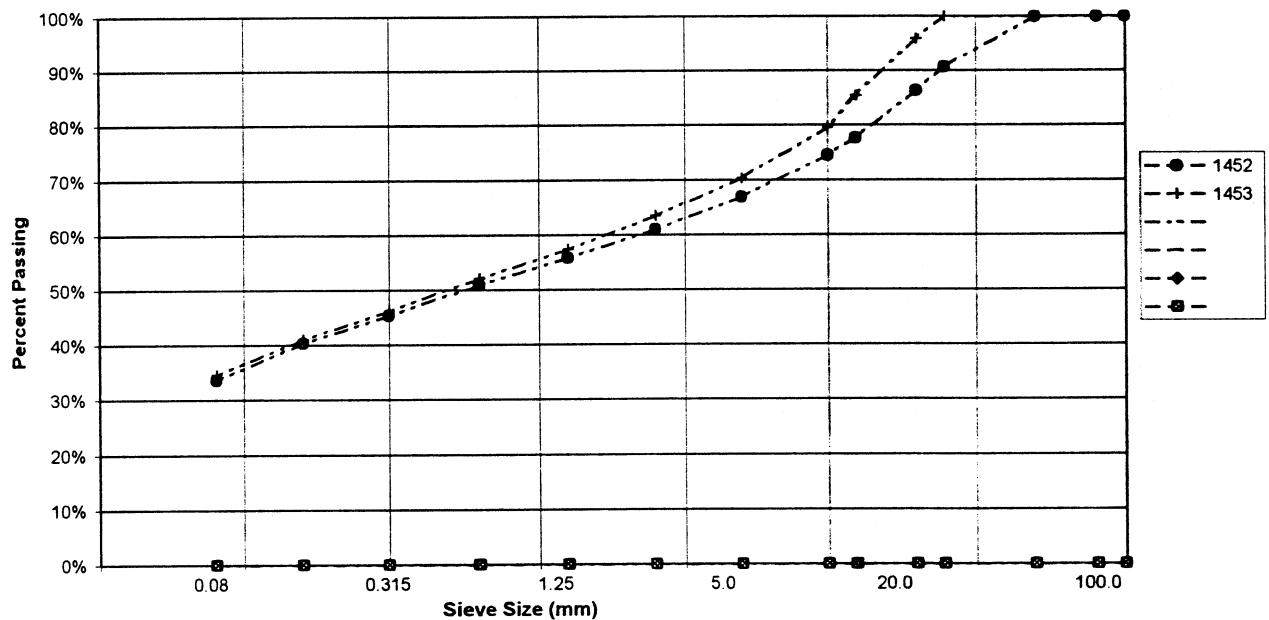
PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1960

DATE COMP: 2001/09/25

FIELD NO:	1452	1453				
LAB NO:	2232	2233				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	91%	100%				
20.0	86%	96%				
12.5	78%	85%				
10.0	75%	80%				
5.0	67%	70%				
2.5	61%	63%				
1.25	56%	57%				
0.630	51%	52%				
0.315	45%	46%				
0.160	40%	41%				
0.080	34%	35%				
M.C.(%)	5%	6%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	33	30				
% SAND:	33	36				
% FINES:	34	35				
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)				

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

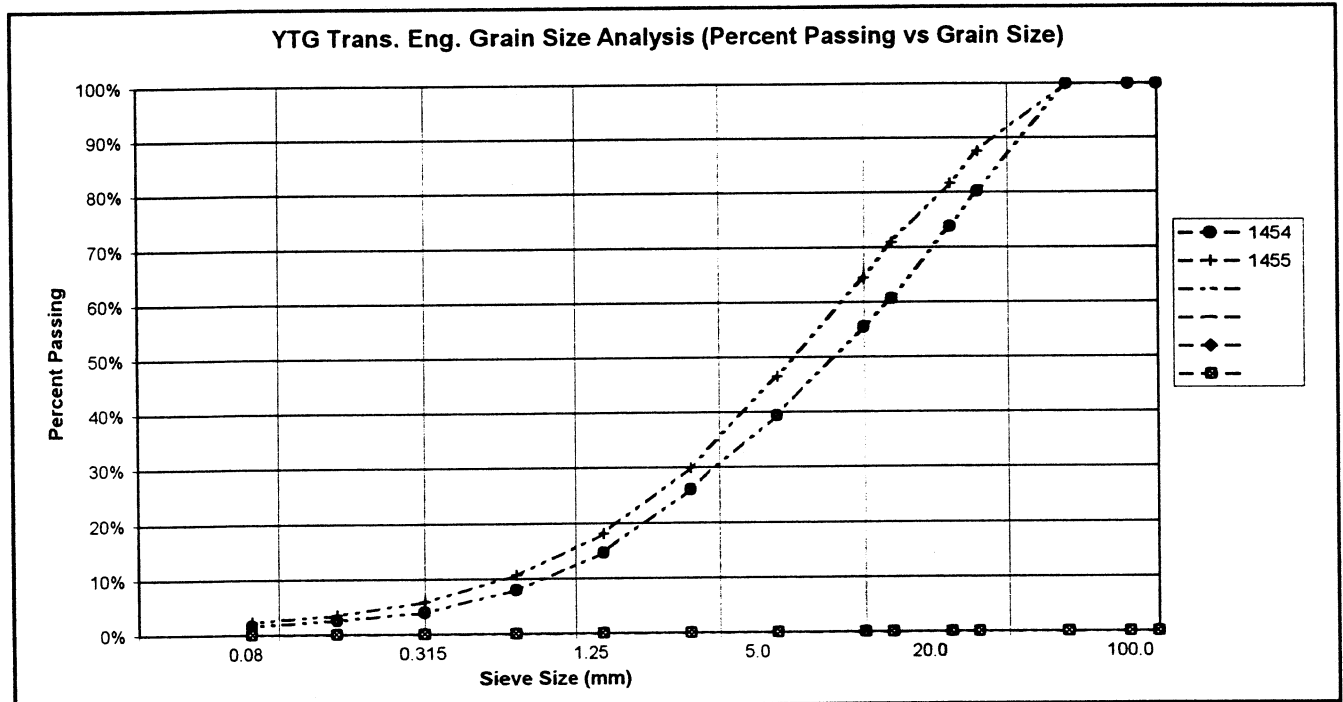


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1961

DATE COMP: 2001/09/25

FIELD NO:	1454	1455				
LAB NO:	2234	2235				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	80%	88%				
20.0	74%	82%				
12.5	61%	71%				
10.0	55%	64%				
5.0	39%	46%				
2.5	26%	30%				
1.25	15%	18%				
0.630	8%	11%				
0.315	4%	6%				
0.160	3%	4%				
0.080	2%	2%				
M.C. (%):	8%	10%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	61	54				
% SAND:	38	44				
% FINES:	2	2				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)				



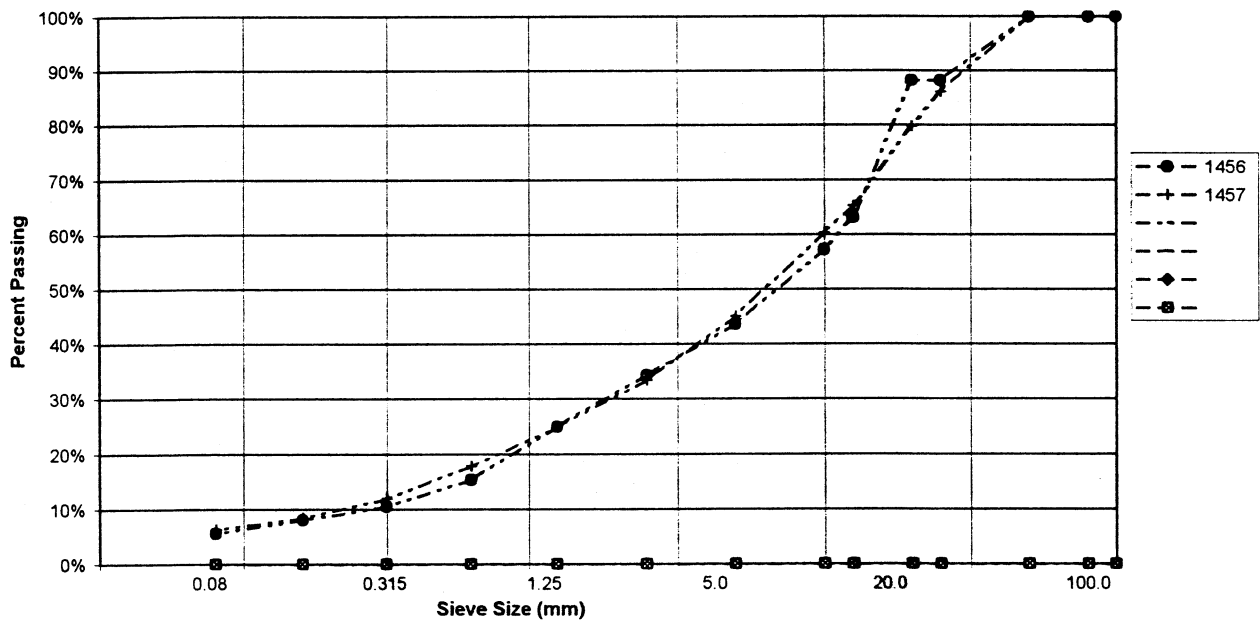
PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1962

DATE COMP: 2001/09/25

FIELD NO:	1456	1457				
LAB NO:	2237	2238				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	88%	86%				
20.0	88%	80%				
12.5	63%	65%				
10.0	57%	60%				
5.0	44%	45%				
2.5	34%	33%				
1.25	25%	25%				
0.630	15%	18%				
0.315	11%	12%				
0.160	8%	8%				
0.080	6%	6%				
M.C.(%)	3%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	56	55				
% SAND:	38	39				
% FINES:	6	6				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

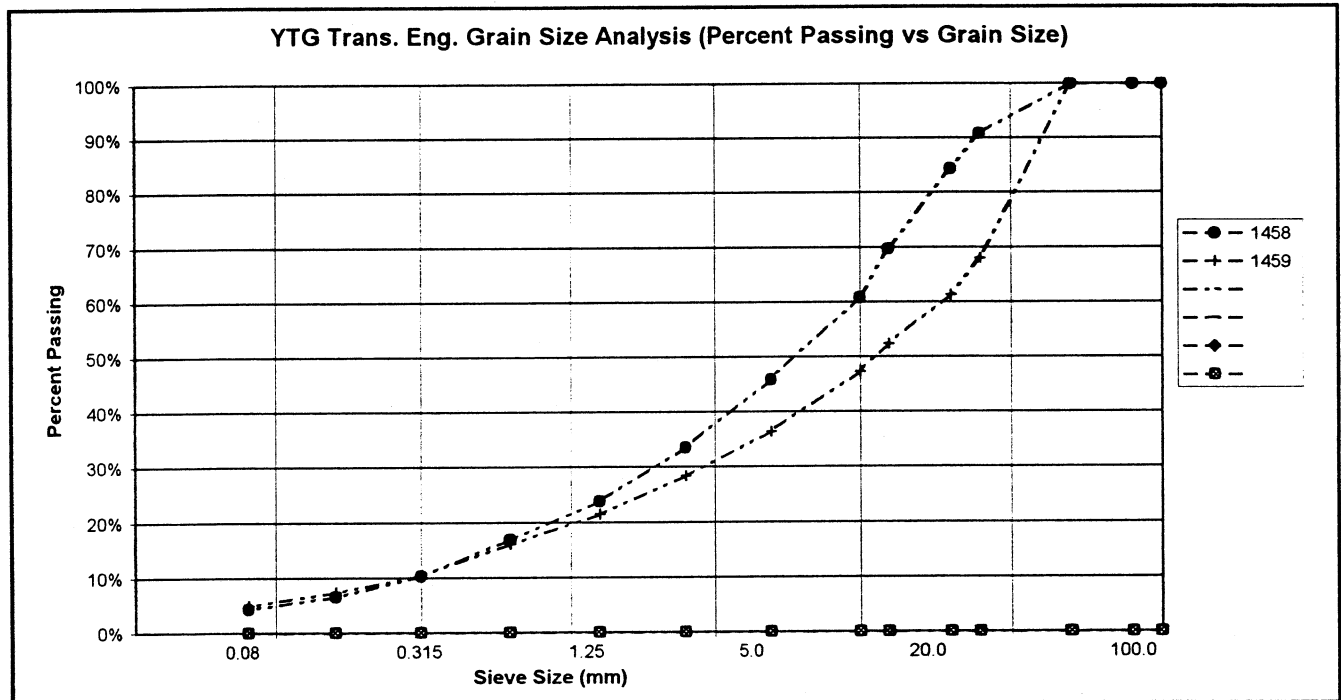


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1963

DATE COMP: 2001/09/25

FIELD NO:	1458	1459				
LAB NO:	2236	2239				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	91%	68%				
20.0	84%	61%				
12.5	70%	52%				
10.0	61%	47%				
5.0	46%	36%				
2.5	34%	28%				
1.25	24%	21%				
0.630	17%	16%				
0.315	10%	10%				
0.160	7%	7%				
0.080	4%	5%				
M.C.(%)	2%	2%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	54	64				
% SAND:	42	31				
% FINES:	4	5				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)				

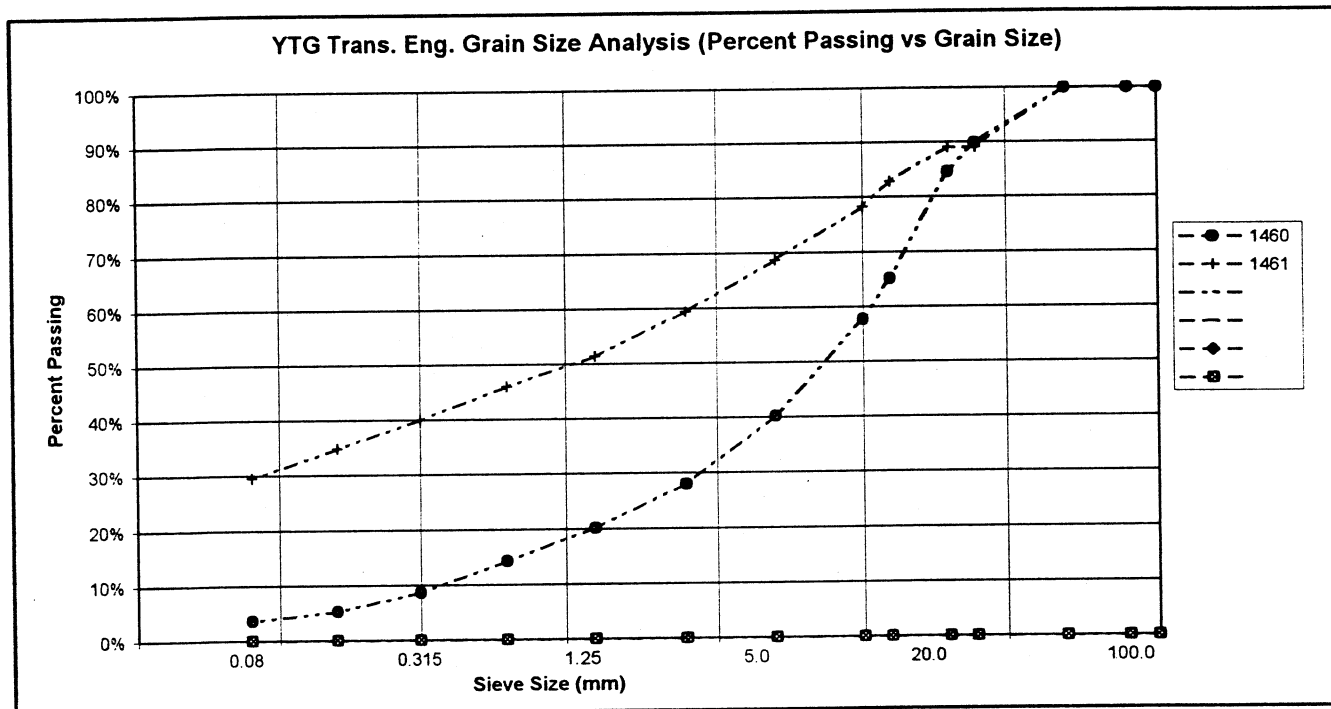


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Lewis Creek Channel
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 625-1964

DATE COMP: 2001/09/25

FIELD NO:	1460	1461				
LAB NO:	2240	2241				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	90%	89%				
20.0	85%	89%				
12.5	65%	83%				
10.0	58%	78%				
5.0	40%	69%				
2.5	28%	59%				
1.25	20%	51%				
0.630	14%	46%				
0.315	9%	40%				
0.160	5%	35%				
0.080	4%	30%				
M.C.(%)	2%	19%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	60	31				
% SAND:	37	39				
% FINES:	4	30				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)				



Pit 115 G-04
Km 1750 LHS Alaska Highway

1985
Test Pit Logs

HOLE No. ~~85-108~~

DEPTH TO G.W.L.

DATE DRILLED 85-06-27

DRILL UNIT BACKHOE

TECHNICIAN *S.S.*

[illegible]

SUBSURFACE EXPLORATION AND TESTING REPORT

808-109

[illegible]

SUBSURFACE EXPLORATION AND TESTING REPORT 808-110

[illegible]

SUBSURFACE EXPLORATION AND TESTING REPORT 808-111

[illegible]

SUBSURFACE EXPLORATION AND TESTING REPORT

808-112

[illegible]

Pit 115 G-04
Km 1750 LHS Alaska Highway

1988
Test Pit Logs

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-01	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ PLASTIC M.C. LIQUID 	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	WELL-GRADED GRAVEL WITH SAND (GW) -maximum 100mm material							
1.0			1			GW		1.0
2.0								2.0
3.0	SANDY SILT -light brown -saturated							3.0
	END HOLE at 3.5m							
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 3.5 m
	REVIEWED BY:	COMPLETE: 88/10/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-02	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	ORGANIC MATERIAL WELL-GRADED GRAVEL WITH SAND (GW) -maximum 150mm material -subrounded to rounded											0.0
1.0												1.0
2.0			2				GW					2.0
3.0	-damp below 3.0m		3				GW					3.0
4.0												4.0
5.0	-caving in below 5.0m		4				GW					5.0
5.3	END HOLE at 5.3m											5.3
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 5.3 m
	REVIEWED BY:	COMPLETE: 88/10/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-03	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -maximum 150mm material -estimate 2-5% +100mm						0.0	
1.0							1.0	
2.0							2.0	
3.0	-maximum 200mm material below 2.4m		5		GP		3.0	
4.0	-maximum 150mm material below 4.0m -estimate 2-3% +100mm		6		GW		4.0	
5.0			7		GW		5.0	
6.0	END HOLE at 4.7m						6.0	

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 4.7 m
	REVIEWED BY:	COMPLETE: 88/10/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-04	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID					PERCENT SAND		PERCENT GRAVEL
0.0	ORGANIC MATERIAL											0.0	
	WELL-GRADED GRAVEL WITH SAND (GW)												
	-maximum 150mm material												
	-estimate 2-3% +100mm												
1.0												1.0	
2.0			8				GW					2.0	
3.0	-estimate 3-5% +100mm below 3.0m											3.0	
4.0			9				GW					4.0	
5.0	-estimate 2-3% +100mm below 4.4m											5.0	
6.0	END HOLE at 5.5m		10				GW					6.0	

Government of Yukon Transportation Engineering		LOGGED BY: DT	COMPLETION DEPTH: 5.5 m
		REVIEWED BY:	COMPLETE: 88/10/19
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-05	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	WELL-GRADED GRAVEL WITH SAND (GW)							
	-maximum 150mm material							
	-estimate 2-3% +100mm							
1.0								1.0
2.0	SANDY SILT		11			GW		2.0
	-dark brown							
	-wet							
3.0	END HOLE at 2.7m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 2.7 m
	REVIEWED BY:	COMPLETE: 88/10/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-06				
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04				
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲	USC	SOIL SYMBOL	◆ PERCENT SAND ◆	DEPTH (m)
				PLASTIC M.C. LIQUID			■ PERCENT GRAVEL ■	
0.0	ORGANIC MATERIAL			20 40 60 80			20 40 60 80	0.0
	WELL-GRADED GRAVEL WITH SAND (GW)			20 40 60 80			20 40 60 80	
	-maximum 100mm material							
1.0								1.0
2.0								2.0
3.0	SILT							3.0
	-light brown							
	-wet							
4.0	END HOLE at 3.1m							4.0
5.0								5.0
6.0								6.0
Government of Yukon Transportation Engineering				LOGGED BY: DT		COMPLETION DEPTH: 3.1 m		
				REVIEWED BY:		COMPLETE: 88/10/19		
				Fig. No:		Page 1 of 1		

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-07	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	SANDY GRAVELLY SILT							
	-brown							
	-damp							
1.0	POORLY GRADED GRAVEL WITH SAND (GP)							1.0
	-maximum 100mm material							
2.0			13			GP		2.0
3.0								3.0
	SILT							
	-dark brown							
	-wet							
	END HOLE at 3.6m							
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 3.6 m
	REVIEWED BY:	COMPLETE: 88/10/19
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-08						
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04						
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)						
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80		DEPTH (m)
0.0	ORGANIC MATERIAL									0.0
	GRAVELLY SILTY SAND									
	ORGANIC MATERIAL									
	POORLY GRADED GRAVEL WITH SAND									
	-maximum 75mm material									
1.0										1.0
	-sample lost in transit		14							
2.0										2.0
3.0	SANDY SILT									3.0
	POORLY GRADED GRAVEL WITH SAND (GP)									
	-maximum 75mm material									
4.0			15	▲		GP	▲	◆		4.0
5.0	END HOLE at 5.0m									5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: DT		COMPLETION DEPTH: 5.0 m				
				REVIEWED BY:		COMPLETE: 88/10/19				
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-09	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL SILTY GRAVEL WITH SAND (GM) -maximum 75mm material							0.0
1.0								1.0
2.0			16	▲		GM	◆	2.0
3.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -maximum 75mm material							3.0
4.0			17	▲		GP-GM	◆	4.0
5.0	WELL-GRADED SAND WITH SILT AND GRAVEL (SW-SM) -maximum 75mm material							5.0
5.5	END HOLE at 5.5m		18	▲		SW-SM	◆	5.5
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 5.5 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-10	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC MATERIAL											0.0
	SILTY ORGANIC MATERIAL											
	GRAVELLY SAND											
1.0												1.0
	SILTY SAND WITH GRAVEL (SM)		19				SM					
2.0												2.0
			20				SM					
3.0												3.0
	END HOLE at 3.5m											
4.0												4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 3.5 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-11	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)			
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■						
				20	40	60	80		20	40	60	80			
0.0	ORGANIC MATERIAL												0.0		
	SMALL ALTERNATING LAYERS OF GRAVELLY SAND AND SANDY SILT -brown -damp														
1.0													1.0		
	POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) -maximum 75mm material		21	▲				SP-SM	◆						
2.0													2.0		
	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -damp -maximum 125mm material -estimate 2% +100mm		22	▲				GW-GM	◆	■					
3.0													3.0		
	SILTY SAND WITH GRAVEL (SM) -dark brown -damp		23	▲				SM	◆	■					
5.0													5.0		
	END HOLE at 5.5m														
6.0													6.0		

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-12	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	ORGANIC MATERIAL SILTY GRAVELLY SAND -maximum 75mm material											0.0
1.0	ORGANIC MATERIAL POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) -brown -damp -maximum 75mm material											1.0
2.0	ORGANIC MATERIAL SILTY GRAVELLY SAND		24	▲			SP-SM	○○○○	■	◆		2.0
3.0	ORGANIC MATERIAL											3.0
4.0	SILTY SAND (SM) -light brown -wet		25		▲		SM	●●●●	■	◆		4.0
5.0	POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) -maximum 25mm material		26	▲			SP-SM	○○○○	■	◆		5.0
6.0	END HOLE at 5.6m											6.0

Government of Yukon Transportation Engineering		LOGGED BY: DT	COMPLETION DEPTH: 5.6 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-13	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■				
				20	40	60	80		20	40	60	80	
0.0	ORGANIC MATERIAL WELL-GRADED GRAVEL WITH SAND (GW) -maximum 100mm material												0.0
1.0			27				GW						1.0
2.0	SANDY SILT												2.0
	ORGANIC MATERIAL												
	GRAVELLY SAND												
	SANDY SILT -brown -saturated												
3.0	POORLY GRADED GRAVEL WITH SAND (GP) -maximum 150mm material -estimate 1% +100mm		28				GP						3.0
4.0													4.0
5.0	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -light brown -wet -maximum 200mm material -estimate 1% +100mm		29				GW-GM						5.0
6.0	END HOLE at 5.7m												6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-14	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	ORGANIC MATERIAL SILTY GRAVELLY SAND -maximum 50mm material											0.0
1.0	ORGANIC MATERIAL WELL-GRADED GRAVEL WITH SAND (GW) -gray -damp -maximum 100mm material											1.0
2.0			30					GW				2.0
3.0	SILTY GRAVELLY SAND ASH GRAVELLY SAND											3.0
4.0	SILTY SAND WITH GRAVEL TO WELL-GRADED SAND WITH SILT AND GRAVEL (SM TO SW-SM) -brown -wet -maximum 100mm material		31					SM				4.0
5.0												5.0
6.0	END HOLE at 5.4m		32					SW-SM				6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-15	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)		
				20	40	60			80	20	40		60	80
0.0	ORGANIC MATERIAL											0.0		
	WELL-GRADED GRAVEL WITH SAND (GW) -maximum 100mm material													
1.0			33					GW				1.0		
	SANDY SILT													
2.0	ASH											2.0		
	WELL-GRADED GRAVEL WITH SAND (GW) -maximum 100mm material													
3.0			34					GW				3.0		
4.0												4.0		
5.0	POORLY GRADED GRAVEL WITH SAND (GP) -maximum 200mm material below 4.6m -estimate 2% +100mm		35					GP				5.0		
	END HOLE at 5.2m													
6.0												6.0		

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 5.2 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-16	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	ORGANIC MATERIAL GRAVELLY SAND											0.0
1.0	ORGANIC MATERIAL SILTY SAND											1.0
2.0	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -maximum 100mm material		36				GP					2.0
3.0	-maximum 150mm material below 2.4m -estimate 5% +100mm below 2.4m		37				GP					3.0
4.0												4.0
5.0	END HOLE at 5.0m		38				GW					5.0
6.0												6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-17	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC SANDY GRAVEL							0.0
	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -maximum 100mm material							
1.0								1.0
			39		GP			
2.0								2.0
3.0								3.0
			40		GP			
4.0								4.0
5.0	END HOLE at 5.0m							5.0
			41		GW			
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 5.0 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-18	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	SANDY GRAVEL							0.0
	ORGANIC MATERIAL							
	GRAVELLY SAND							
1.0								1.0
	ORGANIC SANDY SILT							
2.0								2.0
	ORGANIC MATERIAL -trees and roots							
3.0								3.0
	WELL-GRADED GRAVEL WITH SAND (GW) -maximum 150mm material -estimate 1% +100mm		42	▲		GW	◆ ■	
4.0								4.0
	SANDY SILT (ML) -brown -wet		43	▲		ML	◆	
5.0								5.0
	END HOLE at 4.3m -organic materials found at all levels (twigs, logs, stumps)							
6.0								6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-19		
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04		
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)		
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE						
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL					0.0
	SANDY GRAVEL					
1.0	SANDY SILT -brown -damp					1.0
2.0	POORLY GRADED SAND WITH GRAVEL (SP) -maximum 75mm material		44	▲	SP	2.0
3.0	SANDY SILT -brown -moist -300mm tree trunks					3.0
4.0	END HOLE at 4.0m					4.0
5.0						5.0
6.0						6.0
Government of Yukon Transportation Engineering				LOGGED BY: DT		COMPLETION DEPTH: 4.0 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-20	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC GRAVELLY SILTY SAND							0.0
1.0	WELL-GRADED GRAVEL WITH SAND (GW) -maximum 75mm material		45			GW		1.0
2.0	SANDY SILT							2.0
3.0	ASH SANDY GRAVELLY SILT							3.0
4.0	END HOLE at 3.3m							4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 3.3 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 029-21	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL ◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC SILT-gravelly						0.0
	GRAVELLY SAND						
	-maximum 100 mm.						
	-trace silt						
1.0	-sample 46 lost in transit		46				1.0
	ORGANIC						
	SILTY GRAVELLY SAND						
2.0	SILT						2.0
	GRAVELLY SAND						
3.0	SILT						3.0
	-brown						
	-moist						
4.0	END HOLE at 3.7						4.0
5.0							5.0
6.0							6.0

Government of Yukon Transportation Engineering		LOGGED BY: DT	COMPLETION DEPTH: 3.7 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-22	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	GRAVELLY SILTY ORGANIC SAND							0.0
1.0	POORLY GRADED GRAVEL WITH SAND (GP) -maximum 200mm material -estimate 2-5% +100mm		47			GP		1.0
2.0	WELL-GRADED GRAVEL WITH SAND (GW) -maximum 150mm material -estimate 2-5% +100mm							2.0
3.0			48			GW		3.0
4.0								4.0
5.0	END HOLE at 4.8m -caving in at bottom		49			GW		5.0
6.0								6.0

Government of Yukon Transportation Engineering		LOGGED BY: DT	COMPLETION DEPTH: 4.8 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-23	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC MATERIAL										0.0
	WELL-GRADED GRAVEL WITH SAND (GW)										
	-gray brown										
	-moist										
	-maximum 100mm material										
	-easy digging										
1.0			50					GW			1.0
2.0	-maximum 125mm material below 2.0m										
	-estimate 5% +100mm										
	-subrounded to rounded material										
	-easy digging										
3.0			51					GW			3.0
4.0	POORLY GRADED SAND WITH GRAVEL (SP)										
	-gray brown										
	-moist										
	-vertical hole walls, little sluffing										
	-maximum 200mm material below 4.8m										
	-estimate 5% +100mm below 4.8m										
	-organic material present below 4.8m										
5.0	END HOLE at 5.2m										
	-photo #1-1										
	-flat logged area										
	-spruce to 250mm dia.										
6.0			52					SP			6.0

Government of Yukon Transportation Engineering		LOGGED BY: CB	COMPLETION DEPTH: 5.2 m
		REVIEWED BY:	COMPLETE: 88/10/22
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-24	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	PERCENT SAND		PERCENT GRAVEL
				20	40	60	80		20	40	60	80	
0.0	ORGANIC MATERIAL SILTY GRAVEL WITH ROOTS												0.0
1.0	SANDY GRAVEL -gray brown -moist -maximum 200mm material -estimate 2-5% +100mm -easy digging -rounded to subrounded material												1.0
2.0	ORGANIC SANDY SILT -gray brown -moist												2.0
3.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -gray brown -moist		53					GP-GM					3.0
4.0	SANDY SILT -gray brown -moist												4.0
5.0	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -light brown -moist -vertical hole walls, little sluffing		54					GW-GM					5.0
6.0	END HOLE at 5.3m -photo #1-2 -flat logged area -spruce to 300mm dia.												6.0

Government of Yukon Transportation Engineering		LOGGED BY: CB	COMPLETION DEPTH: 5.3 m
		REVIEWED BY:	COMPLETE: 88/10/22
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-25					
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04					
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)					
SAMPLE TYPE		RETURN		S.P.T.					
AUGER		BULK		TUBE					
CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES	USC	SOIL SYMBOL	PERCENT SAND	PERCENT GRAVEL	DEPTH (m)
0.0	ORGANIC MATERIAL SILTY SANDY GRAVEL -gray brown -moist -maximum 100mm material -round to subrounded material								0.0
1.0	POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) -gray brown -moist -roots to 2.0m		55			SP-SM			1.0
2.0									2.0
3.0	SILTY SAND -brown -moist								3.0
4.0									4.0
5.0	-no sluffing								5.0
6.0	END HOLE at 5.3m -spruce to 400mm dia., 9m tall								6.0

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Fig. No:

COMPLETION DEPTH: 5.3 m

COMPLETE: 88/10/22

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-26				
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04				
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
	-gray brown							
	-moist							
	-maximum 150mm material							
	-estimate 5% +100mm							
	-rounded to subrounded material							
1.0			56			GP		1.0
2.0	-maximum 200mm material below 2.0m							2.0
	-estimate 5% +100mm							
	-rounded to subrounded material							
	-easy digging							
3.0	-odd stick throughout		57			GP		3.0
4.0								4.0
			58			GP		
5.0								5.0
6.0	END HOLE at 5.4m							6.0
	-photo #1-3							
Government of Yukon Transportation Engineering				LOGGED BY: CB		COMPLETION DEPTH: 5.4 m		
				REVIEWED BY:		COMPLETE: 88/10/22		
				Fig. No:		Page 1 of 1		

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-27	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	WELL TO POORLY GRADED GRAVEL WITH SAND (GW TO GP)							
	-gray brown							
	-damp to moist							
	-maximum 250mm material							
	-estimate 5% +100mm							
	-root system to 1.0m							
1.0								1.0
2.0			59			GP		2.0
3.0	-verticle hole walls, little sluffing		60			GW		3.0
4.0								4.0
5.0			61			GP		5.0
6.0								6.0
	END HOLE at 5.2m							
	-photo #1-4							

Government of Yukon Transportation Engineering	LOGGED BY: CB	COMPLETION DEPTH: 5.2 m
	REVIEWED BY:	COMPLETE: 88/10/22
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-28	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	SILTY SAND WITH GRAVEL (SM)							
	-gray brown -damp -silt pockets -maximum 300mm material -estimate 5-10% +100mm -rounded to subrounded material -silty sand seams below 1.2m							
1.0								1.0
	-light brown below 2.0m -moist below 2.0m							
2.0			62	▲		SM	◆ ■	2.0
3.0								3.0
	-gravel seams alternating with silty sand seams below 3.0m							
4.0			63	▲		SM	◆ ■	4.0
5.0	END HOLE at 5.0m							5.0
	-photo #1-5 shot down hole							
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: CB	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 88/10/22
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-29	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	GRAVELLY SILTY SAND							
	-root system							
	WELL-GRADED GRAVEL WITH SAND (GW)							
	-gray brown							
1.0	-damp							1.0
	-maximum 300mm material							
	-estimate 10% +100mm							
2.0			64 ▲			GW		2.0
	ORGANIC MATERIAL							
	-small logs and branches							
3.0	SANDY SILT							3.0
	-brown							
	-moist							
	-trace of gravel							
4.0								4.0
5.0								5.0
	END HOLE at 5.2m							
	-spruce to 6.0m, willows							
	-flat							
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: CB	COMPLETION DEPTH: 5.2 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-30	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	FINE GRAVEL							
	SANDY SILT							
1.0	FINE GRAVEL							1.0
	SANDY SILT							
2.0	POORLY GRADED GRAVEL WITH SAND (GP)							2.0
	-gray brown							
	-moist							
	-maximum 100mm material							
3.0			65	▲	GP			3.0
	SANDY SILT							
	-brown							
	-moist							
4.0	END HOLE at 3.6m							4.0
	-flat terrain							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering		LOGGED BY: CB	COMPLETION DEPTH: 3.6 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-32				
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04				
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲	USC	SOIL SYMBOL	◆ PERCENT SAND ◆	DEPTH (m)
				20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC MATERIAL							0.0
	SILTY SAND							
	-gray brown							
	-moist							
1.0								1.0
	SANDY GRAVEL							
	-gray brown							
	-damp							
	-maximum 150mm material							
2.0	-estimate 5% +100mm							2.0
	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM)							
	-gray brown							
	-moist							
	-maximum 150mm material							
3.0	-estimate 5% +100mm							3.0
	-easy digging							
4.0								4.0
	-hole walls vertical, little sluffing							
5.0								5.0
	GRAVELLY SILTY SAND							
6.0								6.0
	END HOLE at 5.4m							
	-flat terrain							
	-spruce to 6.5m tall							

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-33	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	WELL TO POORLY GRADED GRAVEL WITH SAND (GW TO GP)							
	-gray brown							
	-moist							
	-maximum 250mm material							
	-estimate 5% +100mm							
1.0			70			GW		1.0
2.0								2.0
	-free standing walls							
3.0								3.0
	ORGANIC SANDY SILT							
	-hard							
4.0								4.0
	END HOLE at 3.6m							
	-flat terrain							
	-spruce to 10m tall							
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-34	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC MATERIAL											0.0
	WELL-GRADED GRAVEL WITH SAND (GW)											
	-gray brown											
	-moist											
	-maximum 250mm material											
1.0	-estimate 5% +100mm											1.0
	-easy digging											
2.0			72					GW				2.0
3.0												3.0
			73					GW				
4.0												4.0
	-free standing walls											
	SANDY SILT											
	-hard											
	END HOLE at 4.5m											
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering		LOGGED BY: CB	COMPLETION DEPTH: 4.5 m
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-35				
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04				
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL POORLY GRADED GRAVEL WITH SAND (GP) -gray brown -moist -maximum 250mm material estimate 5% +100mm							0.0
1.0								1.0
2.0			74 ▲		GP			2.0
3.0	-maximum 300mm material below 3.0m -estimate 5-10% +100mm below 3.0m -occasional decomposed log below 3.0m -free standing walls		75 ▲		GW-GM			3.0
4.0								4.0
5.0			76 ▲		GP			5.0
6.0	END HOLE at 5.2m -photo #1-6 -flat terrain							6.0
Government of Yukon Transportation Engineering				LOGGED BY: CB		COMPLETION DEPTH: 5.2 m		
				REVIEWED BY:		COMPLETE: 88/10/23		
				Fig. No:		Page 1 of 1		

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-36	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	ORGANIC MATERIAL											0.0
	SANDY SILTY GRAVEL											
	-gray brown											
	-moist											
	-maximum 300mm material											
	-estimate 5% +100mm											
1.0	GRAVELLY SILT											1.0
	FINE GRAVEL											
	GRAVELLY SANDY SILT											
2.0	POORLY GRADED SAND WITH GRAVEL (SP)											2.0
	-gray brown											
	-moist											
	-maximum 200mm material											
	-estimate 5% +100mm											
3.0			77					SP				3.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-gray brown											
	-moist											
	-maximum 200mm material											
	-estimate 5% +100mm											
	-easy digging											
	-very little sluffing											
4.0			78					GP				4.0
	GRAVELLY SANDY SILT											
	-hard digging											
	END HOLE at 5.2m											
	-flat terrain											
5.0												5.0
6.0												6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-37				
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04				
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲	USC	SOIL SYMBOL	◆ PERCENT SAND ◆	DEPTH (m)
				20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC MATERIAL POORLY GRADED GRAVEL WITH SAND (GP) -gray brown -moist -maximum 300mm material -estimate 10% +100mm							0.0
1.0								1.0
2.0			79	▲		GP	◆ ■	2.0
3.0			80	▲		GP	◆ ■	3.0
4.0	ALTERNATING LAYERS OF SILT, SAND, ORGANICS -hard digging							4.0
5.0	END HOLE at 4.6m							5.0
6.0								6.0
Government of Yukon Transportation Engineering				LOGGED BY: CB		COMPLETION DEPTH: 4.6 m		
				REVIEWED BY:		COMPLETE: 88/10/23		
				Fig. No:		Page 1 of 1		

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-38	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)		
				20	40	60			80	20	40		60	80
0.0	ORGANIC MATERIAL SANDY SILT											0.0		
1.0	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -gray brown -moist -maximum 200mm material -estimate 5% +100mm											1.0		
2.0			81					GP				2.0		
3.0			82					GW				3.0		
4.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -gray brown -moist -maximum 200mm material -estimate 5% +100mm											4.0		
5.0	END HOLE at 5.0m -flat terrain -beside water course -formerly logged area		83					GP-GM				5.0		
6.0												6.0		

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	REVIEWED BY:	COMPLETE: 88/10/23
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST PIT NO: 030-39	
PWC CAPITAL - Y.T.		A/H KM 1749.5 LHS		Project No: 115-G-04	
BACKHOE: CAT 225		LOCATION: See Plan		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC MATERIAL							0.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
	-gray brown -moist -maximum 250mm material -estimate 10% +100mm -easy digging							
1.0								1.0
2.0			84			GP		2.0
3.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM)							3.0
	-gray brown -moist -maximum 250mm material -estimate 10% +100mm -hole caving in -easy digging							
4.0			85			GP-GM		4.0
5.0	-maximum 200mm material below 4.5m -estimate 5% +100mm below 4.5m							
			86			GP-GM		5.0
6.0	END HOLE at 5.2m -photo #1-7							6.0

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	REVIEWED BY:	COMPLETE: 88/10/23
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Pit 115 G-04
Km 1750 LHS Alaska Highway

1988
Pit Run Sample Results

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-01
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 1
LAB NO: 2853
DEPTH: 1.1-1.5
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	100
76.2	75
50.8	69
38.1	65
25.4	57
19.0	53
12.7	45
9.5	41
4.76	34
2.38	--
2.00	27
1.19	--
0.841	20
0.595	--
0.42	14
0.297	--
0.177	--
0.149	7
0.074	4

M.C. (%): --

LIMITS

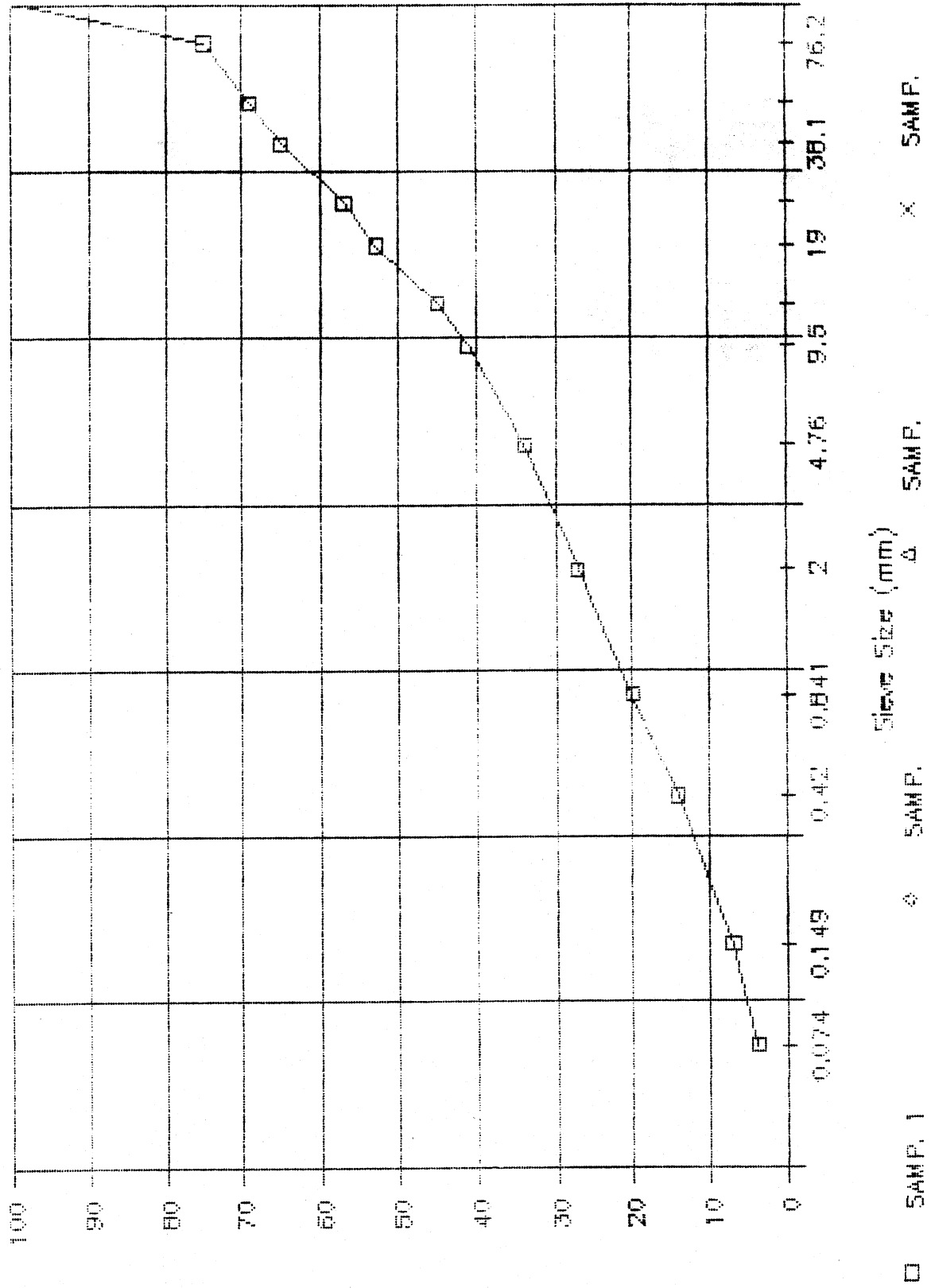
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 66
% SAND: 31
% FINES: 4

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-01



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-02
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 2
 LAB NO: 2854
 DEPTH: 1.2-1.9
 TYPE: BULK

FIELD NO: 3
 LAB NO: 2855
 DEPTH: 3.0-3.4
 TYPE: BULK

FIELD NO: 4
 LAB NO: 2856
 DEPTH: 5.0-5.3
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	94
38.1	77
25.4	61
19.0	54
12.7	46
9.5	41
4.76	32
2.38	--
2.00	23
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 68
 % SAND: 30
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	92
38.1	81
25.4	65
19.0	60
12.7	49
9.5	42
4.76	31
2.38	--
2.00	22
1.19	--
0.841	14
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 69
 % SAND: 29
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	100
76.2	91
50.8	81
38.1	72
25.4	63
19.0	57
12.7	45
9.5	40
4.76	31
2.38	--
2.00	22
1.19	--
0.841	14
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

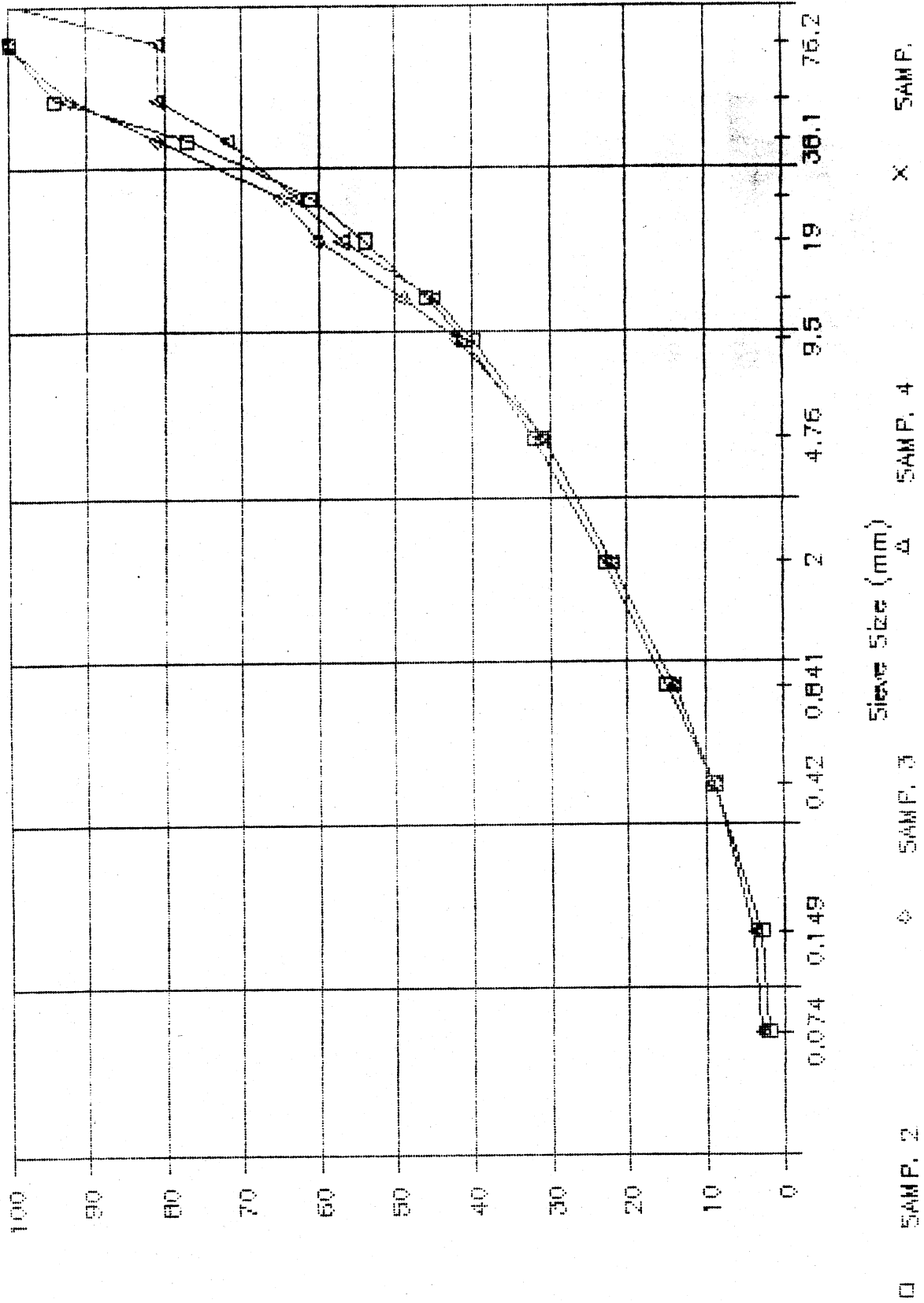
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 69
 % SAND: 28
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-02



GRAIN SIZE ANALYSIS

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-03
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO:	LAB NO:	DEPTH:	TYPE:
5	2857	1.2-1.6	BULK
6	2858	2.8-3.3	BULK
7	2859	4.3-4.7	BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	100
76.2	100	76.2	100	76.2	72
50.8	87	50.8	71	50.8	62
38.1	79	38.1	68	38.1	60
25.4	68	25.4	58	25.4	53
19.0	59	19.0	54	19.0	50
12.7	49	12.7	47	12.7	41
9.5	44	9.5	42	9.5	37
4.76	35	4.76	33	4.76	29
2.38	--	2.38	--	2.38	--
2.00	25	2.00	23	2.00	20
1.19	--	1.19	--	1.19	--
0.841	14	0.841	14	0.841	13
0.595	--	0.595	--	0.595	--
0.42	8	0.42	9	0.42	8
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	3	0.149	4	0.149	4
0.074	2	0.074	3	0.074	3

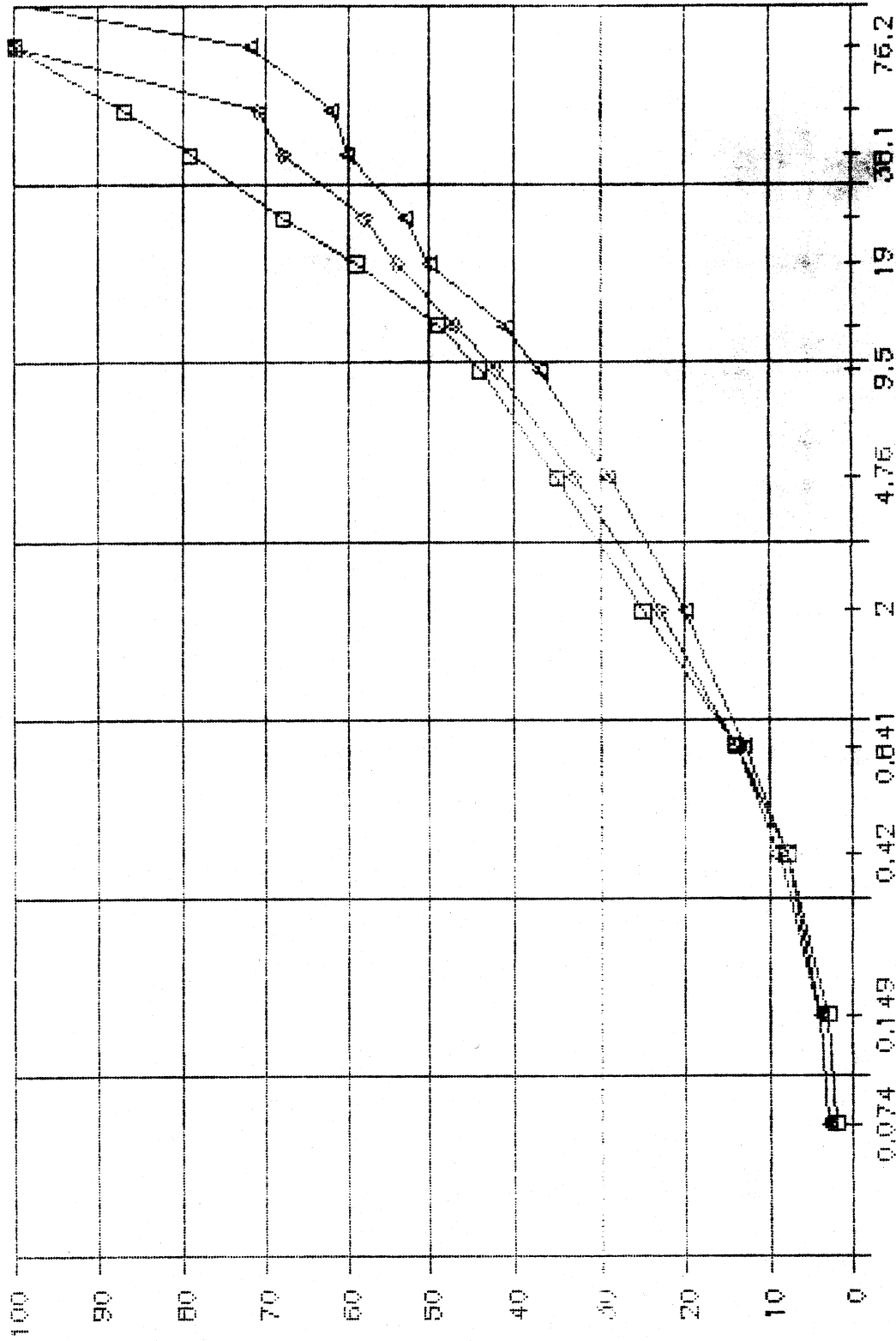
M.C.(%)	LIMITS	M.C.(%)	LIMITS	M.C.(%)	LIMITS
--	LIQUID: --	--	LIQUID: --	--	LIQUID: --
--	PLASTIC: --	--	PLASTIC: --	--	PLASTIC: --
--	P.I.: N.P.	--	P.I.: N.P.	--	P.I.: N.P.

% GRAVEL:	% SAND:	% FINES:	% GRAVEL:	% SAND:	% FINES:	% GRAVEL:	% SAND:	% FINES:
65	33	2	67	30	3	71	26	3

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029—03



SAMP. 5
 SAMP. 6
 SAMP. 7
 X SAMP.

0 10 20 30 40 50 60 70 80 90 100

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-04
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 8
 LAB NO: 2860
 DEPTH: 1.3-1.7
 TYPE: BULK

FIELD NO: 9
 LAB NO: 2861
 DEPTH: 3.3-3.6
 TYPE: BULK

FIELD NO: 10
 LAB NO: 2862
 DEPTH: 5.2-5.5
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	100
76.2	82
50.8	82
38.1	71
25.4	60
19.0	51
12.7	43
9.5	38
4.76	29
2.38	--
2.00	20
1.19	--
0.841	13
0.595	--
0.42	7
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 71
 % SAND: 27
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	81
38.1	69
25.4	52
19.0	49
12.7	42
9.5	38
4.76	30
2.38	--
2.00	20
1.19	--
0.841	12
0.595	--
0.42	7
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 70
 % SAND: 27
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	75
38.1	70
25.4	62
19.0	55
12.7	45
9.5	38
4.76	29
2.38	--
2.00	19
1.19	--
0.841	12
0.595	--
0.42	8
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

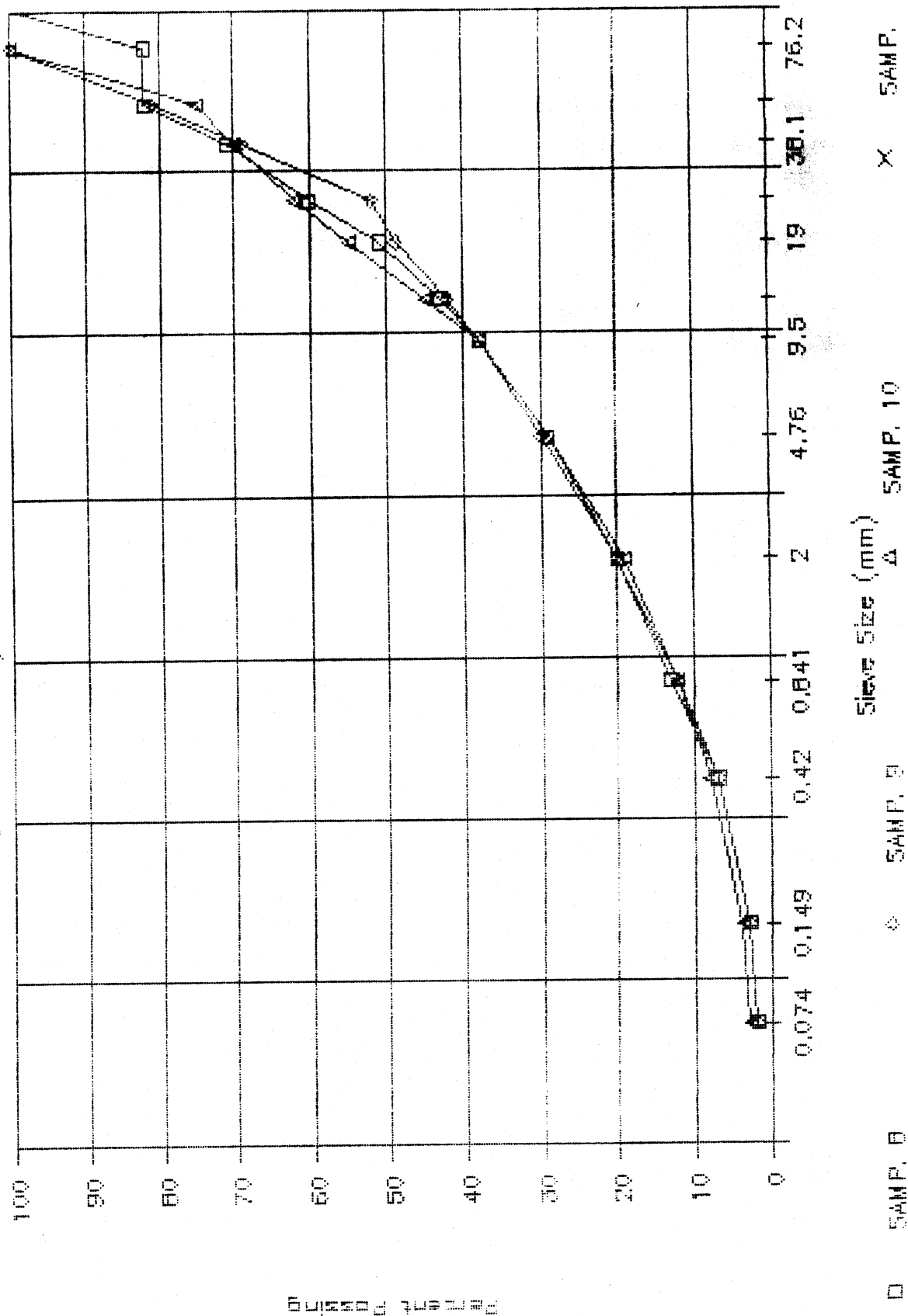
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 71
 % SAND: 26
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-04



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-05
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 11
LAB NO: 2863
DEPTH: 1.5-2.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	82
38.1	77
25.4	66
19.0	59
12.7	48
9.5	43
4.76	33
2.38	--
2.00	24
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	2

M.C.(%): --

LIMITS

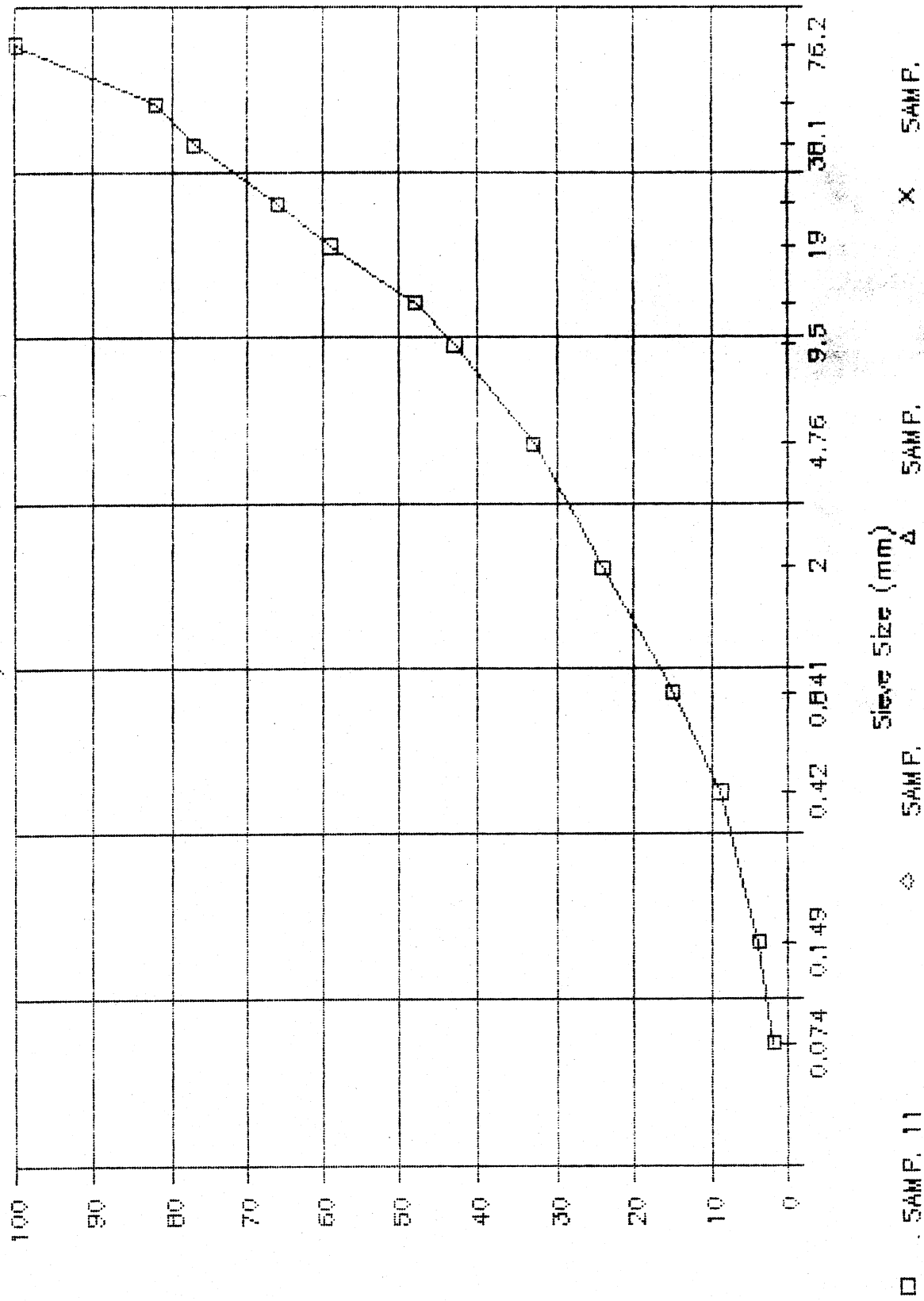
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 67
% SAND: 31
% FINES: 2

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Gain Size Analysis - Hole 029-05



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PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-06
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 12
LAB NO: 2864
DEPTH: 1.5-1.9
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	89
38.1	77
25.4	66
19.0	60
12.7	50
9.5	45
4.76	34
2.38	--
2.00	23
1.19	--
0.841	14
0.595	--
0.42	7
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

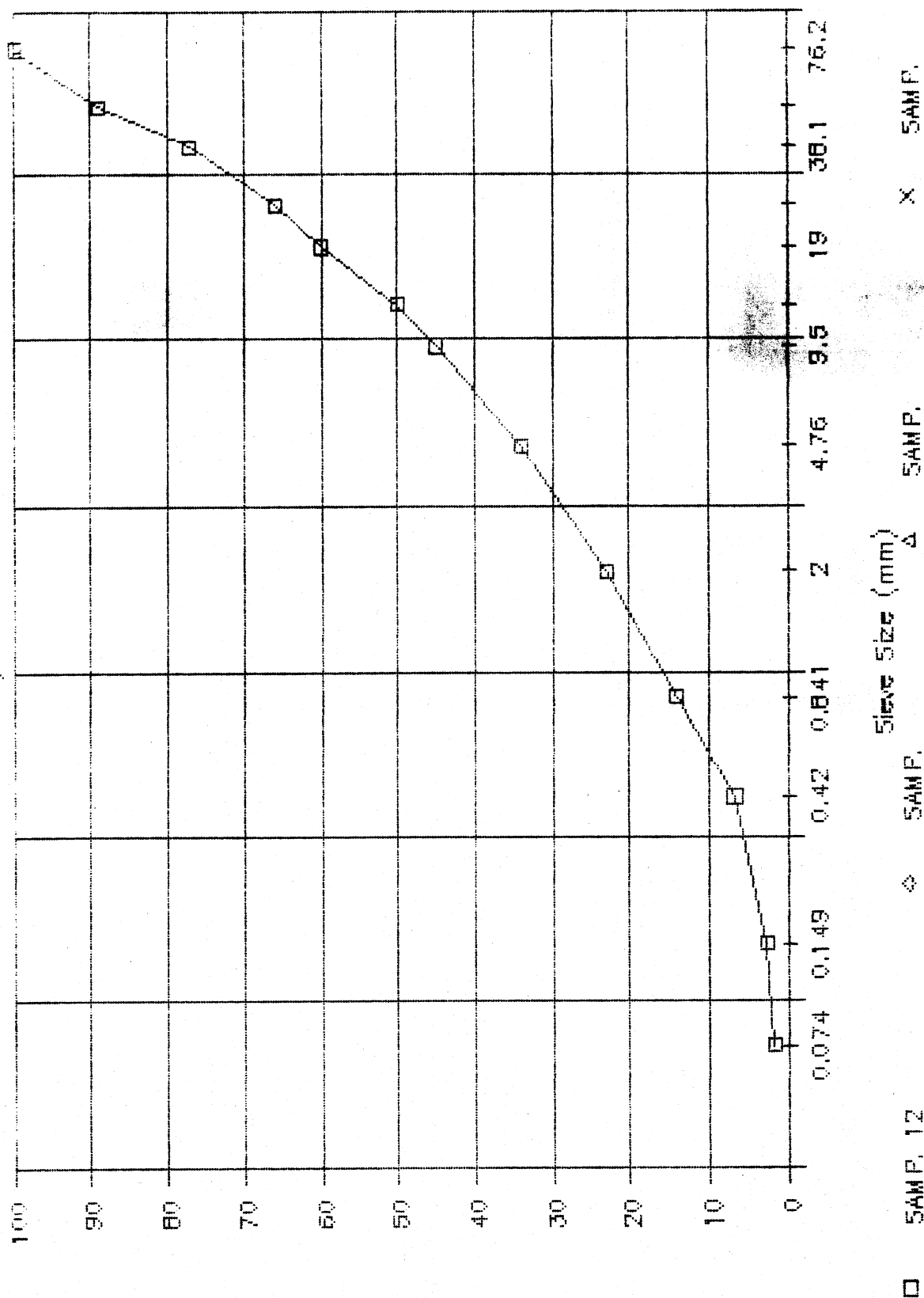
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 66
% SAND: 32
% FINES: 2

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-06



PLANNED PROJECT

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-07
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 13
LAB NO: 2865
DEPTH: 1.5-2.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	96
38.1	85
25.4	77
19.0	70
12.7	61
9.5	56
4.76	43
2.38	--
2.00	30
1.19	--
0.841	19
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	2

M.C.(%): --

LIMITS

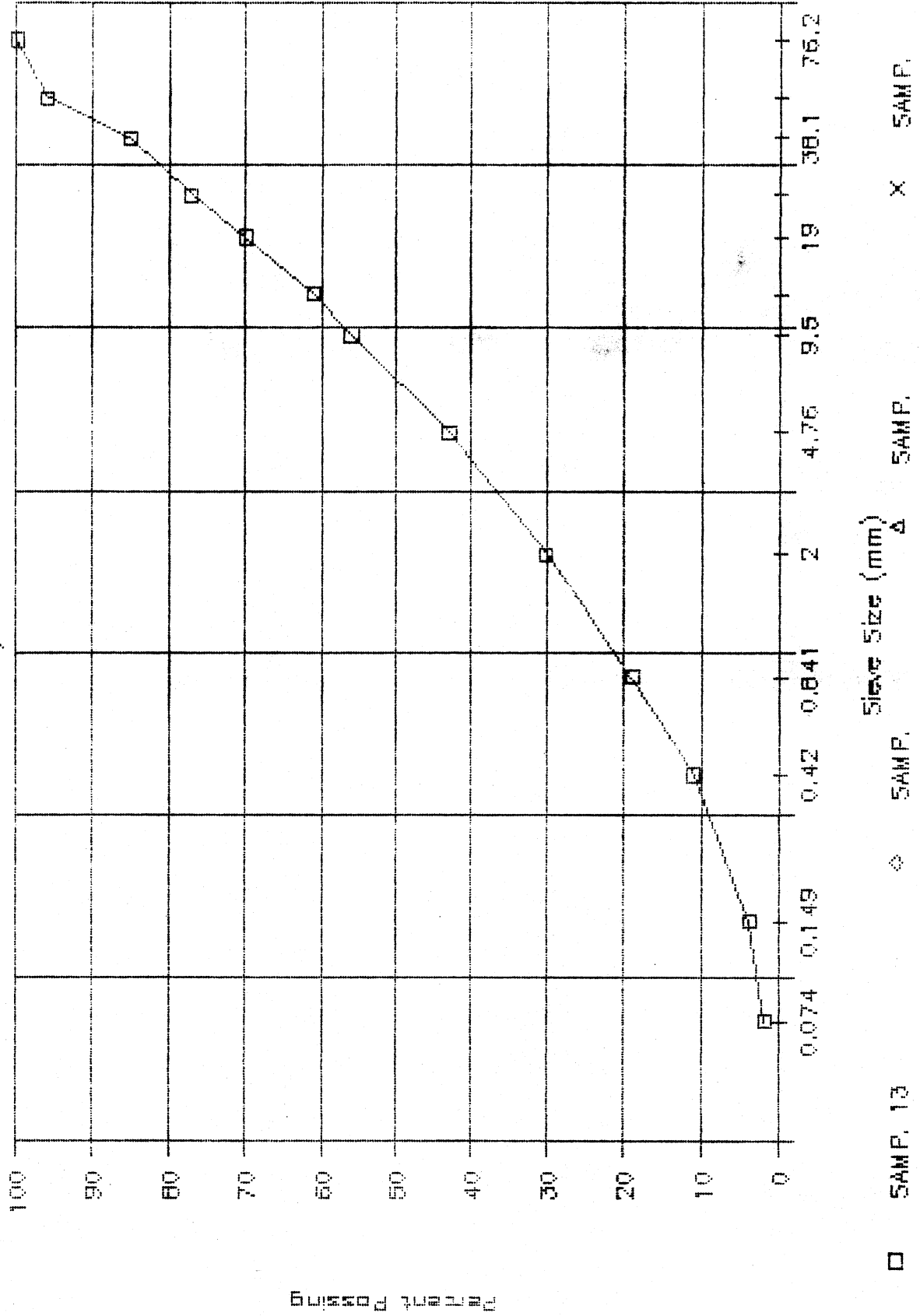
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 57
% SAND: 41
% FINES: 2

CLASSIFICATION:
POORLY GRADED
GRAVEL WITH SAND
(GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-07



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-08
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO.: 15
LAB NO: 2866
DEPTH: 3.5-4.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	100
38.1	95
25.4	85
19.0	75
12.7	67
9.5	62
4.76	50
2.38	--
2.00	36
1.19	--
0.841	21
0.595	--
0.42	12
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

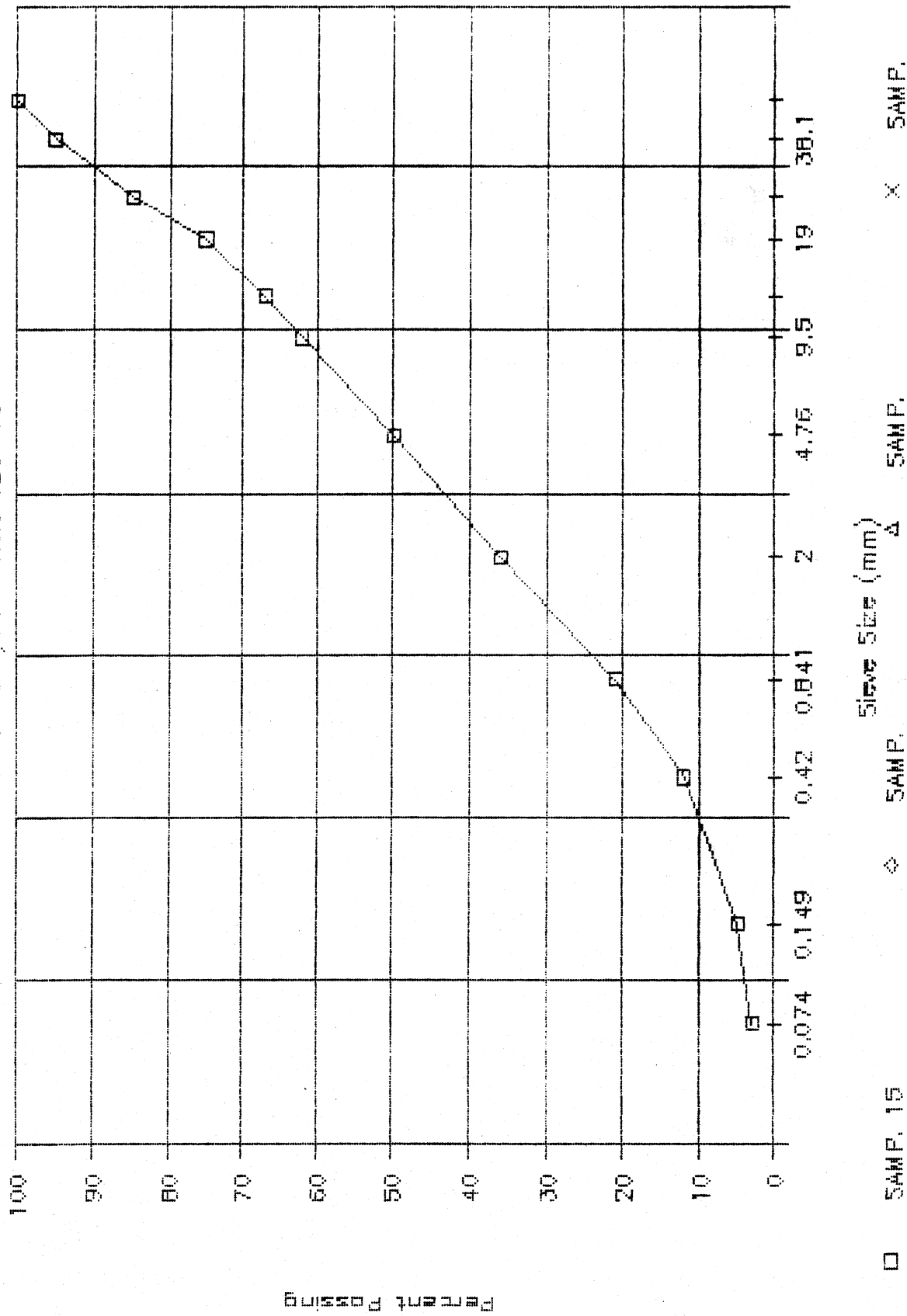
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 50
% SAND: 47
% FINES: 3

CLASSIFICATION:
POORLY GRADED
GRAVEL WITH SAND
(GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-08



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-09
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 16
 LAB NO: 2867
 DEPTH: 1.4-1.8
 TYPE: BULK

FIELD NO: 17
 LAB NO: 2868
 DEPTH: 3.3-3.7
 TYPE: BULK

FIELD NO: 18
 LAB NO: 2869
 DEPTH: 5.0-5.5
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	95
38.1	93
25.4	85
19.0	80
12.7	71
9.5	66
4.76	54
2.38	--
2.00	43
1.19	--
0.841	35
0.595	--
0.42	28
0.297	--
0.177	--
0.149	18
0.074	13

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 46
 % SAND: 42
 % FINES: 13

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	97
25.4	84
19.0	75
12.7	65
9.5	59
4.76	47
2.38	--
2.00	36
1.19	--
0.841	27
0.595	--
0.42	21
0.297	--
0.177	--
0.149	10
0.074	5

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 53
 % SAND: 42
 % FINES: 5

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	92
19.0	89
12.7	81
9.5	74
4.76	60
2.38	--
2.00	44
1.19	--
0.841	31
0.595	--
0.42	22
0.297	--
0.177	--
0.149	11
0.074	7

M.C.(%): --

LIMITS

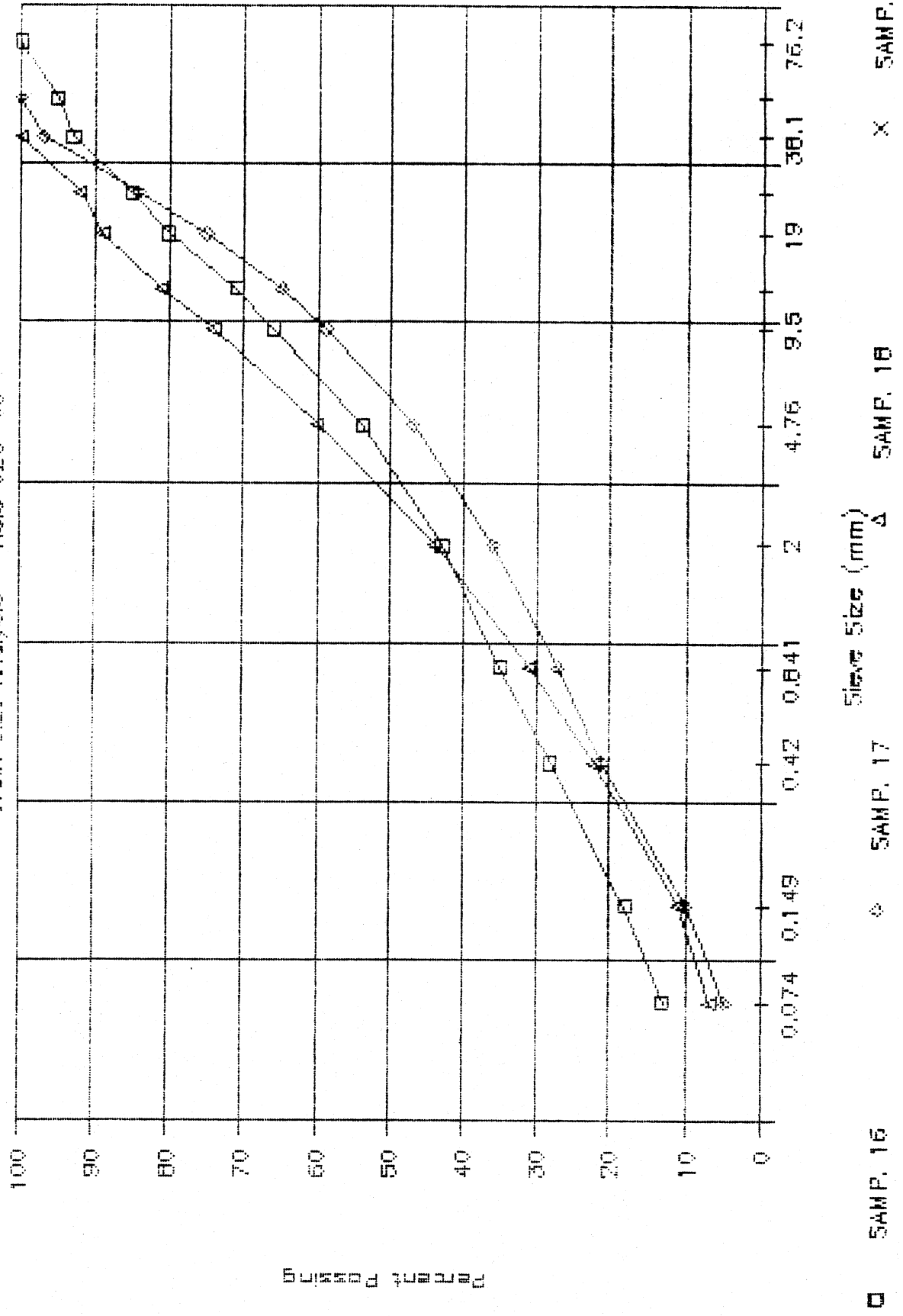
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 40
 % SAND: 53
 % FINES: 7

CLASSIFICATION:
 WELL-GRADED SAND
 WITH SILT &
 GRAVEL (SW-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-09



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-10
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 19
 LAB NO: 2870
 DEPTH: 1.6-2.1
 TYPE: BULK

FIELD NO: 20
 LAB NO: 2871
 DEPTH: 3.1-3.5
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	92
38.1	89
25.4	85
19.0	83
12.7	77
9.5	72
4.76	64
2.38	--
2.00	56
1.19	--
0.841	49
0.595	--
0.42	43
0.297	--
0.177	--
0.149	29
0.074	19

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 36
 % SAND: 45
 % FINES: 19

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	98
19.0	93
12.7	88
9.5	82
4.76	72
2.38	--
2.00	61
1.19	--
0.841	54
0.595	--
0.42	48
0.297	--
0.177	--
0.149	34
0.074	24

M.C.(%): --

LIMITS

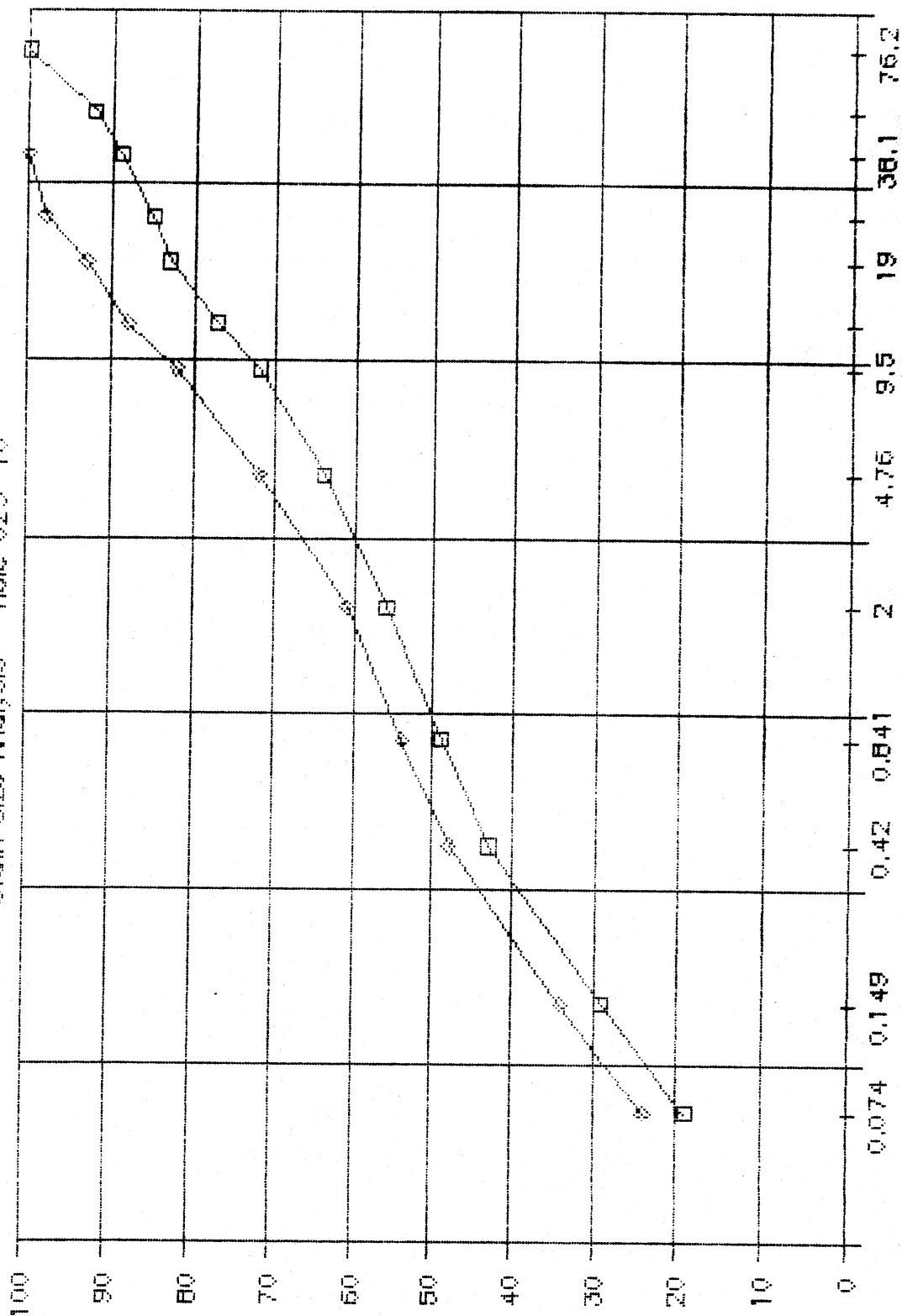
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 28
 % SAND: 48
 % FINES: 24

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-10



SAMP. 19
 SAMP. 20
 SAMP.
 SAMP.

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-11
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO:	LAB NO:	DEPTH:	TYPE:
21	2872	1.6-2.0	BULK
22	2873	3.3-3.7	BULK
23	2874	5.1-5.5	ERR

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	100	50.8	100	50.8	--
38.1	95	38.1	95	38.1	100
25.4	93	25.4	84	25.4	94
19.0	89	19.0	75	19.0	91
12.7	84	12.7	62	12.7	83
9.5	79	9.5	56	9.5	80
4.76	68	4.76	43	4.76	71
2.38	--	2.38	--	2.38	--
2.00	57	2.00	33	2.00	62
1.19	--	1.19	--	1.19	--
0.841	47	0.841	26	0.841	54
0.595	--	0.595	--	0.595	--
0.42	32	0.42	21	0.42	47
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	20	0.149	12	0.149	29
0.074	10	0.074	8	0.074	16

M.C.(%): -- M.C.(%): -- M.C.(%): --

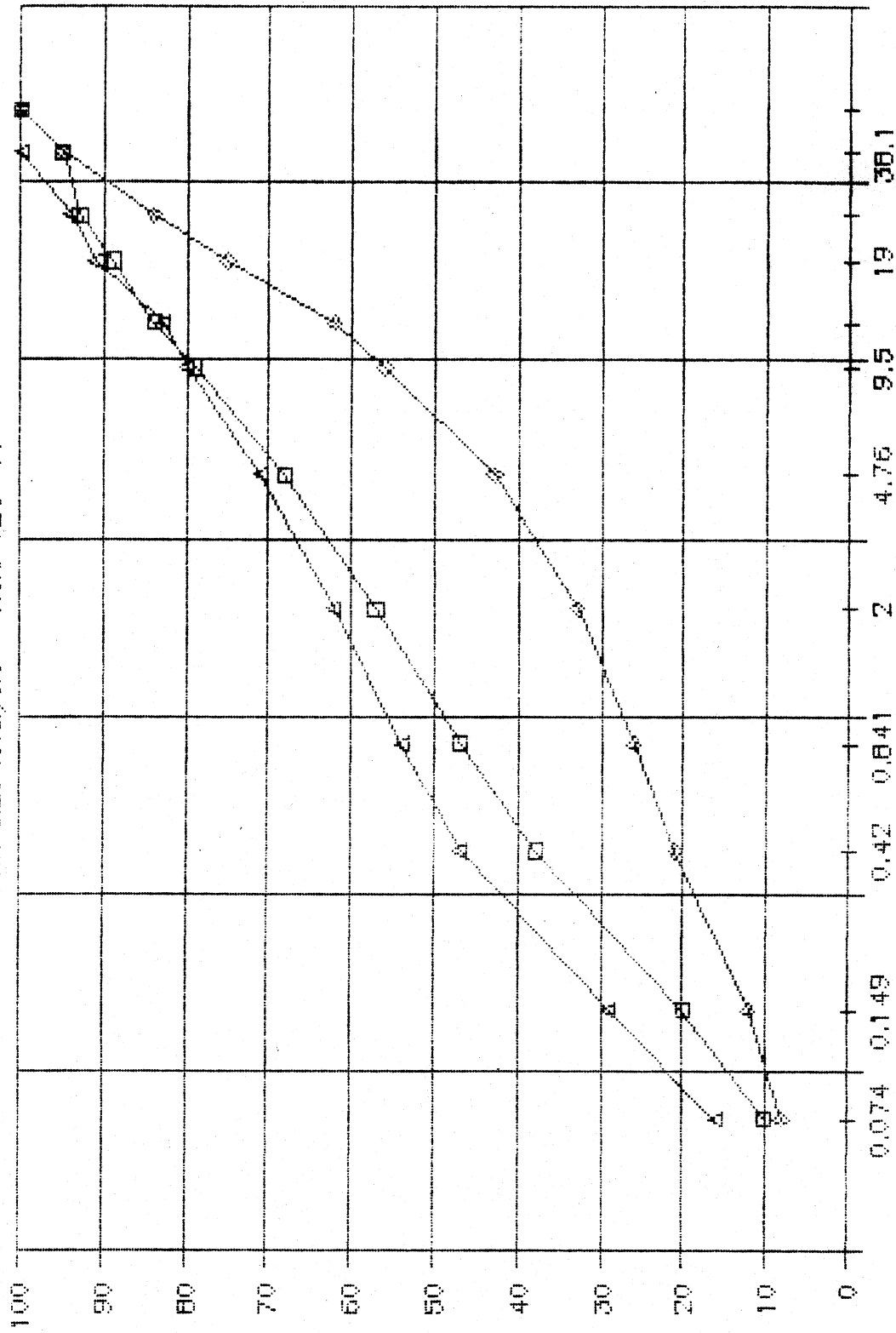
LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.	P.I.:	N.P.

% GRAVEL:	32	% GRAVEL:	57	% GRAVEL:	29
% SAND:	58	% SAND:	36	% SAND:	55
% FINES:	10	% FINES:	8	% FINES:	16

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
POORLY GRADED	WELL-GRADED	SILTY SAND WITH
SAND WITH SILT &	GRAVEL WITH SILT	GRAVEL (SM)
GRAVEL (SP-SM)	& SAND (GW-GM)	

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-11



SAMP. 21
 SAMP. 22
 SAMP. 23

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-12
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 24
 LAB NO: 2875
 DEPTH: 1.7-2.1
 TYPE: BULK

FIELD NO: 25
 LAB NO: 2876
 DEPTH: 3.3-3.6
 TYPE: BULK

FIELD NO: 26
 LAB NO: 2877
 DEPTH: 5.1-5.5
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	92
19.0	87
12.7	80
9.5	74
4.76	64
2.38	--
2.00	53
1.19	--
0.841	42
0.595	--
0.42	31
0.297	--
0.177	--
0.149	11
0.074	5

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 36
 % SAND: 59
 % FINES: 5

CLASSIFICATION:
 POORLY GRADED
 SAND WITH SILT &
 GRAVEL (SP-SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	99
19.0	96
12.7	94
9.5	91
4.76	87
2.38	--
2.00	81
1.19	--
0.841	75
0.595	--
0.42	70
0.297	--
0.177	--
0.149	54
0.074	36

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 13
 % SAND: 51
 % FINES: 36

CLASSIFICATION:
 SILTY SAND (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	94
19.0	88
12.7	80
9.5	74
4.76	62
2.38	--
2.00	48
1.19	--
0.841	36
0.595	--
0.42	26
0.297	--
0.177	--
0.149	13
0.074	7

M.C.(%): --

LIMITS

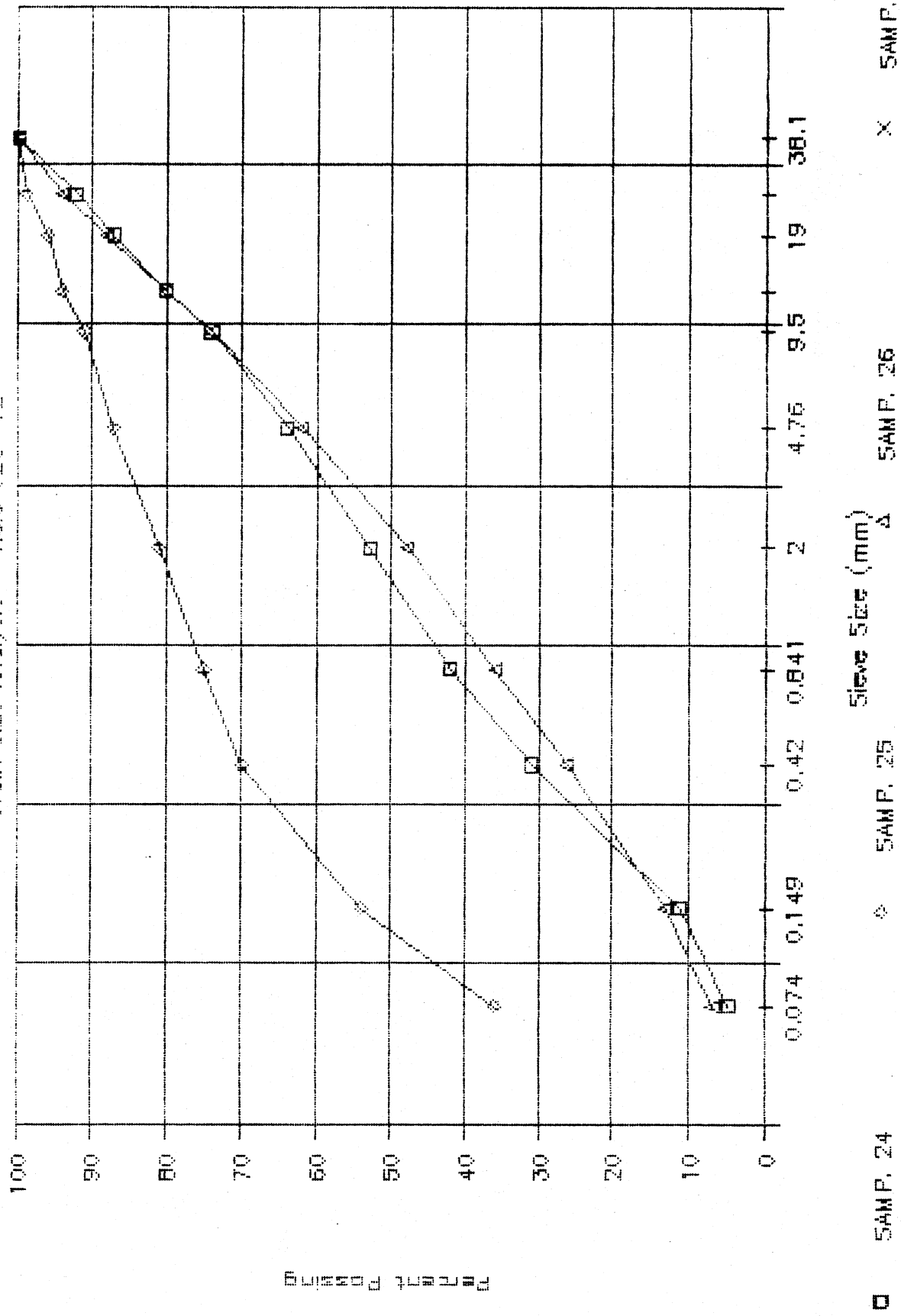
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 38
 % SAND: 55
 % FINES: 7

CLASSIFICATION:
 POORLY GRADED
 SAND WITH SILT &
 GRAVEL (SP-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-12



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-13
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 27
 LAB NO: 2878
 DEPTH: 0.6-1.0
 TYPE: BULK

FIELD NO: 28
 LAB NO: 2879
 DEPTH: 3.1-3.6
 TYPE: BULK

FIELD NO: 29
 LAB NO: 2880
 DEPTH: 4.5-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	92
38.1	90
25.4	81
19.0	77
12.7	66
9.5	59
4.76	45
2.38	--
2.00	28
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 55
 % SAND: 41
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	93
38.1	91
25.4	79
19.0	75
12.7	66
9.5	59
4.76	46
2.38	--
2.00	30
1.19	--
0.841	16
0.595	--
0.42	7
0.297	--
0.177	--
0.149	2
0.074	1

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 54
 % SAND: 45
 % FINES: 1

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	88
25.4	77
19.0	72
12.7	66
9.5	61
4.76	48
2.38	--
2.00	30
1.19	--
0.841	17
0.595	--
0.42	11
0.297	--
0.177	--
0.149	6
0.074	5

M.C.(%): --

LIMITS

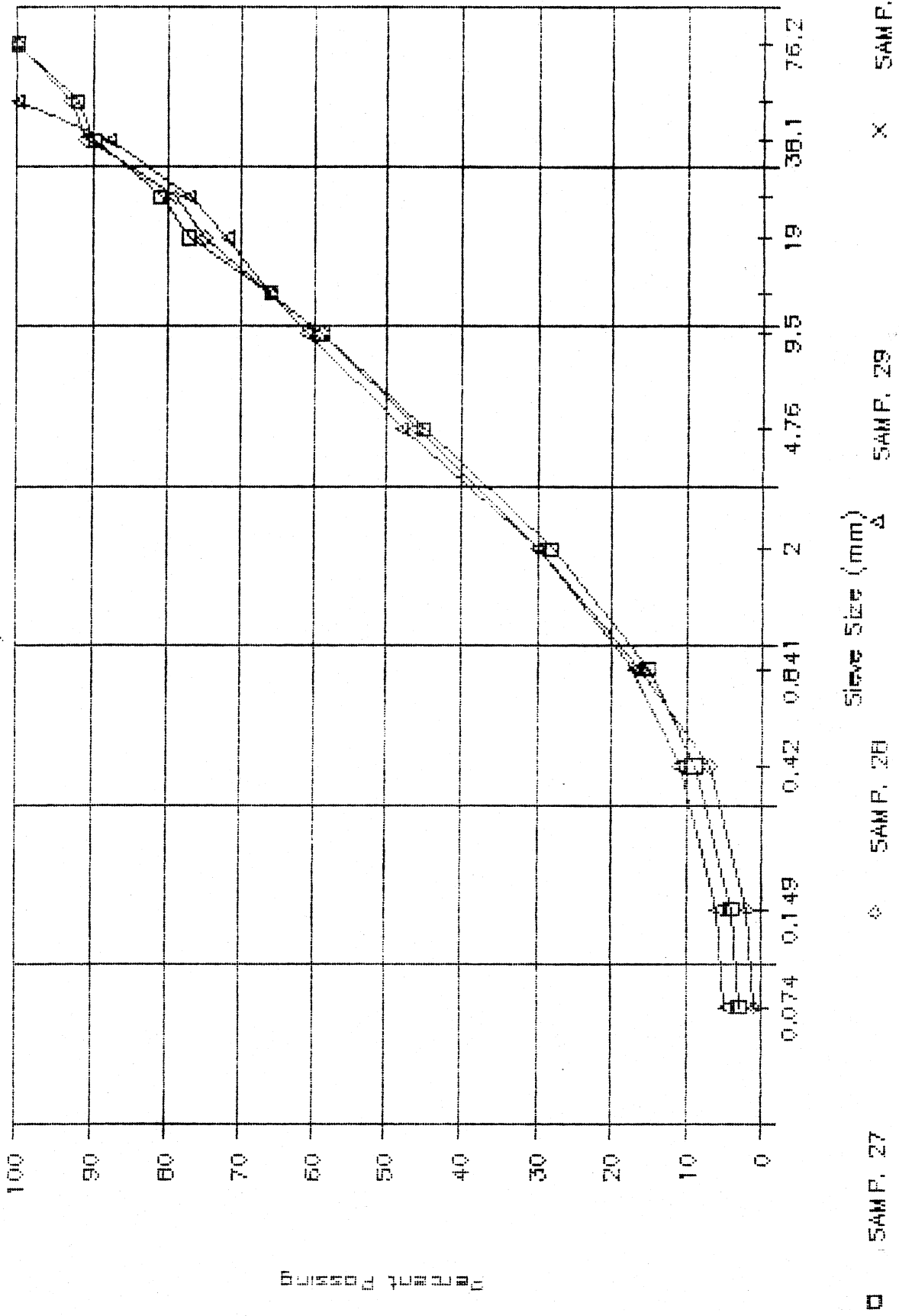
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 52
 % SAND: 43
 % FINES: 5

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SILT
 & SAND (GW-GM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-13



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-14
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 30
 LAB NO: 2881
 DEPTH: 1.6-2.0
 TYPE: BULK

FIELD NO: 31.00
 LAB NO: 2882
 DEPTH: 3.6-4.0
 TYPE: BULK

FIELD NO: 32.00
 LAB NO: 2883
 DEPTH: 5.2-5.4
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	96
25.4	87
19.0	83
12.7	72
9.5	63
4.76	47
2.38	--
2.00	28
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 53
 % SAND: 45
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	95
19.0	90
12.7	83
9.5	78
4.76	67
2.38	--
2.00	55
1.19	--
0.841	44
0.595	--
0.42	36
0.297	--
0.177	--
0.149	25
0.074	17

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 33.00
 % SAND: 50.00
 % FINES: 17.00

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	99
19.0	94
12.7	87
9.5	81
4.76	68
2.38	--
2.00	55
1.19	--
0.841	43
0.595	--
0.42	35
0.297	--
0.177	--
0.149	20
0.074	12

M.C.(%): --

LIMITS

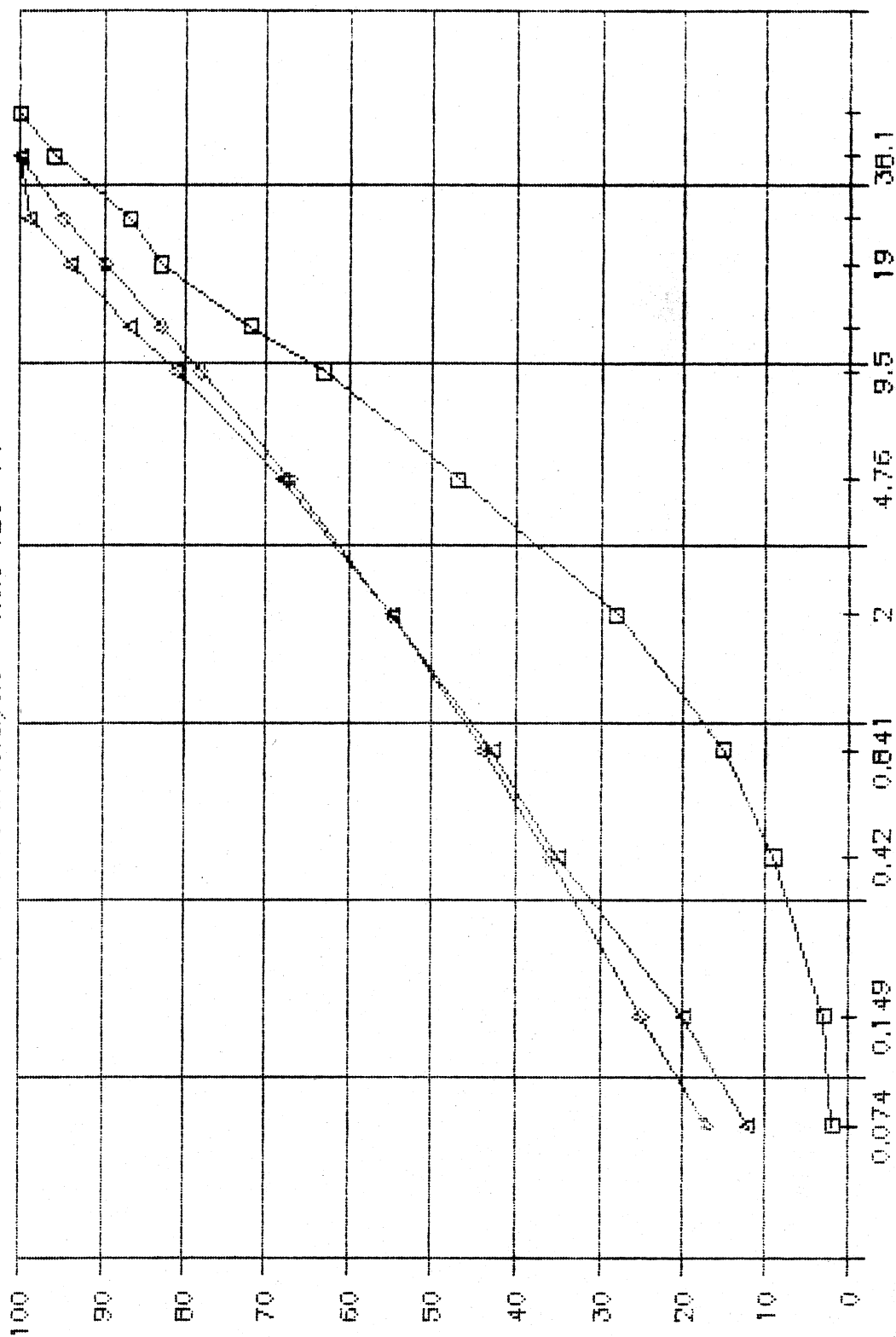
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 32.00
 % SAND: 56.00
 % FINES: 12.00

CLASSIFICATION:
 WELL-GRADED SAND
 WITH SILT &
 GRAVEL (SW-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-14



5AMP. 30
 5AMP. 31
 5AMP. 32
 X 5AMP.

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-15
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 33
 LAB NO: 2884
 DEPTH: 0.8-1.2
 TYPE: BULK

FIELD NO: 34
 LAB NO: 2885
 DEPTH: 3.0-3.4
 TYPE: BULK

FIELD NO: 35
 LAB NO: 2886
 DEPTH: 4.8-5.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	85
38.1	84
25.4	72
19.0	66
12.7	56
9.5	50
4.76	38
2.38	--
2.00	24
1.19	--
0.841	14
0.595	--
0.42	22
0.297	--
0.177	--
0.149	2
0.074	1

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	93
25.4	85
19.0	75
12.7	63
9.5	56
4.76	43
2.38	--
2.00	30
1.19	--
0.841	19
0.595	--
0.42	12
0.297	--
0.177	--
0.149	4
0.074	3

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	100
76.2	73
50.8	64
38.1	60
25.4	54
19.0	50
12.7	44
9.5	39
4.76	32
2.38	--
2.00	23
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 62
 % SAND: 37
 % FINES: 1

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 57
 % SAND: 40
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

M.C.(%): --

LIMITS

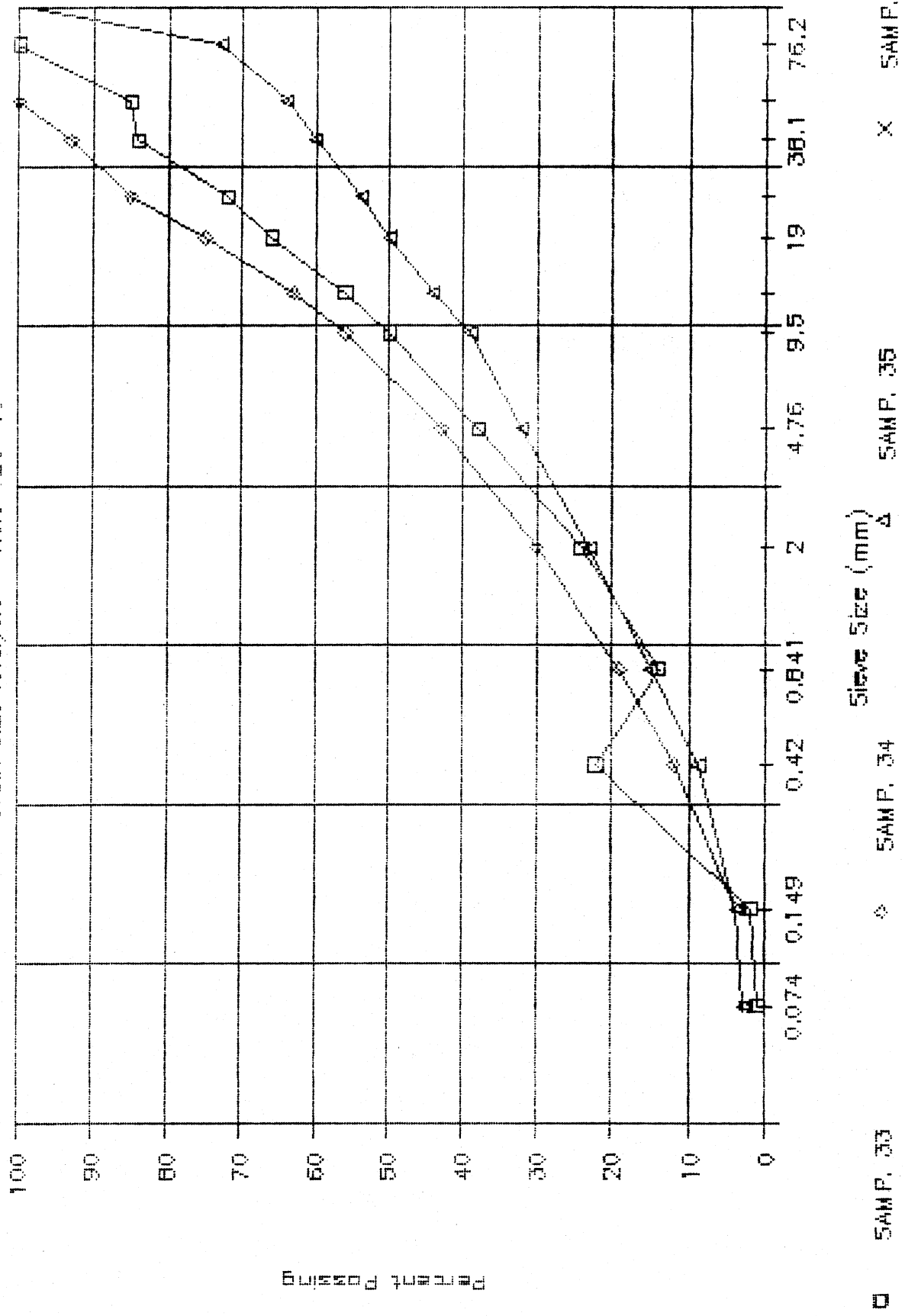
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 68
 % SAND: 28
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 023-15



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-16
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 36
 LAB NO: 2887
 DEPTH: 1.5-1.9
 TYPE: BULK

FIELD NO: 37
 LAB NO: 2888
 DEPTH: 2.6-3.0
 TYPE: BULK

FIELD NO: 38
 LAB NO: 2889
 DEPTH: 4.6-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	91
38.1	79
25.4	72
19.0	65
12.7	58
9.5	53
4.76	42
2.38	--
2.00	30
1.19	--
0.841	20
0.595	--
0.42	13
0.297	--
0.177	--
0.149	5
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 58
 % SAND: 38
 % FINES: 4

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	80
25.4	70
19.0	61
12.7	54
9.5	49
4.76	41
2.38	--
2.00	31
1.19	--
0.841	20
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 59
 % SAND: 38
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	73
38.1	68
25.4	60
19.0	56
12.7	48
9.5	44
4.76	34
2.38	--
2.00	24
1.19	--
0.841	16
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	2

M.C.(%): --

LIMITS

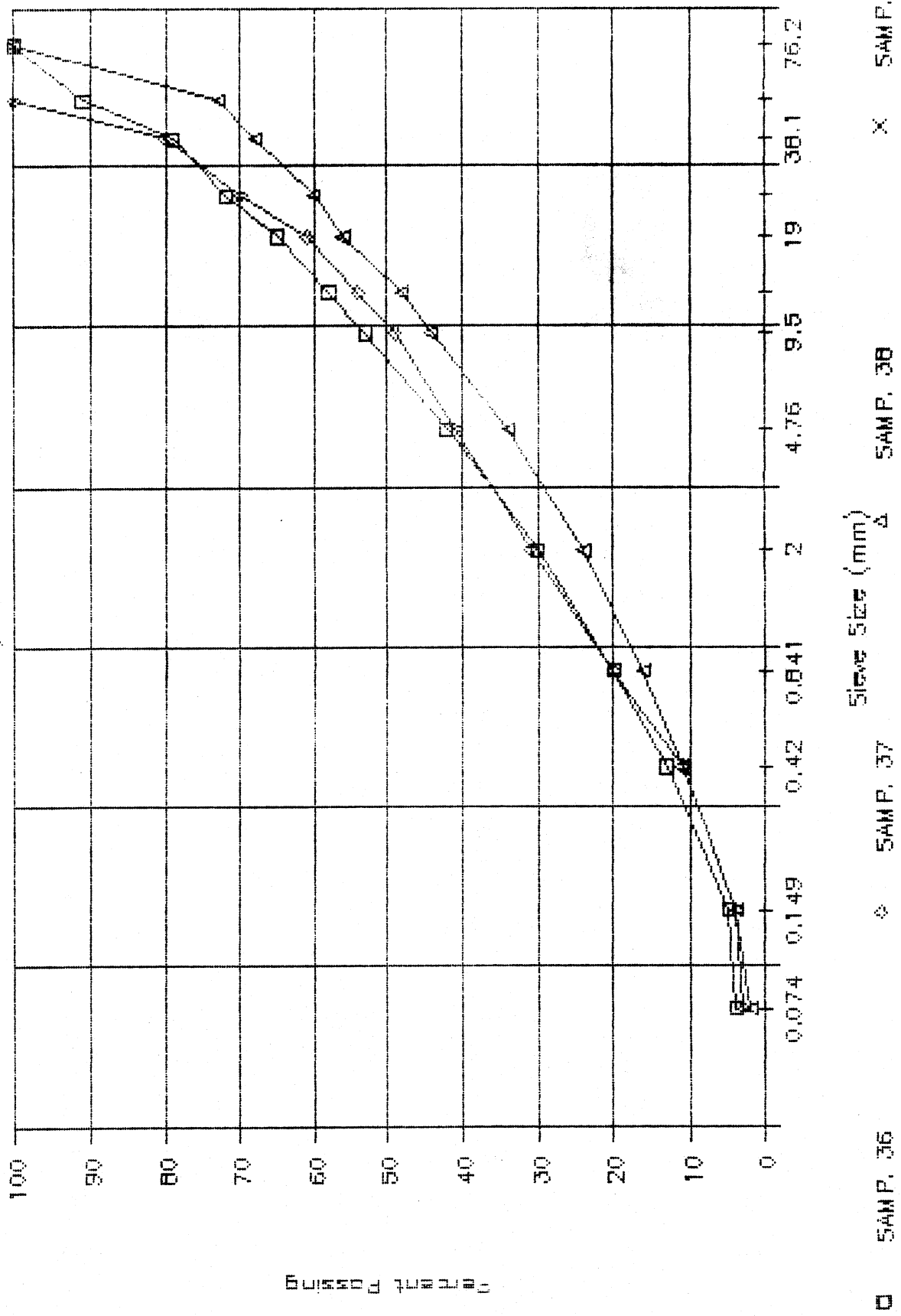
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 66
 % SAND: 32
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-16



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-17
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 39
 LAB NO: 2890
 DEPTH: 1.1-1.5
 TYPE: BULK

FIELD NO: 40
 LAB NO: 2891
 DEPTH: 2.6-3.0
 TYPE: BULK

FIELD NO: 41
 LAB NO: 2892
 DEPTH: 4.6-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	96
38.1	90
25.4	76
19.0	68
12.7	59
9.5	54
4.76	42
2.38	--
2.00	29
1.19	--
0.841	17
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 58
 % SAND: 39
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	96
38.1	86
25.4	74
19.0	66
12.7	53
9.5	48
4.76	38
2.38	--
2.00	27
1.19	--
0.841	16
0.595	--
0.42	9
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 62
 % SAND: 35
 % FINES: 2

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	77
38.1	73
25.4	64
19.0	57
12.7	50
9.5	45
4.76	34
2.38	--
2.00	23
1.19	--
0.841	14
0.595	--
0.42	8
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

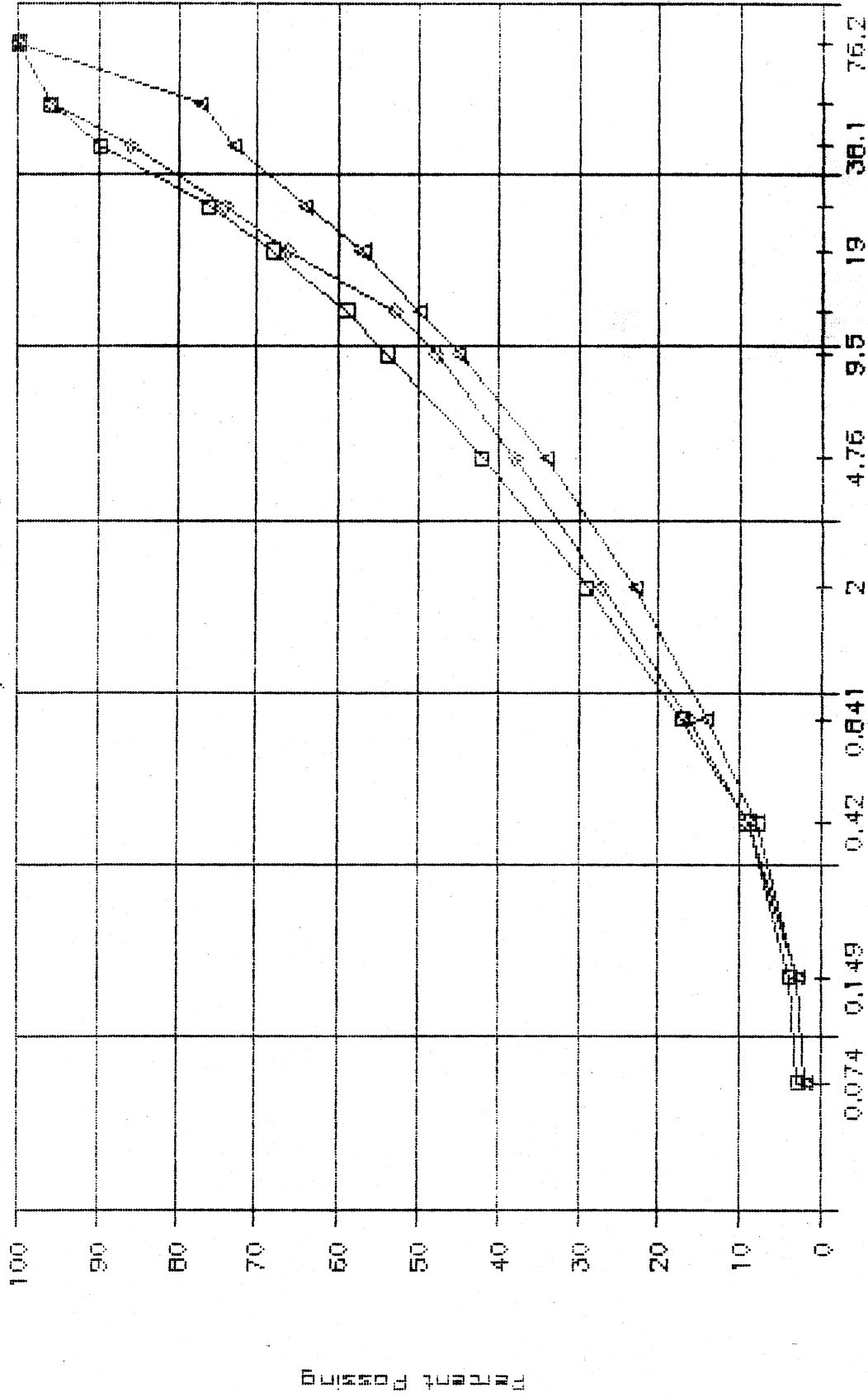
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 66
 % SAND: 32
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-17



SAMP. 39
 SAMP. 40
 SAMP. 41

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-18
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 42
 LAB NO: 2893
 DEPTH: 2.4-2.8
 TYPE: BULK

FIELD NO: 43
 LAB NO: 2894
 DEPTH: 3.8-4.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	91
25.4	82
19.0	74
12.7	66
9.5	60
4.76	46
2.38	--
2.00	30
1.19	--
0.841	17
0.595	--
0.42	10
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 54
 % SAND: 43
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	99
2.38	--
2.00	99
1.19	--
0.841	95
0.595	--
0.42	92
0.297	--
0.177	--
0.149	83
0.074	65

M.C.(%): --

LIMITS

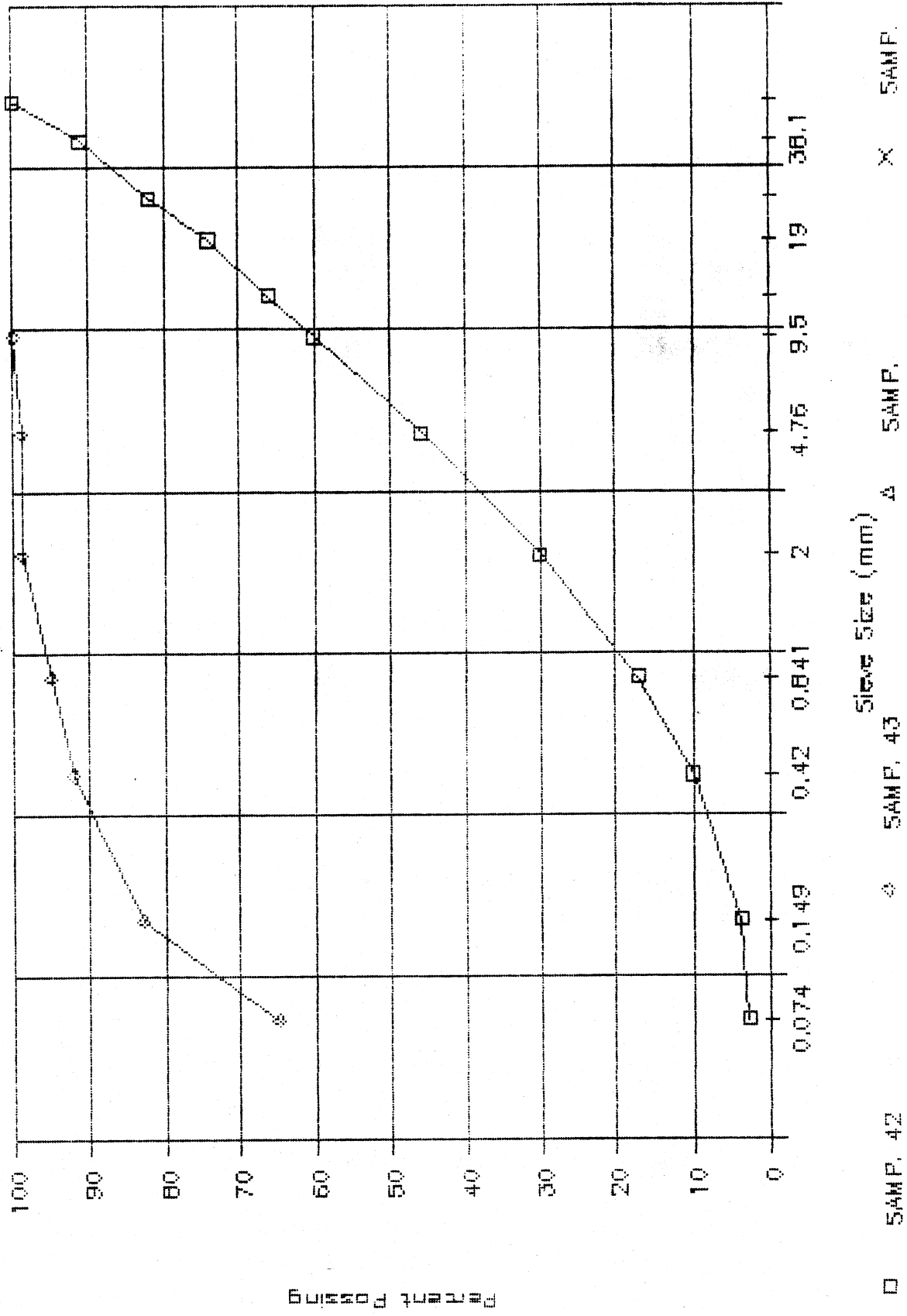
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 1
 % SAND: 35
 % FINES: 65

CLASSIFICATION:
 SANDY SILT (ML)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-10



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-19
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 44
LAB NO: 2895
DEPTH: 1.6-2.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	100
38.1	93
25.4	85
19.0	80
12.7	71
9.5	66
4.76	54
2.38	--
2.00	40
1.19	--
0.841	26
0.595	--
0.42	15
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

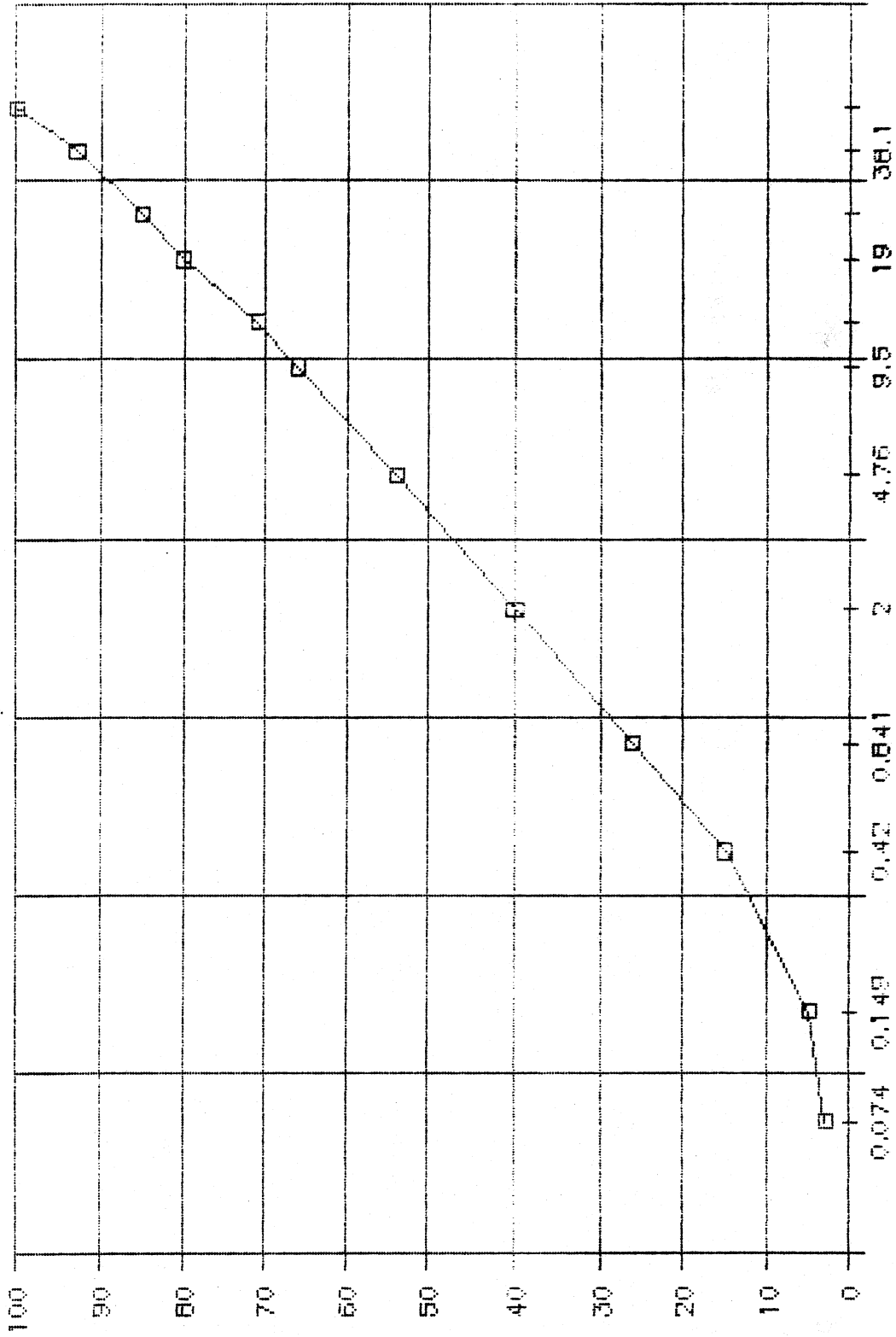
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 46
% SAND: 51
% FINES: 3

CLASSIFICATION: -
POORLY GRADED
SAND WITH GRAVEL
(SP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029—19



SAMP. 44
 SAMP.
 SAMP.
 SAMP.

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-20
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 45
LAB NO: 2896
DEPTH: 0.8-1.2
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	95
38.1	81
25.4	70
19.0	64
12.7	55
9.5	48
4.76	35
2.38	--
2.00	24
1.19	--
0.841	17
0.595	--
0.42	12
0.297	--
0.177	--
0.149	4
0.074	2

M.C.(%): --

LIMITS

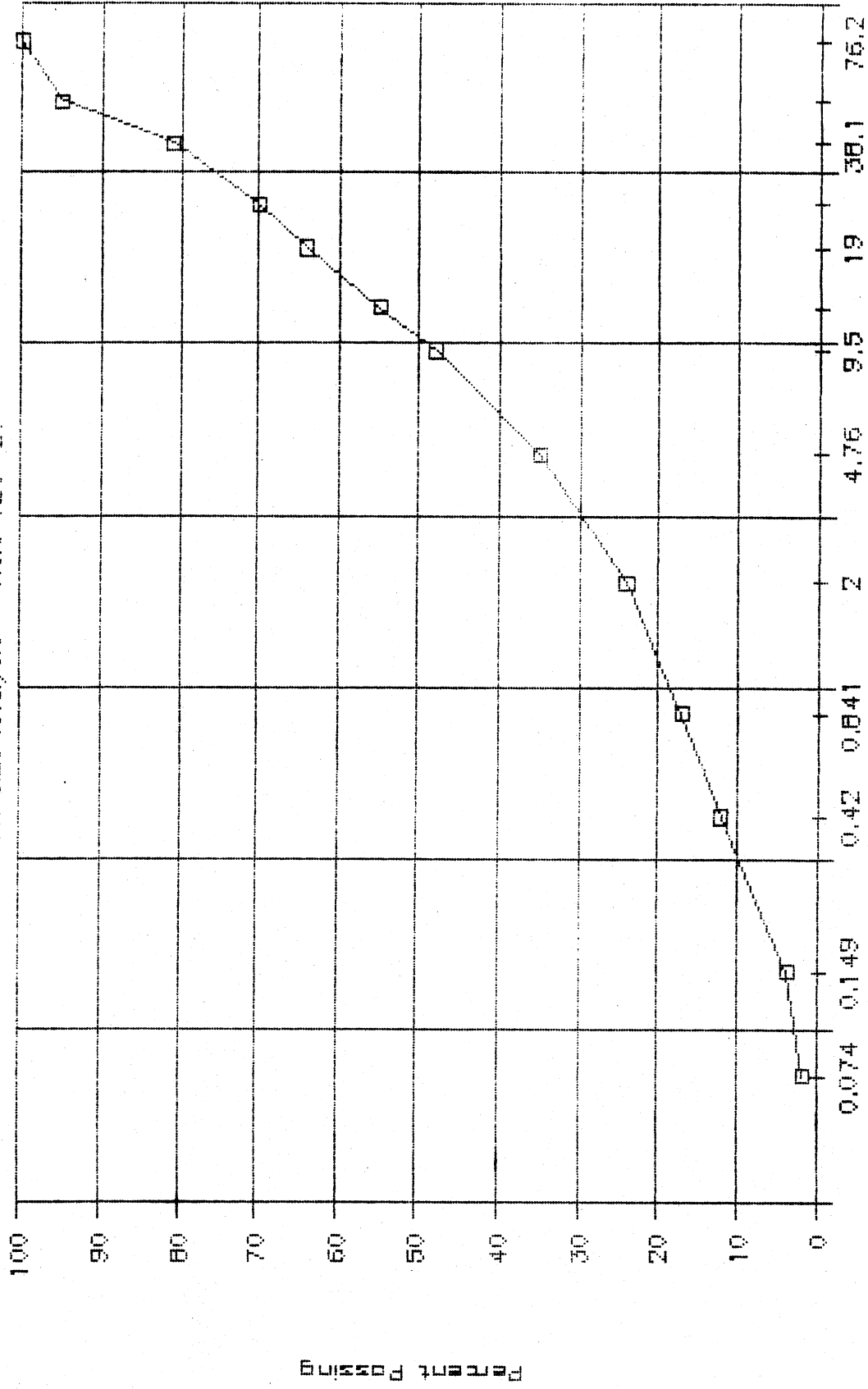
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 65
% SAND: 33
% FINES: 2

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029--20



5AMP. 45
 5AMP.
 5AMP.
 5AMP.

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-22
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 47
 LAB NO: 2897
 DEPTH: 0.8-1.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	91
38.1	81
25.4	68
19.0	60
12.7	54
9.5	49
4.76	38
2.38	--
2.00	27
1.19	--
0.841	18
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS
 LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 62
 % SAND: 35
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

FIELD NO: 48
 LAB NO: 2898
 DEPTH: 2.6-3.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	100
76.2	87
50.8	76
38.1	73
25.4	58
19.0	52
12.7	43
9.5	38
4.76	29
2.38	--
2.00	19
1.19	--
0.841	12
0.595	--
0.42	8
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS
 LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 71
 % SAND: 26
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 49
 LAB NO: 2899
 DEPTH: 4.3-4.7
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	85
38.1	75
25.4	60
19.0	54
12.7	43
9.5	36
4.76	25
2.38	--
2.00	17
1.19	--
0.841	11
0.595	--
0.42	7
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

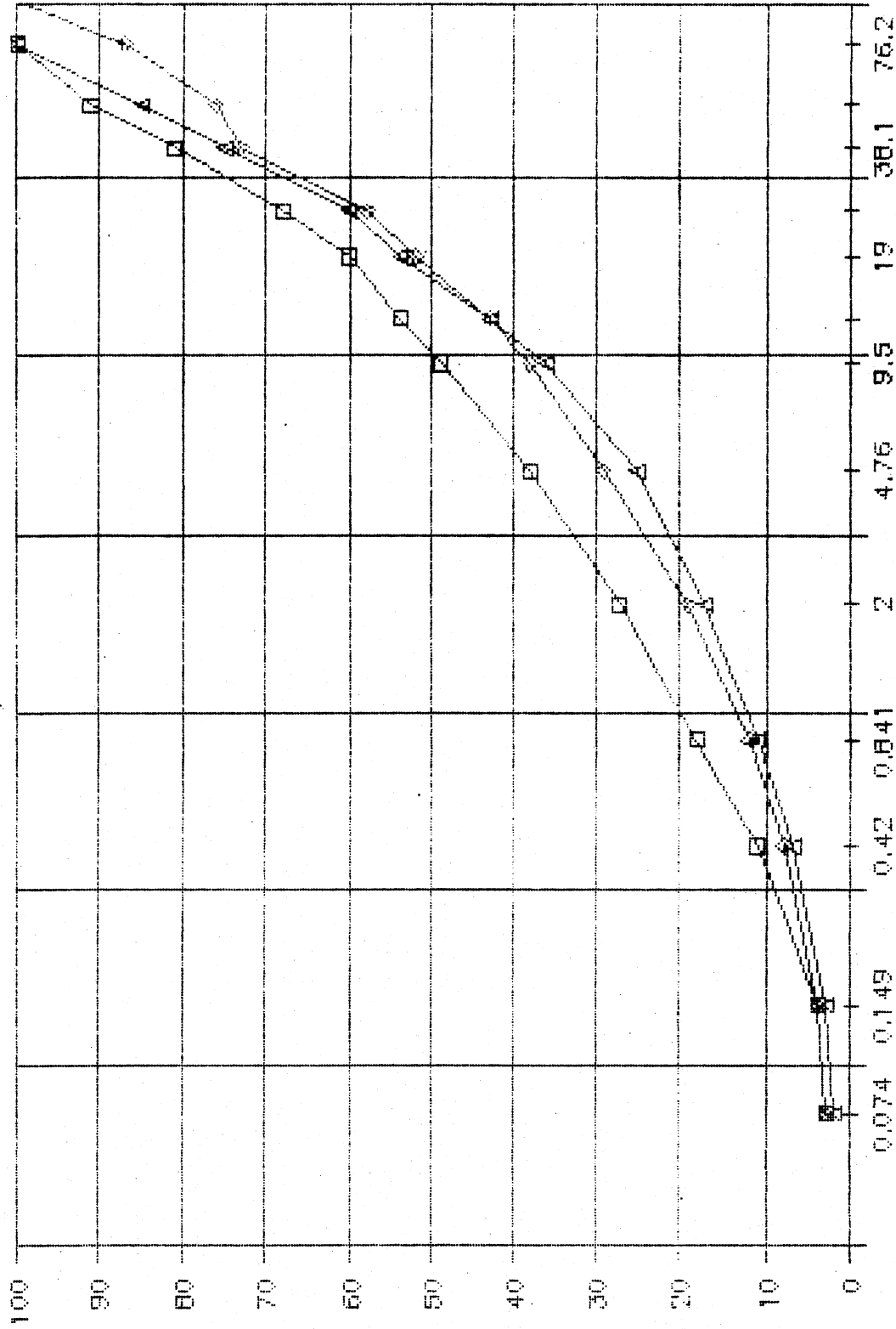
LIMITS
 LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 75
 % SAND: 23
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-22



SAMP. 47
 SAMP. 48
 SAMP. 49

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-23
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: ~~W~~ C.B. DATE COMPLETED: 88.10.22

FIELD NO: 50
 LAB NO: 2900
 DEPTH: 0.8-1.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	94
25.4	84
19.0	75
12.7	64
9.5	56
4.76	42
2.38	--
2.00	29
1.19	--
0.841	19
0.595	--
0.42	12
0.297	--
0.177	--
0.149	4
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 58
 % SAND: 40
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 51
 LAB NO: 2901
 DEPTH: 2.8-3.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	82
38.1	80
25.4	71
19.0	63
12.7	53
9.5	47
4.76	35
2.38	--
2.00	23
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 65
 % SAND: 33
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 52
 LAB NO: 2902
 DEPTH: 3.9-4.3
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	93
25.4	82
19.0	74
12.7	67
9.5	62
4.76	52
2.38	--
2.00	40
1.19	--
0.841	27
0.595	--
0.42	17
0.297	--
0.177	--
0.149	7
0.074	4

M.C.(%): --

LIMITS

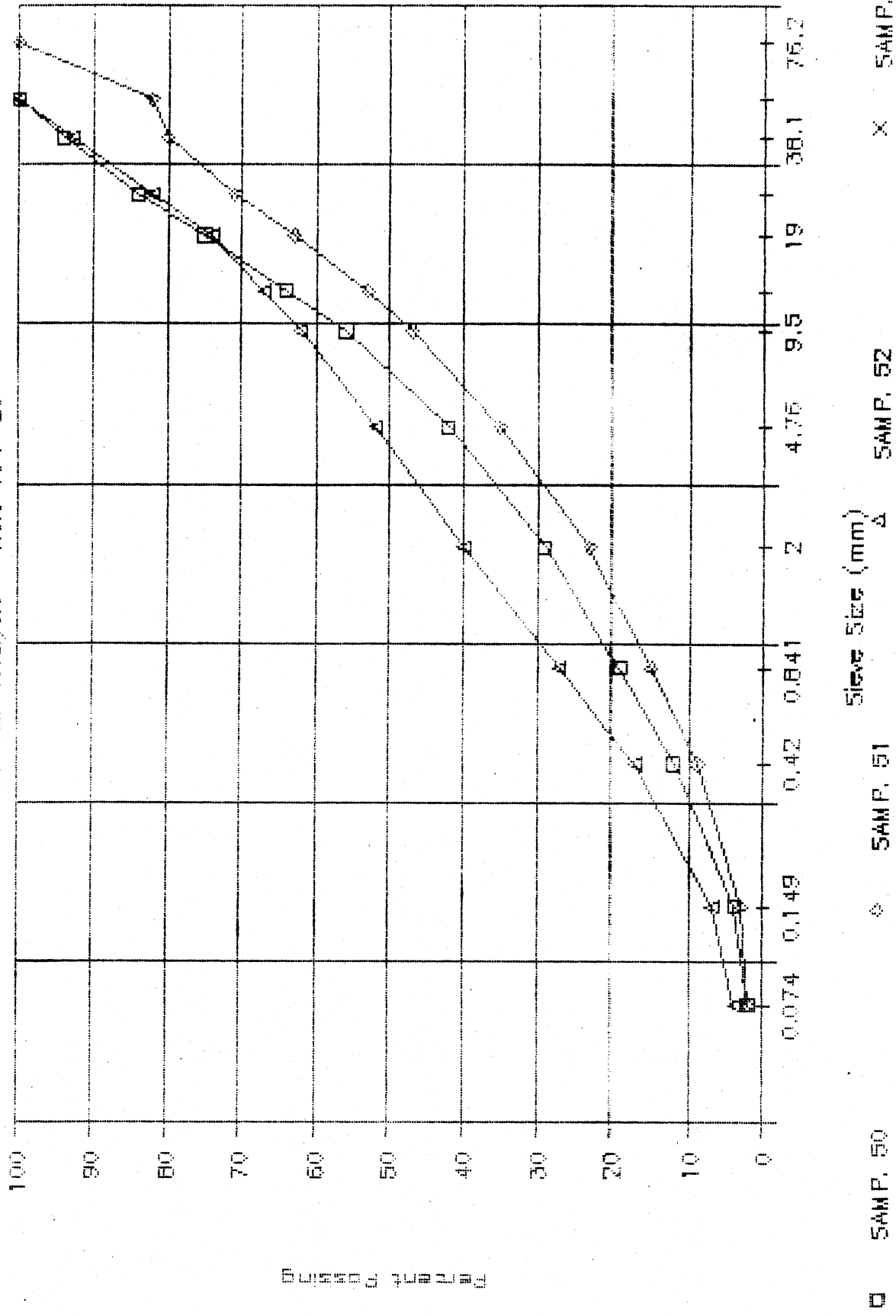
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 48
 % SAND: 48
 % FINES: 4

CLASSIFICATION:
 POORLY GRADED
 SAND WITH GRAVEL
 (SP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-23



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-24
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: **ECB** DATE COMPLETED: 88.10.22

FIELD NO: 53
 LAB NO: 2903
 DEPTH: 2.8-3.2
 TYPE: BULK

FIELD NO: 54
 LAB NO: 2904
 DEPTH: 4.0-4.4
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	83
38.1	74
25.4	71
19.0	67
12.7	62
9.5	58
4.76	51
2.38	--
2.00	43
1.19	--
0.841	36
0.595	--
0.42	30
0.297	--
0.177	--
0.149	18
0.074	11

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 40
 % FINES: 11

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	93
38.1	82
25.4	76
19.0	71
12.7	63
9.5	57
4.76	47
2.38	--
2.00	37
1.19	--
0.841	27
0.595	--
0.42	21
0.297	--
0.177	--
0.149	12
0.074	8

M.C.(%): --

LIMITS

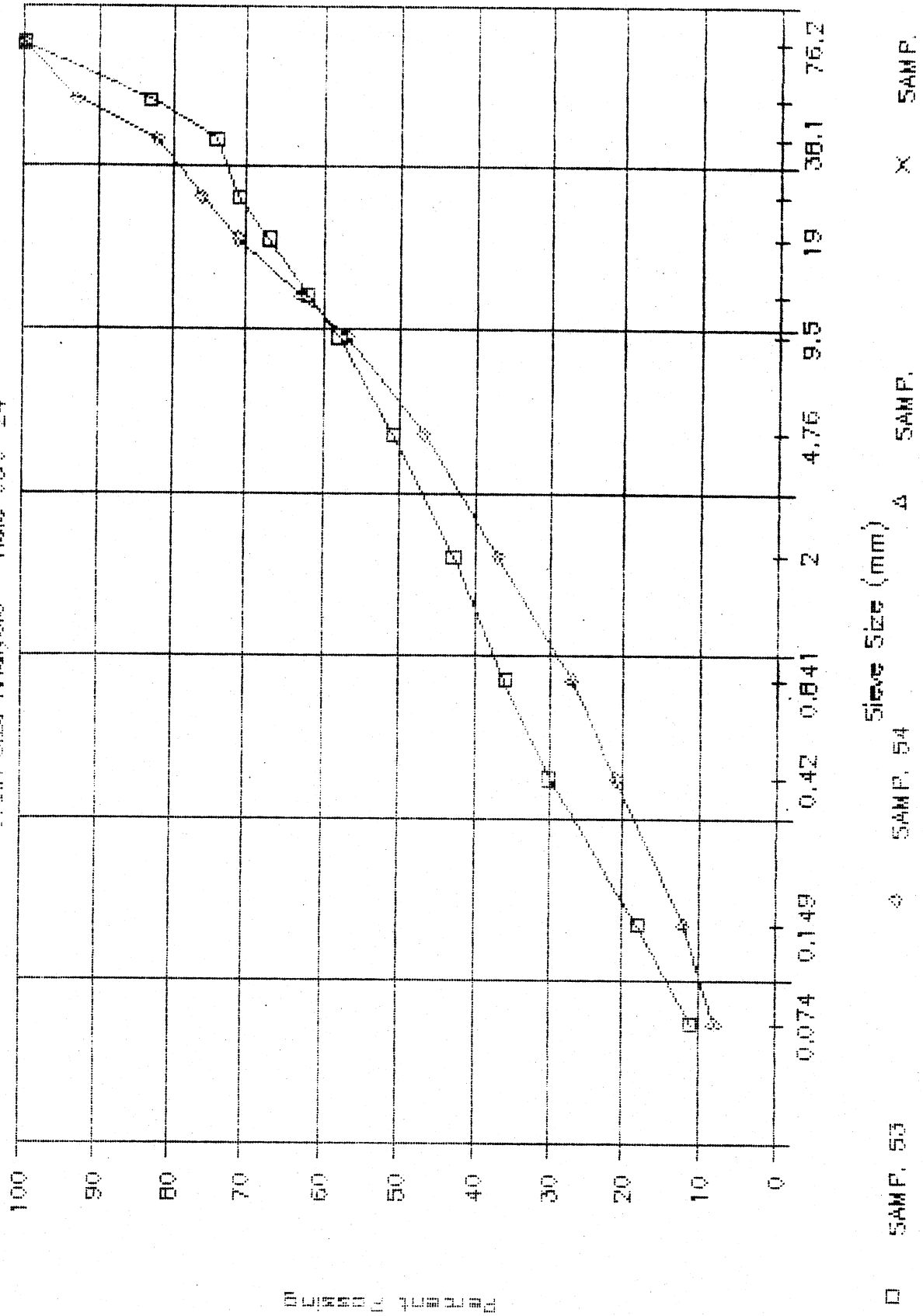
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 53
 % SAND: 39
 % FINES: 8

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SILT
 & SAND (GW-GM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-24



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-25
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: **MCB** DATE COMPLETED: 88.10.22

FIELD NO: 55
LAB NO: 2905
DEPTH: 1.2-1.6
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	100
38.1	98
25.4	97
19.0	94
12.7	88
9.5	83
4.76	71
2.38	--
2.00	56
1.19	--
0.841	45
0.595	--
0.42	36
0.297	--
0.177	--
0.149	15
0.074	7

M.C.(%): --

LIMITS

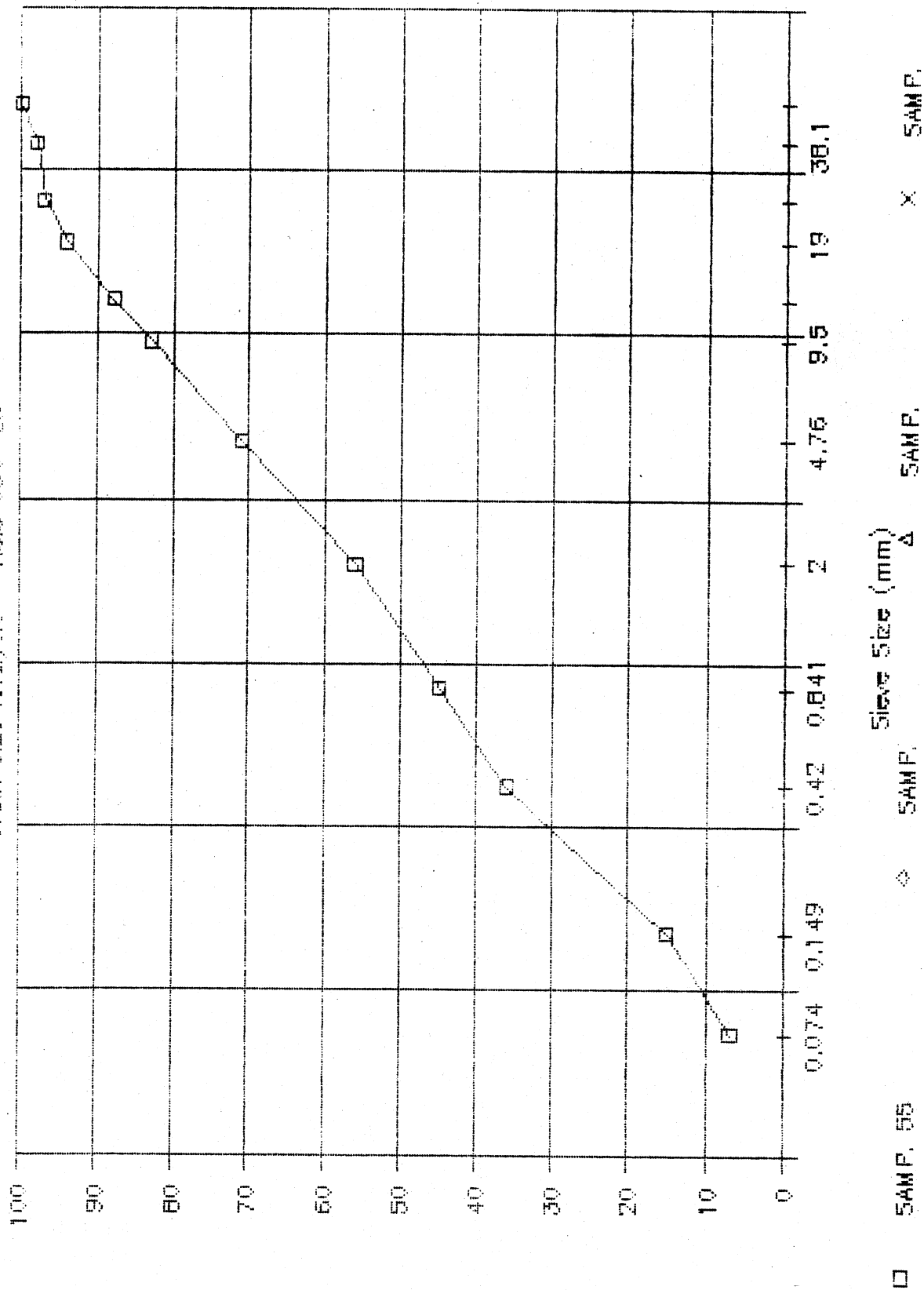
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 29
% SAND: 64
% FINES: 7

CLASSIFICATION:
POORLY GRADED
SAND WITH SILT &
GRAVEL (SP-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—25



0.074 0.149 0.42 0.841 2 4.75 9.5 19 38.1

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-26
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: **ECB** DATE COMPLETED: 88.10.22

FIELD NO: 56
 LAB NO: 2906
 DEPTH: 0.9-1.3
 TYPE: BULK

FIELD NO: 57
 LAB NO: 2907
 DEPTH: 2.6-3.0
 TYPE: BULK

FIELD NO: 58
 LAB NO: 2908
 DEPTH: 4.2-4.6
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	85
25.4	75
19.0	65
12.7	55
9.5	51
4.76	39
2.38	--
2.00	28
1.19	--
0.841	17
0.595	--
0.42	9
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 61
 % SAND: 37
 % FINES: 2

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	88
38.1	77
25.4	68
19.0	62
12.7	54
9.5	48
4.76	38
2.38	--
2.00	27
1.19	--
0.841	16
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 62
 % SAND: 34
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	94
25.4	79
19.0	71
12.7	62
9.5	55
4.76	44
2.38	--
2.00	33
1.19	--
0.841	23
0.595	--
0.42	15
0.297	--
0.177	--
0.149	7
0.074	4

M.C.(%): --

LIMITS

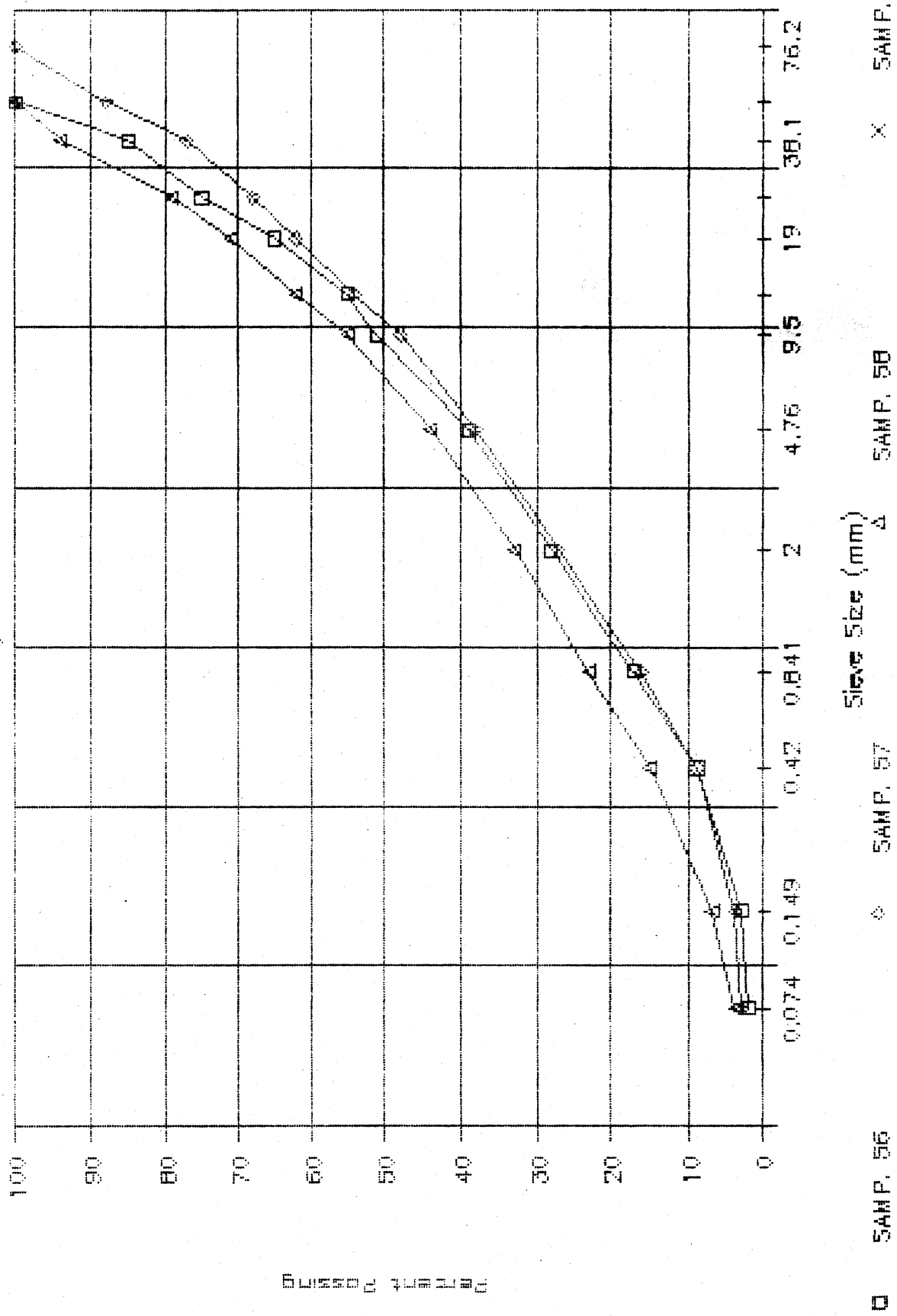
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 40
 % FINES: 4

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—25



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-27
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: **ECB** DATE COMPLETED: 88.10.22

FIELD NO: 59
 LAB NO: 2909
 DEPTH: 1.7-2.1
 TYPE: BULK

FIELD NO: 60
 LAB NO: 2910
 DEPTH: 3.0-3.4
 TYPE: BULK

FIELD NO: 61
 LAB NO: 2911
 DEPTH: 4.6-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	93
38.1	88
25.4	75
19.0	71
12.7	60
9.5	54
4.76	41
2.38	--
2.00	29
1.19	--
0.841	18
0.595	--
0.42	10
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 59
 % SAND: 39
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	91
25.4	82
19.0	77
12.7	65
9.5	59
4.76	44
2.38	--
2.00	29
1.19	--
0.841	17
0.595	--
0.42	10
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 41
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	92
38.1	90
25.4	75
19.0	64
12.7	57
9.5	52
4.76	42
2.38	--
2.00	31
1.19	--
0.841	19
0.595	--
0.42	12
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

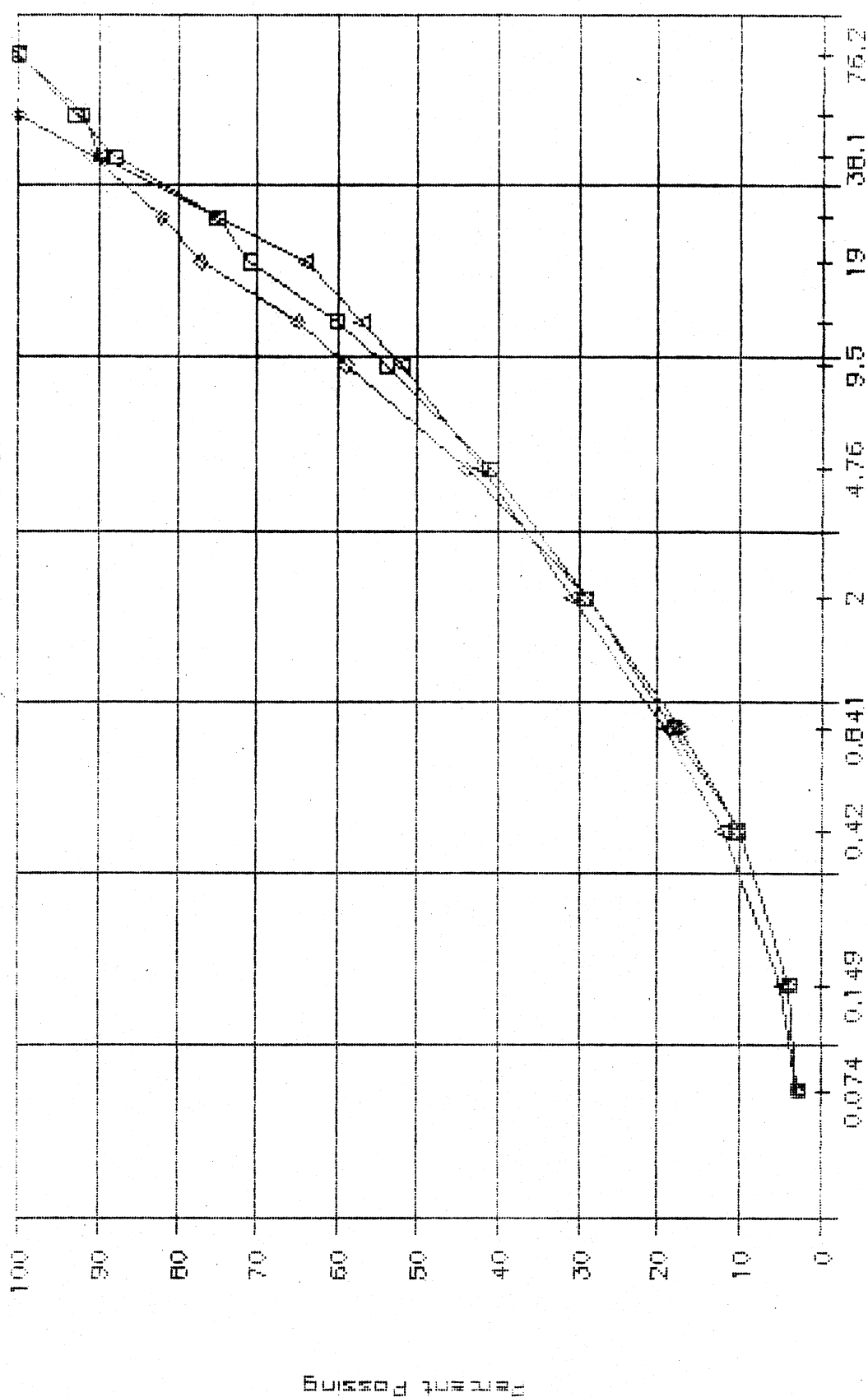
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 58
 % SAND: 39
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-27



Legend:
 □ SAMP. 59
 ◇ SAMP. 60
 △ SAMP. 61

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-28
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: **ECB** DATE COMPLETED: 88.10.22

FIELD NO: 62
 LAB NO: 2912
 DEPTH: 1.6-2.0
 TYPE: BULK

FIELD NO: 63
 LAB NO: 2913
 DEPTH: 3.2-3.6
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	90
38.1	87
25.4	83
19.0	81
12.7	75
9.5	70
4.76	62
2.38	--
2.00	52
1.19	--
0.841	43
0.595	--
0.42	36
0.297	--
0.177	--
0.149	22
0.074	13

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 38
 % SAND: 48
 % FINES: 13

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	97
25.4	90
19.0	84
12.7	75
9.5	70
4.76	61
2.38	--
2.00	52
1.19	--
0.841	45
0.595	--
0.42	40
0.297	--
0.177	--
0.149	29
0.074	18

M.C.(%): --

LIMITS

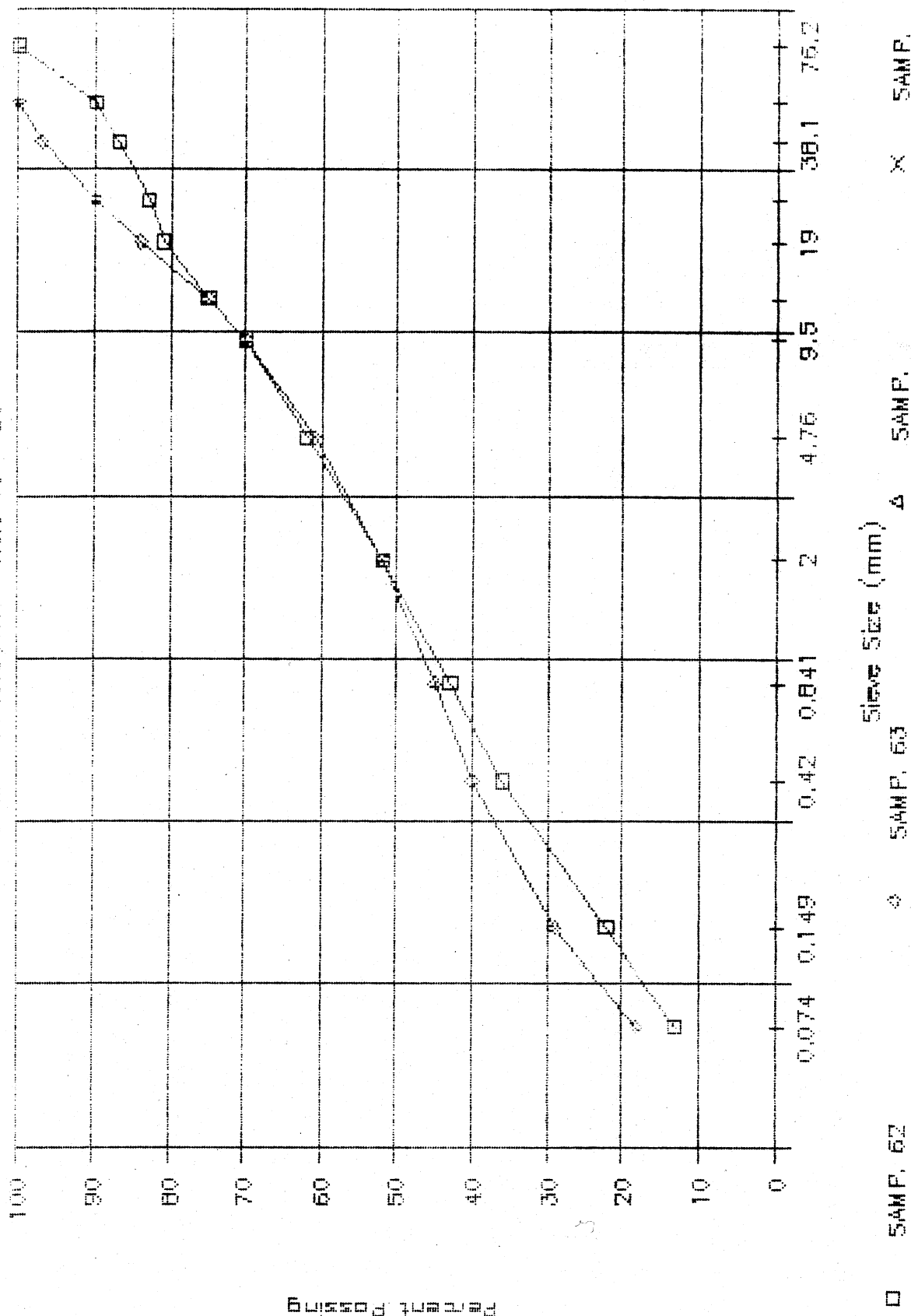
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 39
 % SAND: 43
 % FINES: 18

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-2B



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-29
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: FCB DATE COMPLETED: 88.10.22

FIELD NO: 64
LAB NO: 2914
DEPTH: 2.0-2.4
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	76
38.1	68
25.4	59
19.0	51
12.7	44
9.5	39
4.76	32
2.38	--
2.00	24
1.19	--
0.841	16
0.595	--
0.42	10
0.297	--
0.177	--
0.149	4
0.074	2

M.C. (%): --

LIMITS

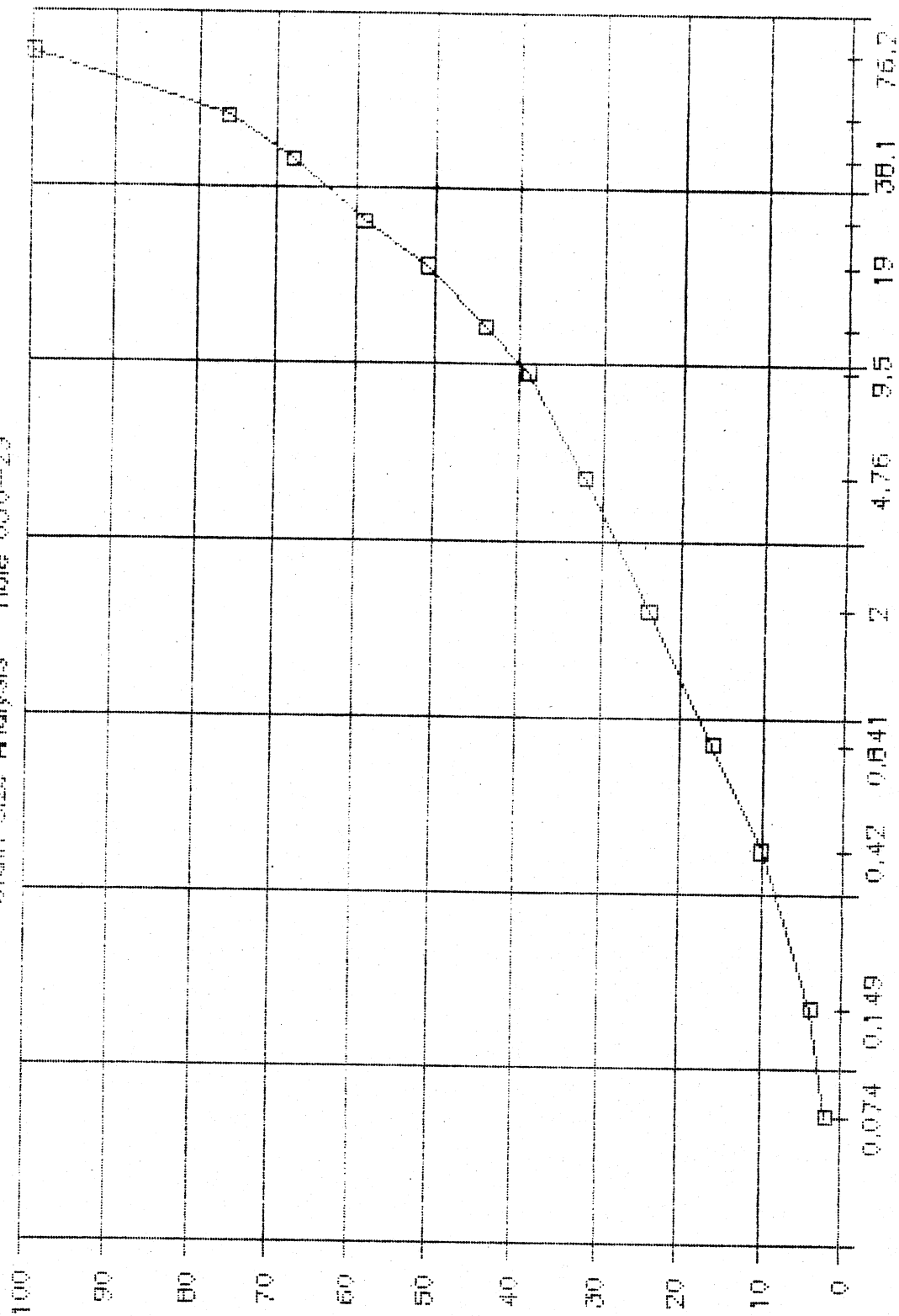
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 68
% SAND: 29
% FINES: 2

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030--29



□ 5AMP. 64 ◊ 5AMP. Δ 5AMP. X 5AMP.

GRAIN SIZE ANALYSIS

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-30
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: CB DATE COMPLETED: 88.10.22

FIELD NO: 65
LAB NO: 2915
DEPTH: 2.6-3.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	100
50.8	88
38.1	88
25.4	81
19.0	75
12.7	65
9.5	59
4.76	49
2.38	--
2.00	38
1.19	--
0.841	28
0.595	--
0.42	19
0.297	--
0.177	--
0.149	7
0.074	4

M.C.(%): --

LIMITS

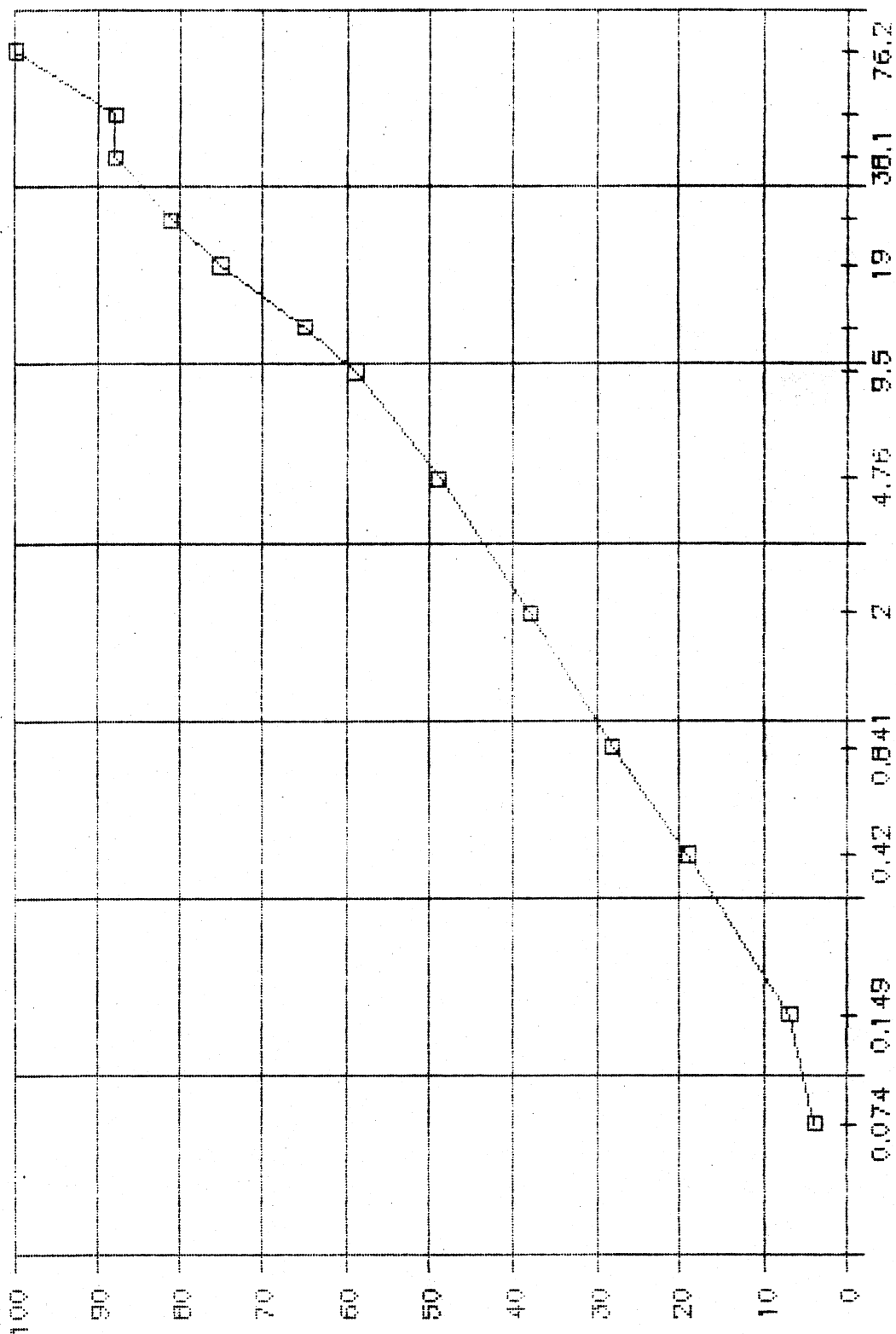
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 51
% SAND: 44
% FINES: 4

CLASSIFICATION:
POORLY GRADED
GRAVEL WITH SAND
(GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-30



Sieve Size (mm)

X SAMP.

Δ SAMP.

◇ SAMP.

□ SAMP. 65

0 10 20 30 40 50 60 70 80 90 100

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-31
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.22

FIELD NO: 66
 LAB NO: 2916
 DEPTH: 1.2-1.6
 TYPE: BULK

FIELD NO: 67
 LAB NO: 2917
 DEPTH: 2.6-3.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	89
38.1	77
25.4	68
19.0	64
12.7	55
9.5	49
4.76	37
2.38	--
2.00	24
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 63
 % SAND: 35
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	91
38.1	89
25.4	77
19.0	72
12.7	65
9.5	61
4.76	51
2.38	--
2.00	41
1.19	--
0.841	32
0.595	--
0.42	24
0.297	--
0.177	--
0.149	8
0.074	5

M.C.(%): --

LIMITS

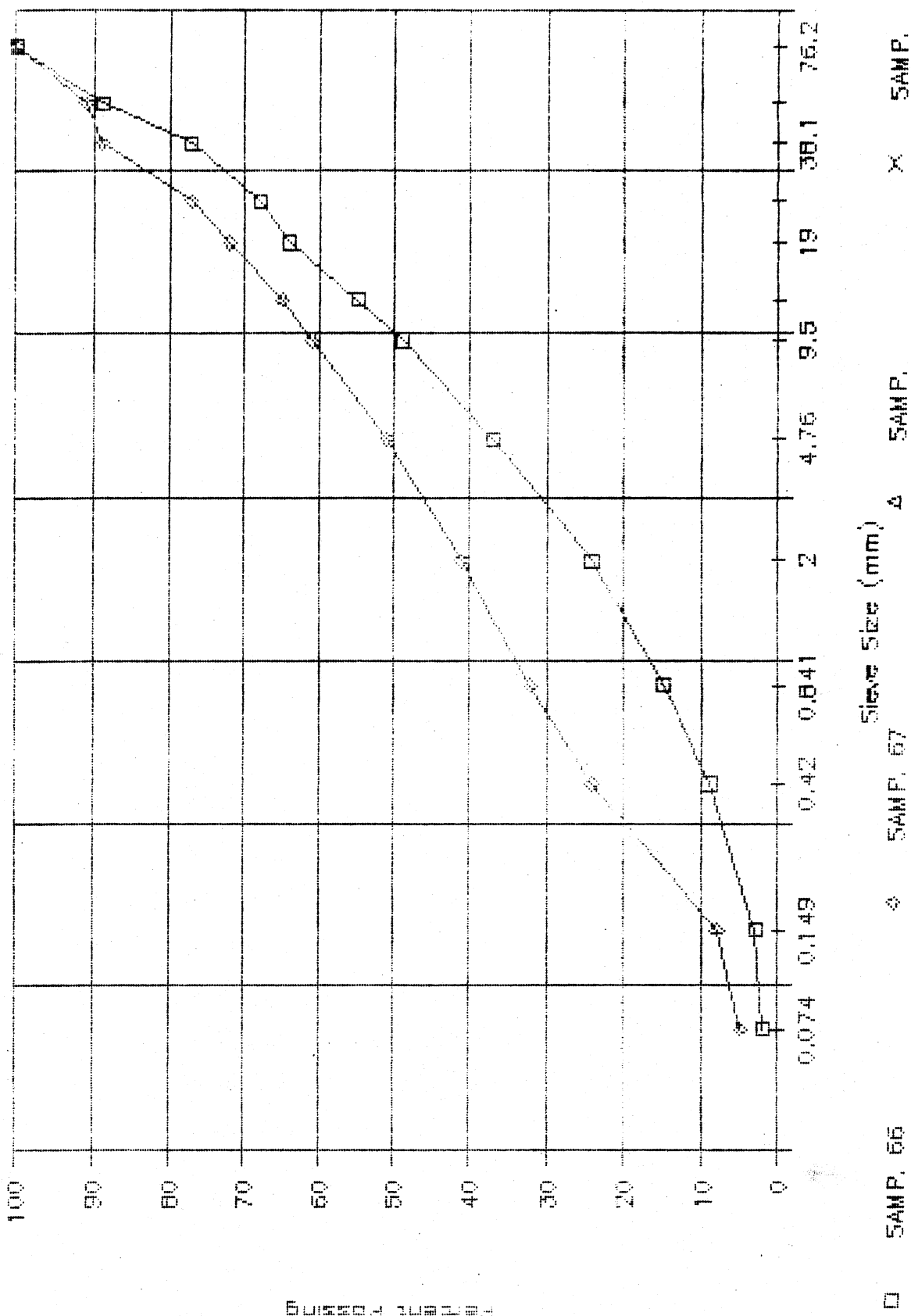
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 46
 % FINES: 5

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-31



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-32
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 68
 LAB NO: 2918
 DEPTH: 2.4-2.8
 TYPE: BULK

FIELD NO: 69
 LAB NO: 2919
 DEPTH: 3.8-4.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	88
25.4	73
19.0	67
12.7	59
9.5	55
4.76	46
2.38	--
2.00	35
1.19	--
0.841	26
0.595	--
0.42	19
0.297	--
0.177	--
0.149	11
0.074	8

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 54
 % SAND: 38
 % FINES: 8

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	94
25.4	80
19.0	77
12.7	66
9.5	60
4.76	49
2.38	--
2.00	37
1.19	--
0.841	27
0.595	--
0.42	19
0.297	--
0.177	--
0.149	10
0.074	6

M.C.(%): --

LIMITS

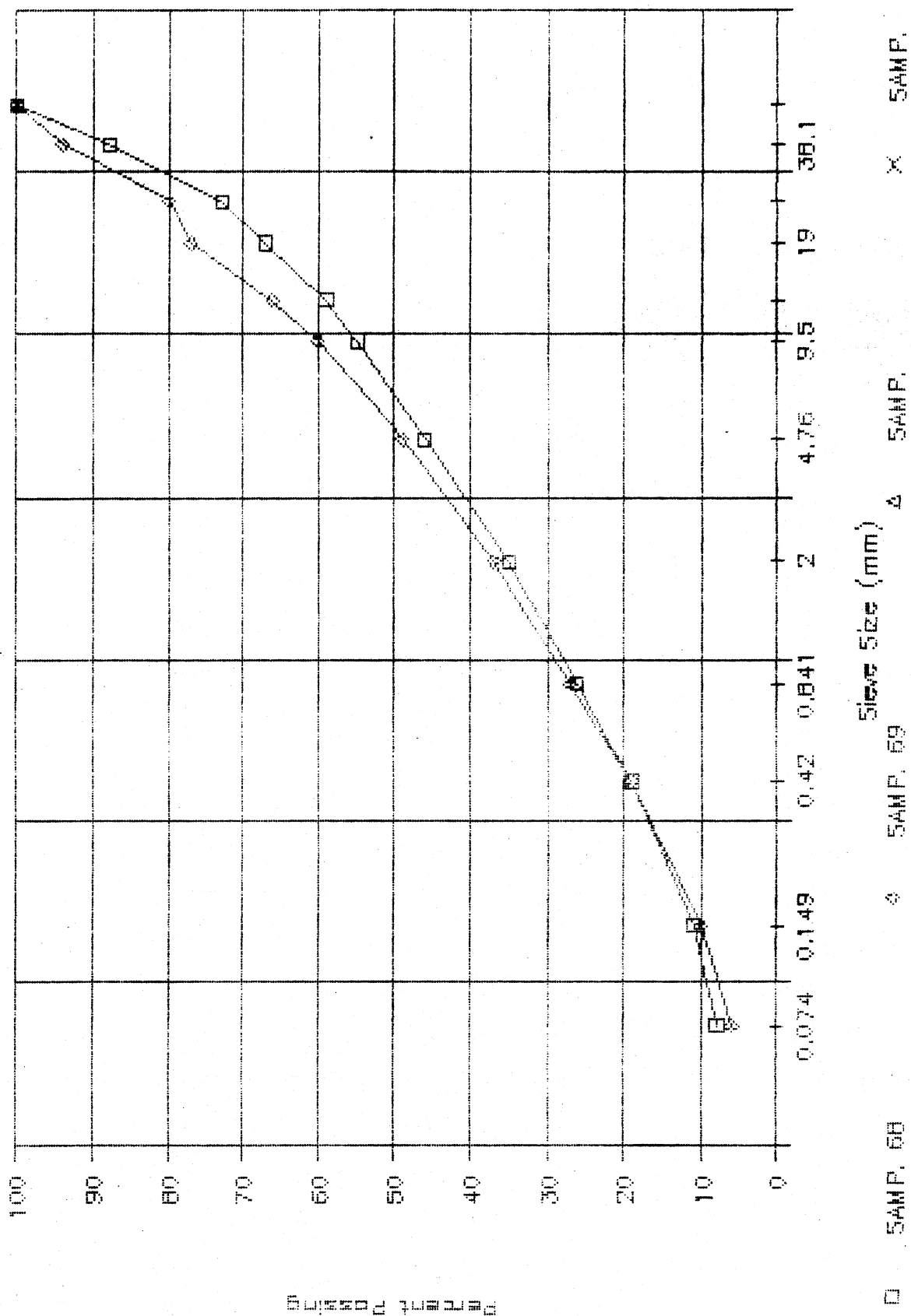
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 51
 % SAND: 43
 % FINES: 6

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

PUBLIC WORKS CANADA — WHITEHORSE, YT.

Grain Size Analysis — Hole 030-32



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-33
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 70	FIELD NO: 71
LAB NO: 2920	LAB NO: 2921
DEPTH: 0.8-1.2	DEPTH: 2.2-2.6
TYPE: BULK	TYPE: BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
------------	-----------------	------------	-----------------

101.6	--	101.6	--
76.2	--	76.2	100
50.8	100	50.8	83
38.1	84	38.1	73
25.4	76	25.4	66
19.0	69	19.0	59
12.7	60	12.7	50
9.5	52	9.5	45
4.76	39	4.76	36
2.38	--	2.38	--
2.00	25	2.00	27
1.19	--	1.19	--
0.841	17	0.841	19
0.595	--	0.595	--
0.42	13	0.42	11
0.297	--	0.297	--
0.177	--	0.177	--
0.149	6	0.149	3
0.074	4	0.074	2

M.C.(%): --	M.C.(%): --
-------------	-------------

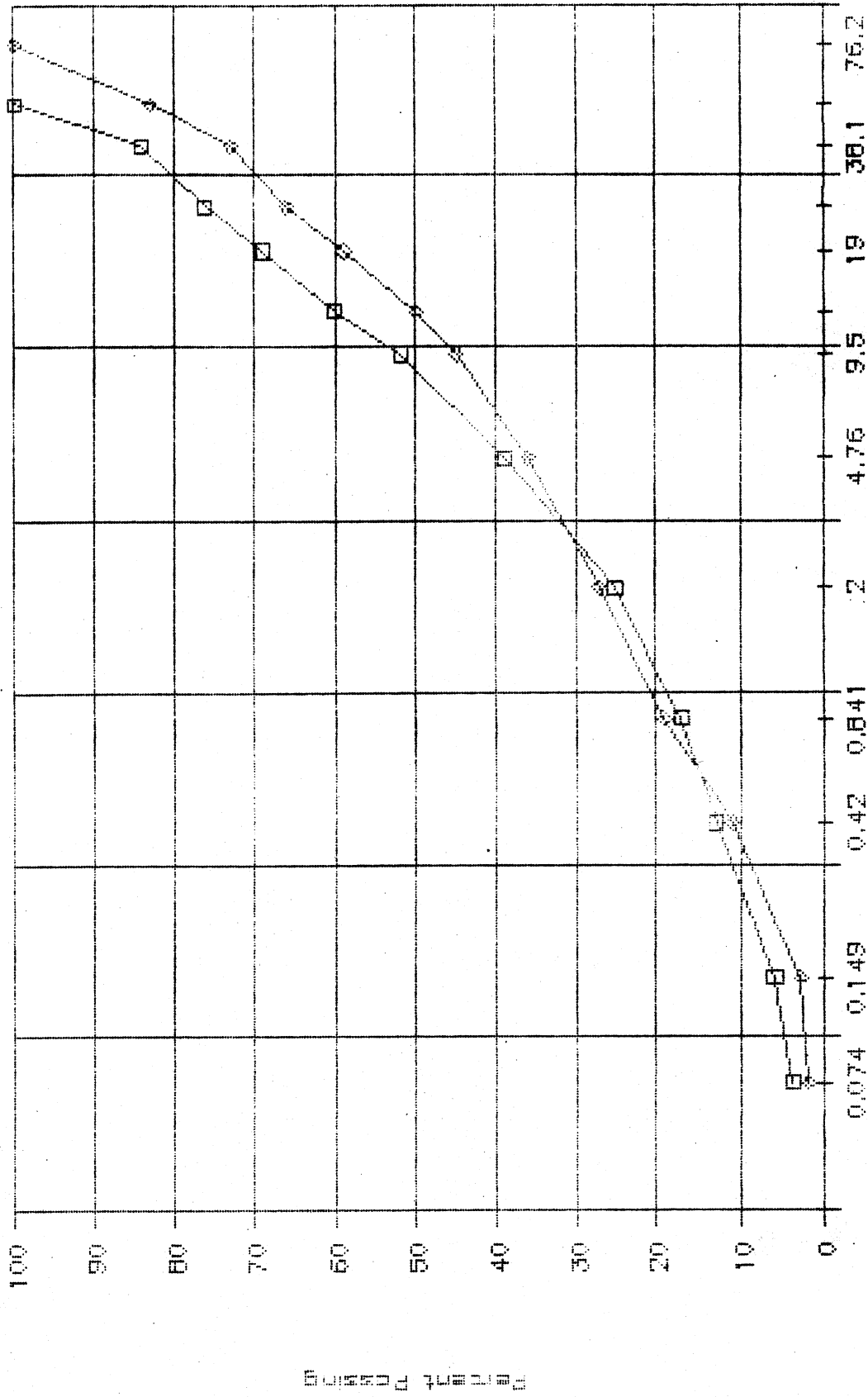
LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.

% GRAVEL: 61	% GRAVEL: 64
% SAND: 35	% SAND: 34
% FINES: 4	% FINES: 2

CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED	POORLY GRADED
GRAVEL WITH SAND	GRAVEL WITH SAND
(GW)	(GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—33



□ SAMP. 70 × SAMP. 71 Δ SAMP. 71

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-34
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 72	FIELD NO: 73
LAB NO: 2922	LAB NO: 2923
DEPTH: 1.6-2.0	DEPTH: 3.2-3.6
TYPE: BULK	TYPE: BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	100	50.8	100
38.1	91	38.1	89
25.4	79	25.4	82
19.0	72	19.0	72
12.7	61	12.7	59
9.5	53	9.5	51
4.76	42	4.76	38
2.38	--	2.38	--
2.00	30	2.00	25
1.19	--	1.19	--
0.841	20	0.841	15
0.595	--	0.595	--
0.42	12	0.42	8
0.297	--	0.297	--
0.177	--	0.177	--
0.149	5	0.149	3
0.074	3	0.074	2

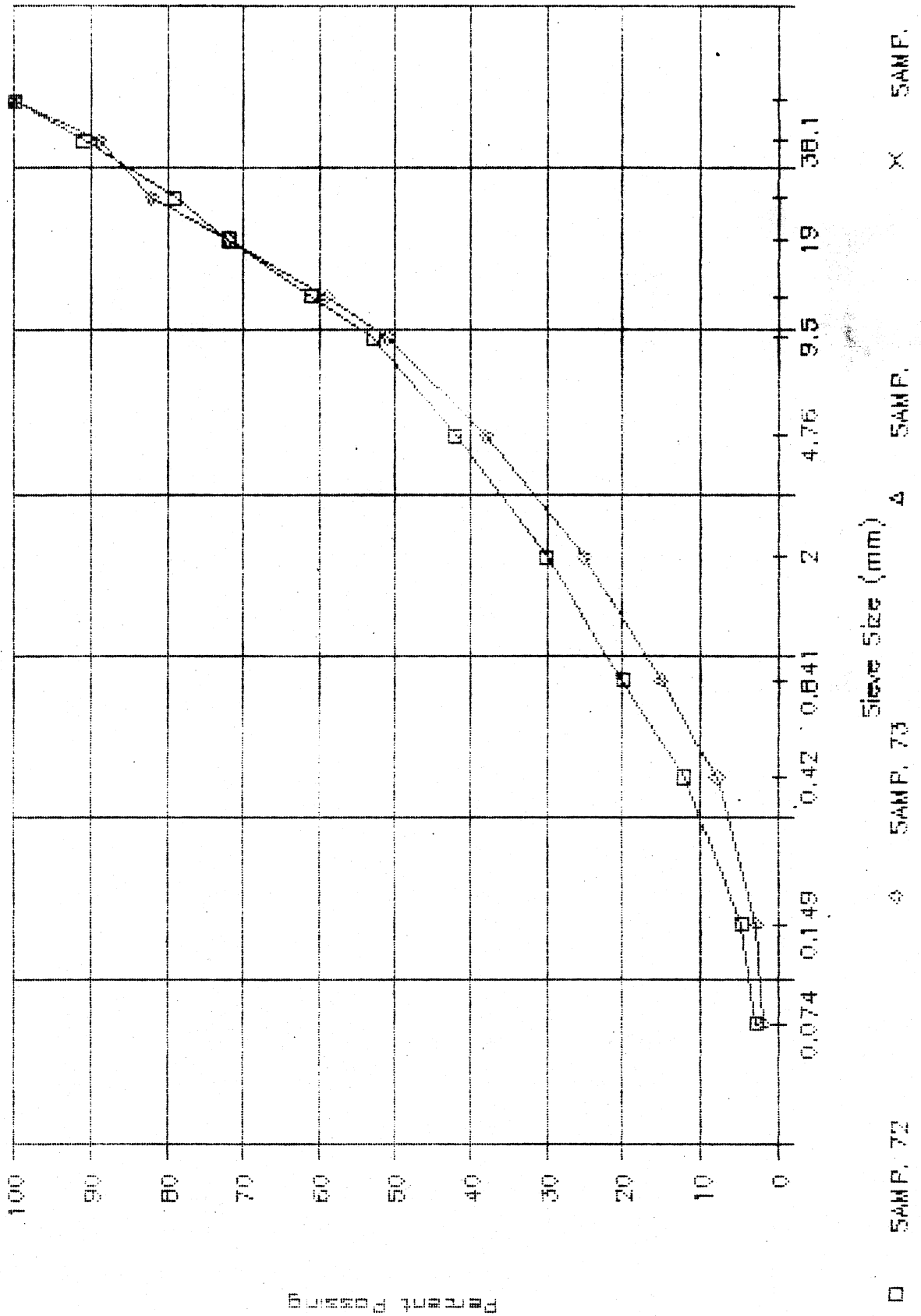
M.C.(%): --	M.C.(%): --
LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.

% GRAVEL: 58	% GRAVEL: 62
% SAND: 38	% SAND: 35
% FINES: 3	% FINES: 2

CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED	WELL-GRADED
GRAVEL WITH SAND	GRAVEL WITH SAND
(GW)	(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—34



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-35
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO:	LAB NO:	DEPTH:	TYPE:
74	2924	1.6-2.0	BULK
75	2925	3.2-3.6	BULK
76	2926	4.2-4.6	BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	100	101.6	--	101.6	--
76.2	83	76.2	--	76.2	100
50.8	83	50.8	100	50.8	93
38.1	80	38.1	92	38.1	82
25.4	71	25.4	84	25.4	69
19.0	65	19.0	77	19.0	64
12.7	56	12.7	65	12.7	56
9.5	50	9.5	58	9.5	50
4.76	38	4.76	43	4.76	42
2.38	--	2.38	--	2.38	--
2.00	25	2.00	28	2.00	33
1.19	--	1.19	--	1.19	--
0.841	14	0.841	18	0.841	24
0.595	--	0.595	--	0.595	--
0.42	8	0.42	12	0.42	16
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	3	0.149	6	0.149	7
0.074	2	0.074	5	0.074	4

M.C.(%): -- M.C.(%): -- M.C.(%): --

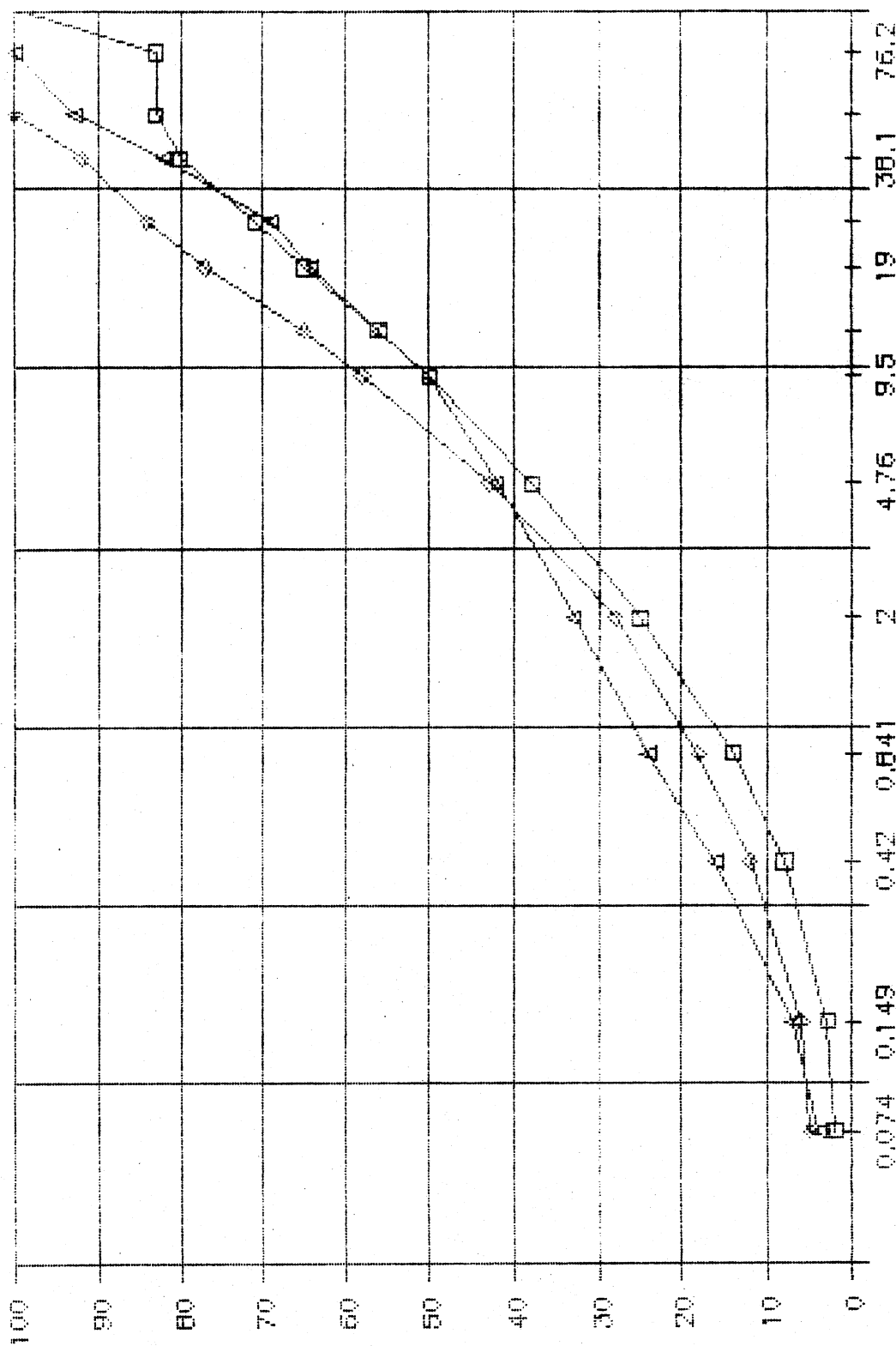
LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.	P.I.:	N.P.

% GRAVEL:	62	% GRAVEL:	57	% GRAVEL:	58
% SAND:	36	% SAND:	38	% SAND:	38
% FINES:	2	% FINES:	5	% FINES:	4

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
POORLY GRADED	WELL-GRADED	POORLY GRADED
GRAVEL WITH SAND	GRAVEL WITH SILT	GRAVEL WITH SAND
(GP)	& SAND (GW-GM)	(GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—35



Sieve Size (mm)

5AMP. 74

5AMP. 75

5AMP. 76

5AMP. 75

5AMP. 74

5AMP. 75

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-36
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 77	FIELD NO: 78
LAB NO: 2927	LAB NO: 2928
DEPTH: 2.6-3.0	DEPTH: 4.0-4.4
TYPE: BULK	TYPE: BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	100	50.8	100
38.1	93	38.1	94
25.4	92	25.4	89
19.0	88	19.0	80
12.7	80	12.7	69
9.5	76	9.5	62
4.76	63	4.76	49
2.38	--	2.38	--
2.00	47	2.00	36
1.19	--	1.19	--
0.841	33	0.841	25
0.595	--	0.595	--
0.42	20	0.42	17
0.297	--	0.297	--
0.177	--	0.177	--
0.149	7	0.149	7
0.074	4	0.074	4

M.C.(%): -- M.C.(%): --

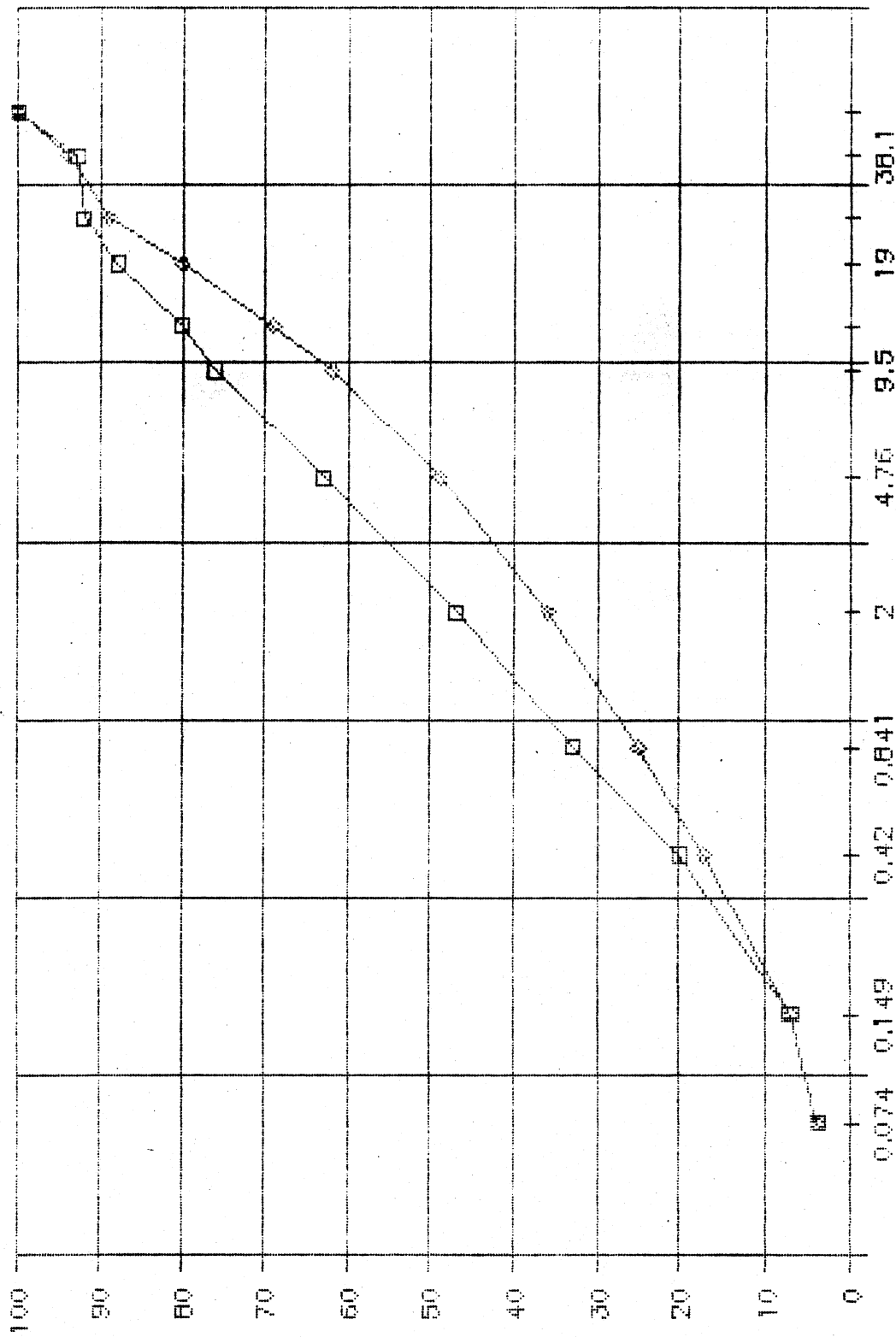
LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.

% GRAVEL:	37	% GRAVEL:	51
% SAND:	59	% SAND:	45
% FINES:	4	% FINES:	4

CLASSIFICATION:	CLASSIFICATION:
POORLY GRADED	POORLY GRADED
SAND WITH GRAVEL	GRAVEL WITH SAND
(SP)	(GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-36



SAMP. 77

 SAMP. 78

 SAMP. 77

 SAMP. 78

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-37
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 79
 LAB NO: 2929
 DEPTH: 1.4-1.8
 TYPE: BULK

FIELD NO: 80
 LAB NO: 2930
 DEPTH: 3.0-3.4
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	87
25.4	79
19.0	75
12.7	66
9.5	59
4.76	47
2.38	--
2.00	35
1.19	--
0.841	23
0.595	--
0.42	14
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 53
 % SAND: 44
 % FINES: 4

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	85
25.4	77
19.0	71
12.7	59
9.5	54
4.76	42
2.38	--
2.00	30
1.19	--
0.841	18
0.595	--
0.42	11
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

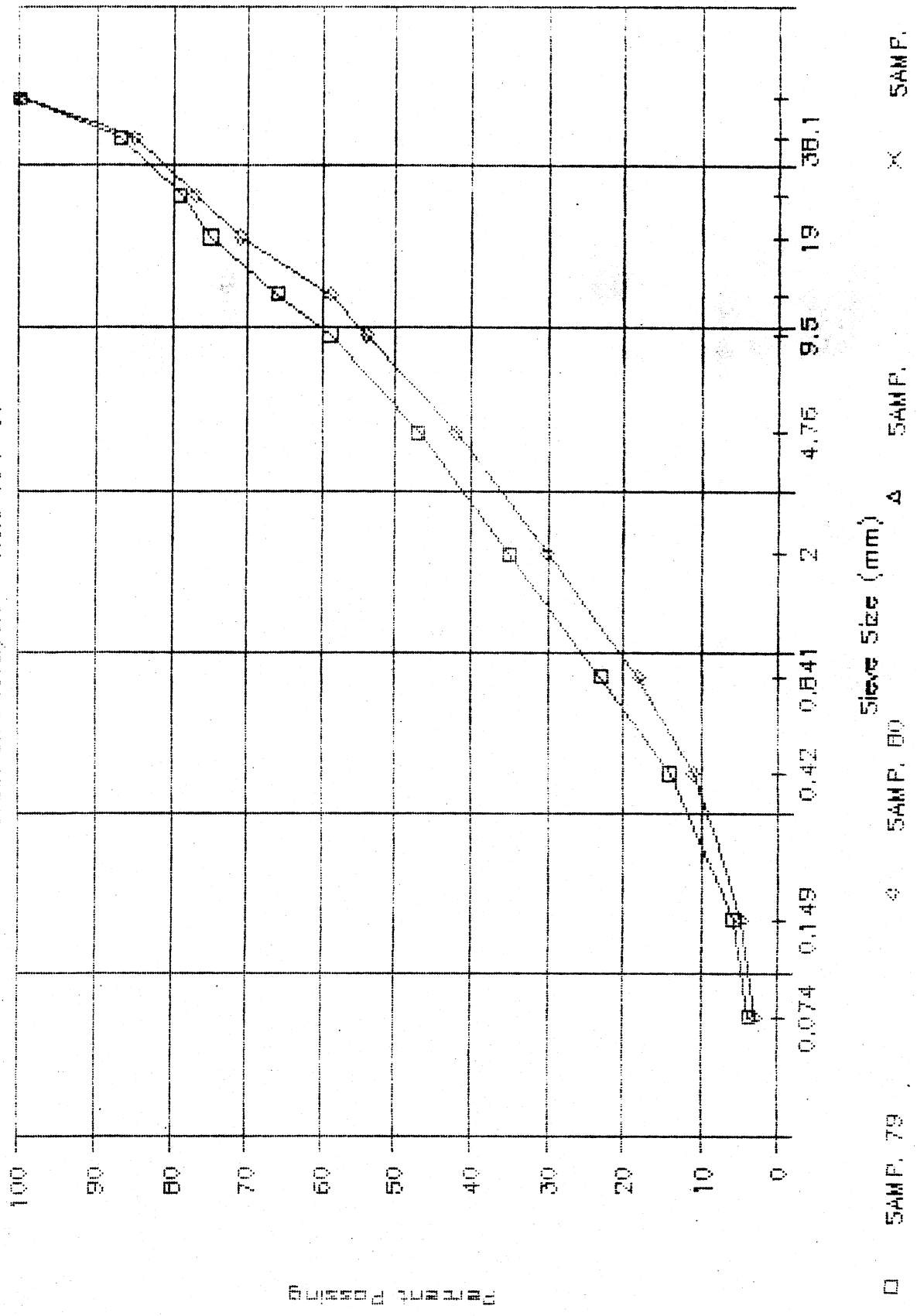
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 58
 % SAND: 39
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—37



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-38
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 81
 LAB NO: 2931
 DEPTH: 1.4-1.8
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	95
38.1	69
25.4	52
19.0	43
12.7	36
9.5	31
4.76	24
2.38	--
2.00	17
1.19	--
0.841	12
0.595	--
0.42	7
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 76
 % SAND: 21
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

FIELD NO: 82
 LAB NO: 2932
 DEPTH: 2.4-2.8
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	89
76.2	67
50.8	64
38.1	56
25.4	52
19.0	47
12.7	44
9.5	35
4.76	29
2.38	--
2.00	23
1.19	--
0.841	15
0.595	--
0.42	5
0.297	--
0.177	--
0.149	3
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 71
 % SAND: 26
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 83
 LAB NO: 2933
 DEPTH: 4.4-4.8
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	94
38.1	82
25.4	74
19.0	67
12.7	58
9.5	54
4.76	44
2.38	--
2.00	35
1.19	--
0.841	27
0.595	--
0.42	21
0.297	--
0.177	--
0.149	11
0.074	8

M.C.(%): --

LIMITS

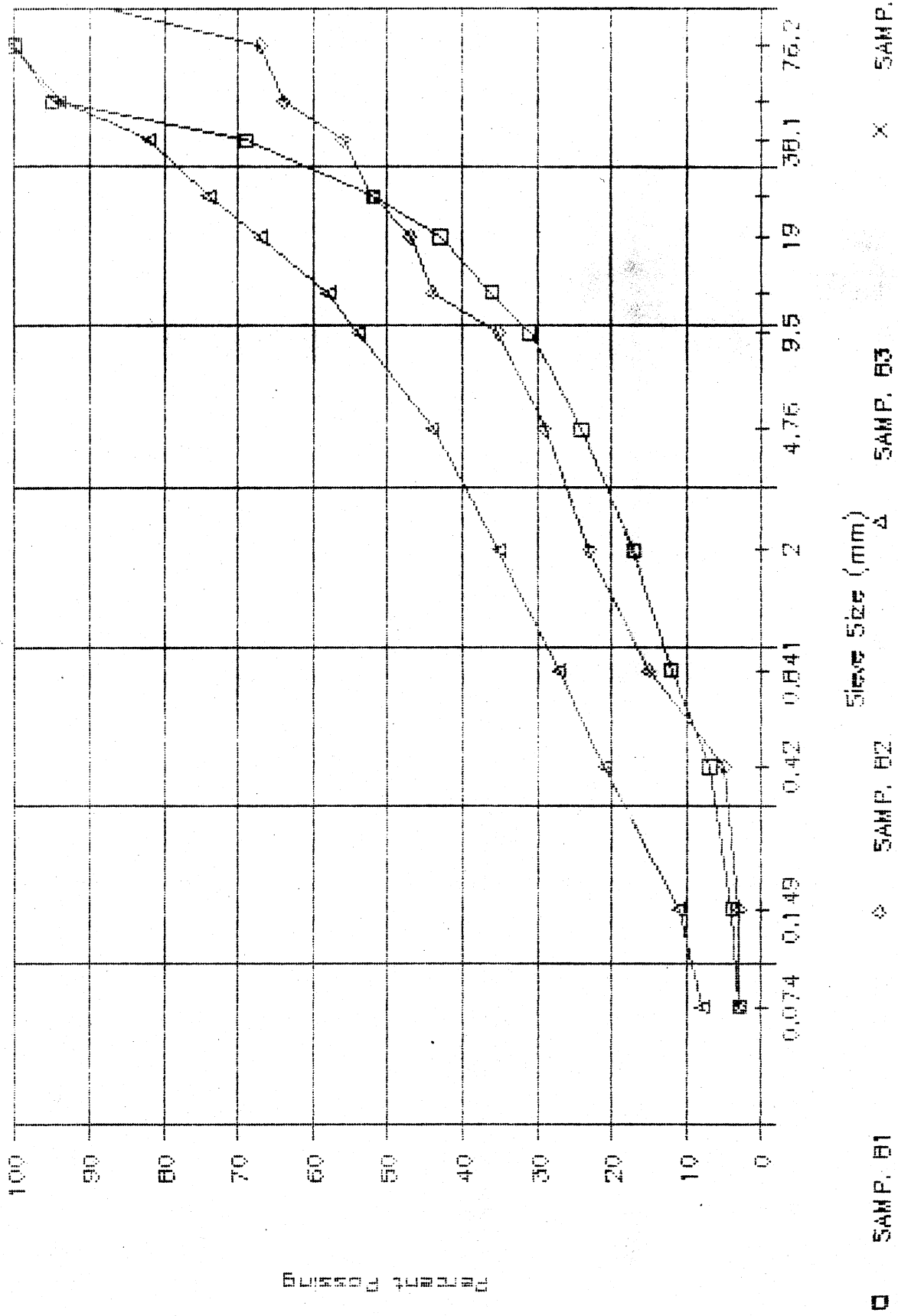
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 37
 % FINES: 8

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-38



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-39
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 84
 LAB NO: 2934
 DEPTH: 1.6-2.0
 TYPE: BULK

FIELD NO: 85
 LAB NO: 2935
 DEPTH: 3.4-3.8
 TYPE: BULK

FIELD NO: 86
 LAB NO: 2936
 DEPTH: 4.8-5.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	96
38.1	76
25.4	68
19.0	62
12.7	55
9.5	50
4.76	42
2.38	--
2.00	31
1.19	--
0.841	20
0.595	--
0.42	10
0.297	--
0.177	--
0.149	3
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 58
 % SAND: 40
 % FINES: 2

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	86
25.4	72
19.0	68
12.7	59
9.5	54
4.76	44
2.38	--
2.00	34
1.19	--
0.841	25
0.595	--
0.42	17
0.297	--
0.177	--
0.149	8
0.074	5

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 39
 % FINES: 5

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	96
25.4	86
19.0	79
12.7	68
9.5	61
4.76	50
2.38	--
2.00	38
1.19	--
0.841	27
0.595	--
0.42	19
0.297	--
0.177	--
0.149	9
0.074	6

M.C.(%): --

LIMITS

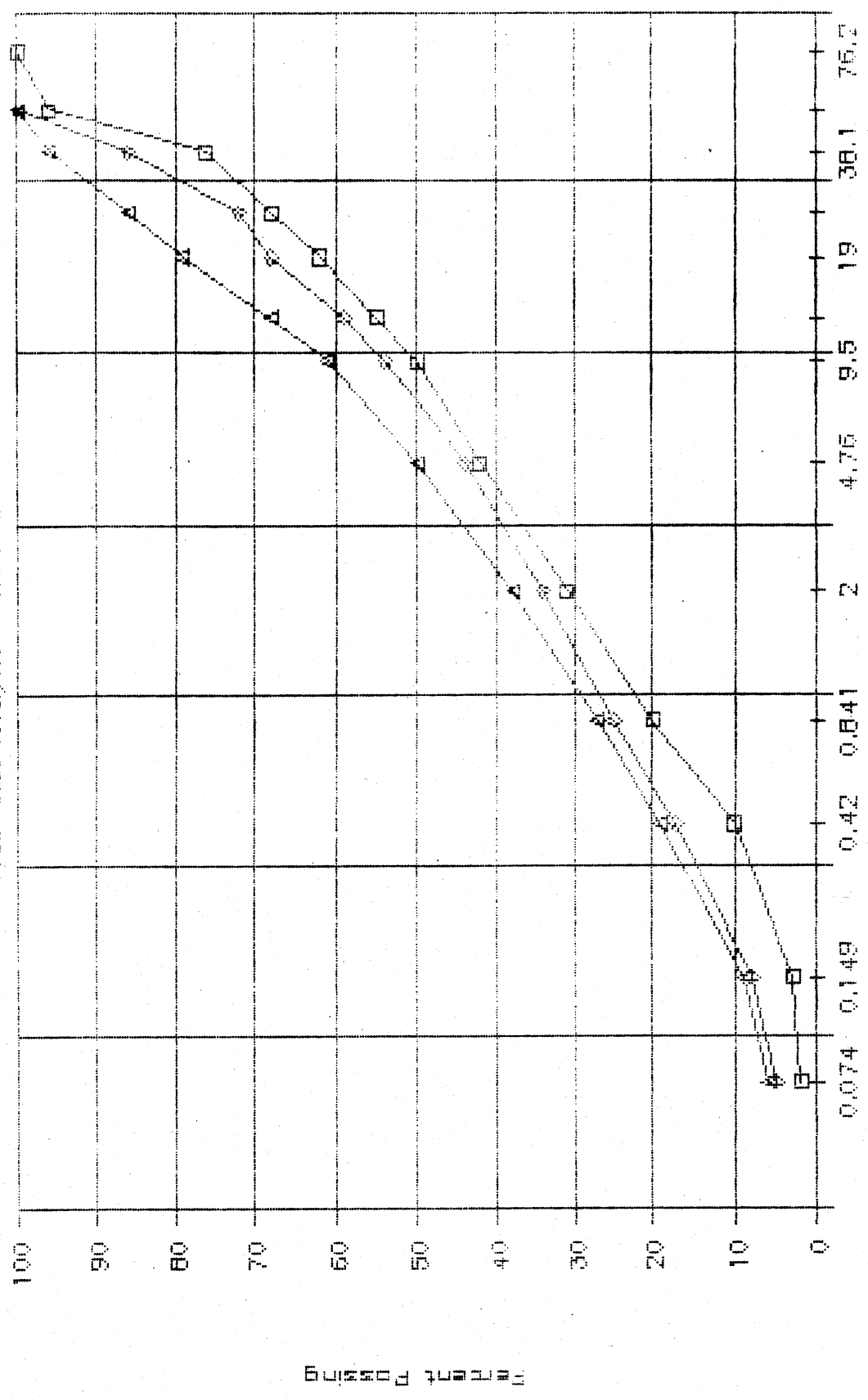
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 50
 % SAND: 44
 % FINES: 6

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SILT
 & SAND (GP-GM)

PUBLIC WORKS CANADA - WHITEHORSE, Y.T.

Grain Size Analysis - Hole 030-37



SAMP. B4
 SAMP. B5
 SAMP. B6

Pit 115 G-04
Km 1750 LHS Alaska Highway

1988
Crush Sample Results

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-01C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 1
LAB NO: 2853
DEPTH: 1.1-1.5
TYPE: BULK
CC = 82%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	88
9.5	72
4.76	48
2.38	--
2.00	31
1.19	--
0.841	21
0.595	--
0.425	15
0.297	--
0.177	--
0.149	7
0.074	4

M.C.(%): --

LIMITS

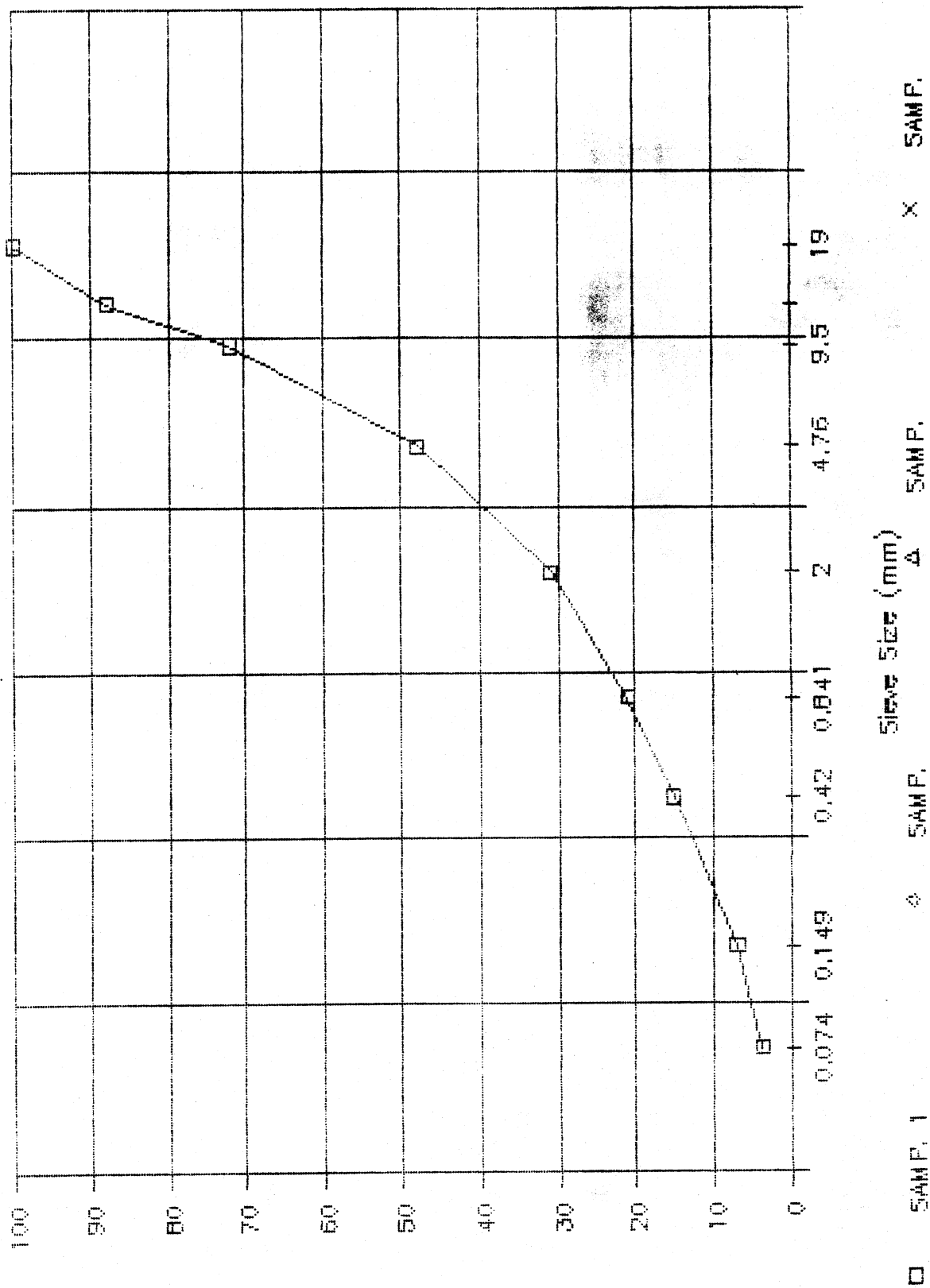
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 52
% SAND: 43
% FINES: 4

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-01C



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-02C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 2
 LAB NO: 2854
 DEPTH: 1.2-1.9
 TYPE: BULK
 CC = 79%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	89
9.5	74
4.76	45
2.38	--
2.00	30
1.19	--
0.841	19
0.595	--
0.42	12
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 55
 % SAND: 42
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 3
 LAB NO: 2855
 DEPTH: 3.0-3.4
 TYPE: BULK
 CC = 87%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	76
4.76	47
2.38	--
2.00	31
1.19	--
0.841	19
0.595	--
0.42	12
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 53
 % SAND: 43
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 4
 LAB NO: 2856
 DEPTH: 5.0-5.3
 TYPE: BULK
 CC = 87%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	89
9.5	73
4.76	46
2.38	--
2.00	29
1.19	--
0.841	19
0.595	--
0.42	13
0.297	--
0.177	--
0.149	6
0.074	5

M.C.(%): --

LIMITS

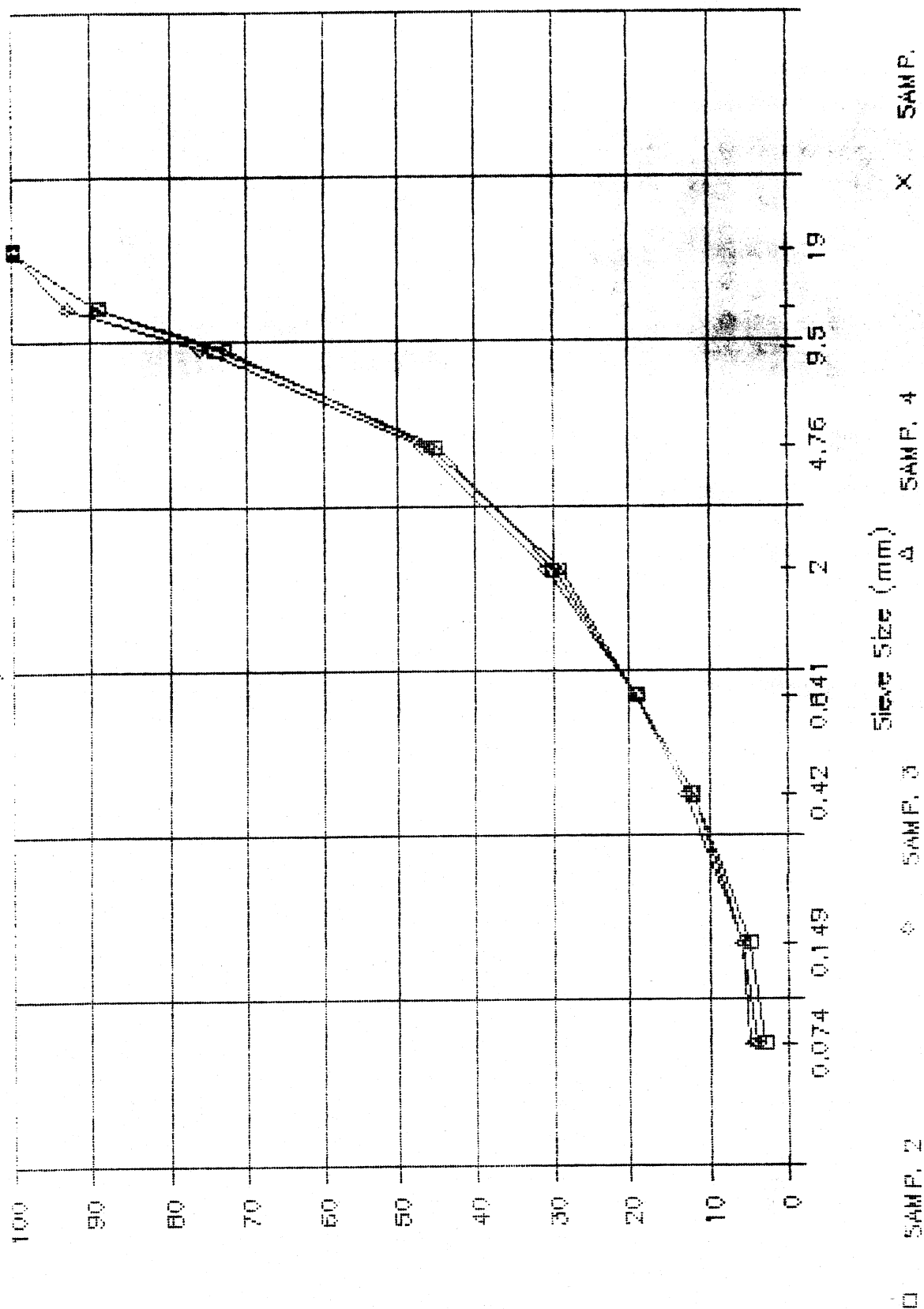
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 54
 % SAND: 41
 % FINES: 5

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SILT
 & SAND (GW-GM)

PUBLIC WORKS CANADA -- WHITEHORSE, Y.T.

Grain Size Analysis -- Hole 029--020



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-03C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 5
 LAB NO: 2857
 DEPTH: 1.2-1.6
 TYPE: BULK
 CC = 83%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	75
4.76	48
2.38	--
2.00	31
1.19	--
0.841	18
0.595	--
0.42	10
0.297	--
0.177	--
0.149	5
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 52
 % SAND: 44
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 6
 LAB NO: 2858
 DEPTH: 2.8-3.3
 TYPE: BULK
 CC = 87%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	75
4.76	44
2.38	--
2.00	27
1.19	--
0.841	15
0.595	--
0.42	10
0.297	--
0.177	--
0.149	5
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 40
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 7
 LAB NO: 2859
 DEPTH: 4.3-4.7
 TYPE: BULK
 CC = 82%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	92
9.5	76
4.76	47
2.38	--
2.00	30
1.19	--
0.841	17
0.595	--
0.42	11
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

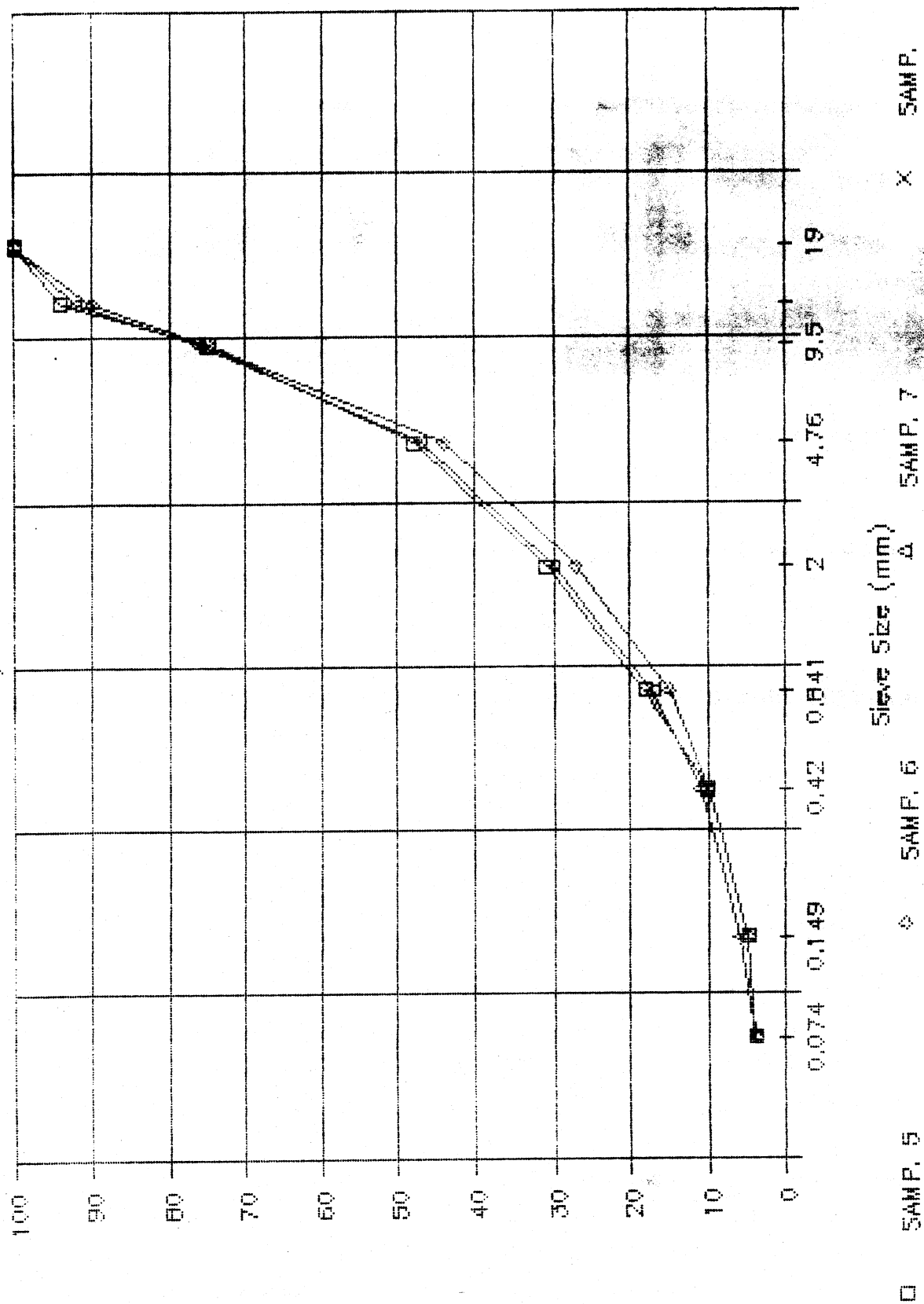
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 53
 % SAND: 43
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029—030



Grain Size Analysis — Hole 029—030

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-04C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 8
 LAB NO: 2860
 DEPTH: 1.3-1.7
 TYPE: BULK
 CC = 83%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	89
9.5	70
4.76	44
2.38	--
2.00	29
1.19	--
0.841	18
0.595	--
0.42	11
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --
 LIMITS
 LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 41
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 9
 LAB NO: 2861
 DEPTH: 3.3-3.6
 TYPE: BULK
 CC = 84%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	75
4.76	42
2.38	--
2.00	25
1.19	--
0.841	14
0.595	--
0.42	8
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --
 LIMITS
 LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 58
 % SAND: 39
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 10
 LAB NO: 2862
 DEPTH: 5.2-5.5
 TYPE: BULK
 CC = 84%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	85
9.5	66
4.76	37
2.38	--
2.00	21
1.19	--
0.841	12
0.595	--
0.42	8
0.297	--
0.177	--
0.149	4
0.074	3

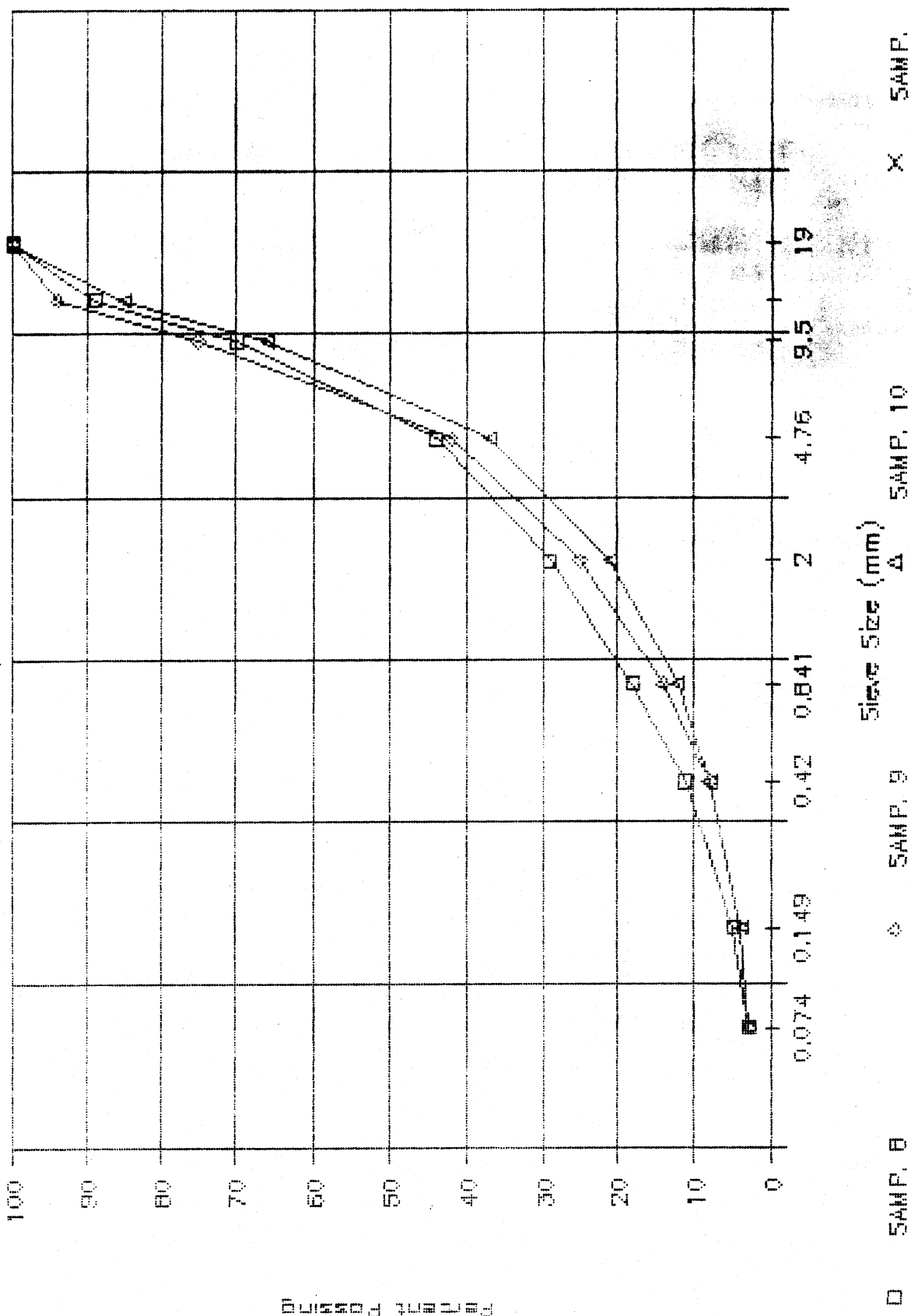
M.C.(%): --
 LIMITS
 LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 63
 % SAND: 34
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029--040



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-05C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 11
LAB NO: 2863
DEPTH: 1.5-2.0
TYPE: BULK
CC = 77%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	82
9.5	66
4.76	39
2.38	--
2.00	25
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

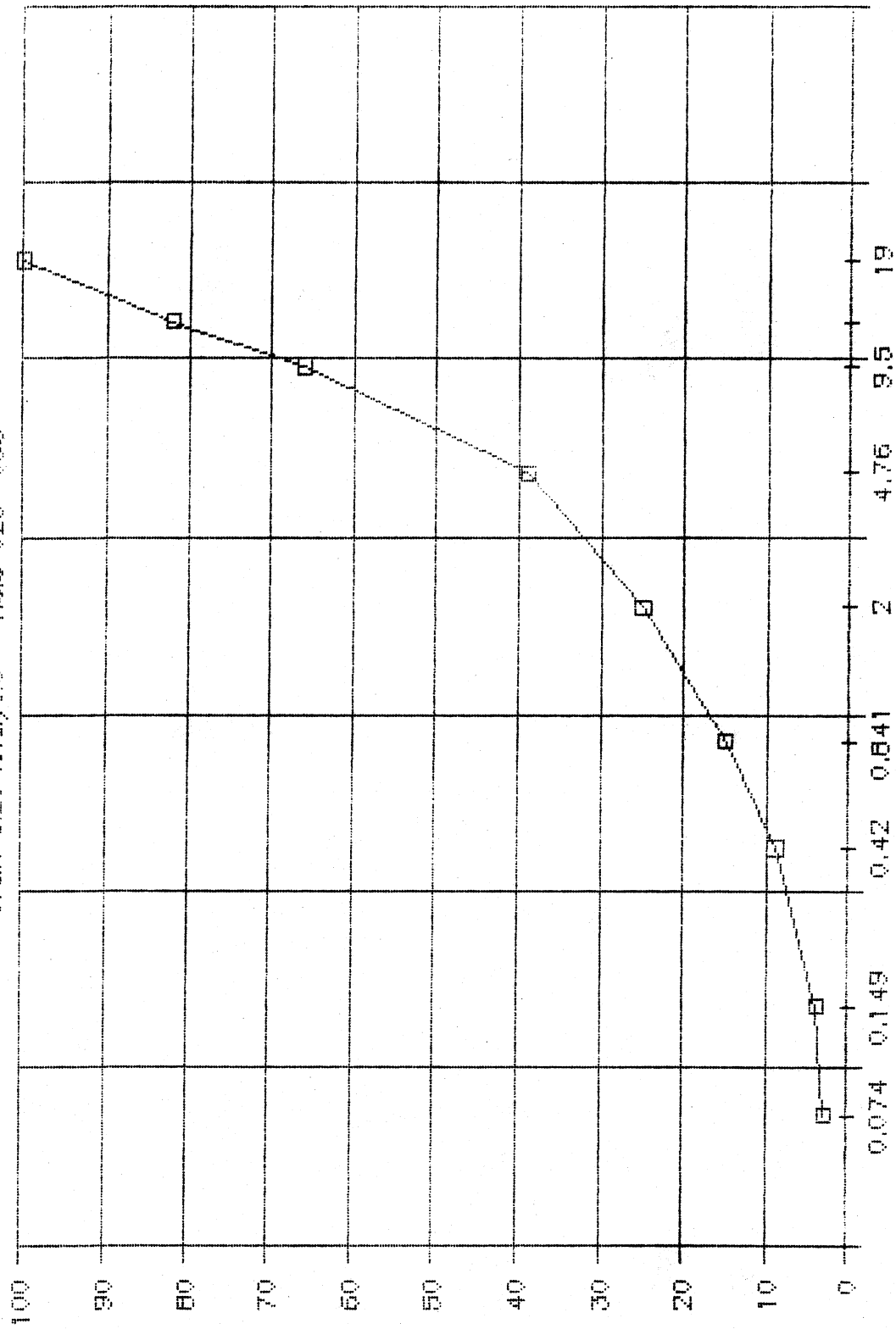
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 61
% SAND: 37
% FINES: 3

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-05C



□ SAMP. 11 ◇ SAMP. Δ SAMP. X SAMP.

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-06C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 12
LAB NO: 2864
DEPTH: 1.5-1.9
TYPE: BULK
CC = 71%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	89
9.5	74
4.76	46
2.38	--
2.00	30
1.19	--
0.841	13
0.595	--
0.42	11
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

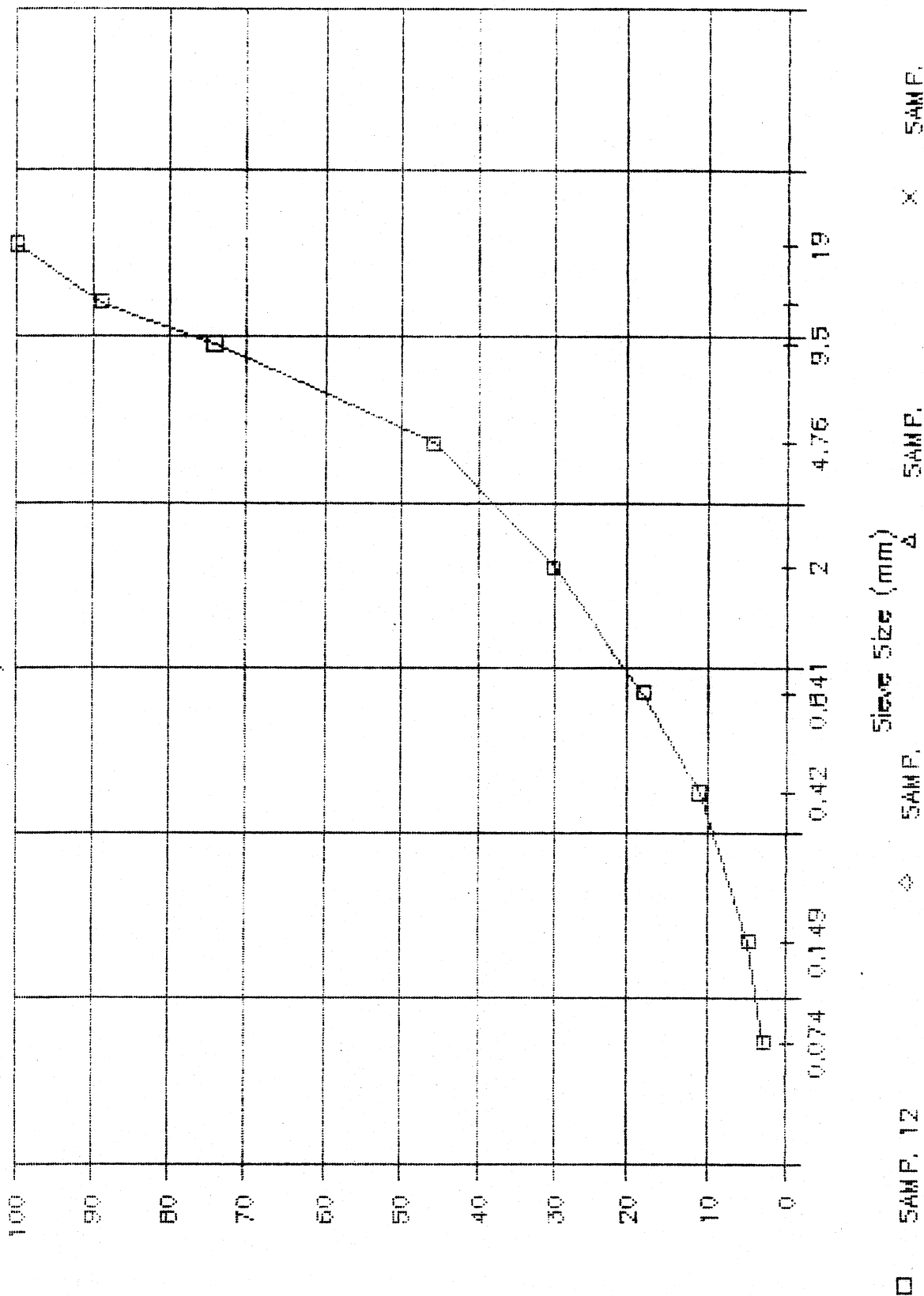
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 54
% SAND: 42
% FINES: 3

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029—060



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-07C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 13
LAB NO: 2865
DEPTH: 1.5-2.0
TYPE: BULK
CC = 67%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	92
9.5	79
4.76	52
2.38	--
2.00	34
1.19	--
0.841	20
0.595	--
0.42	12
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

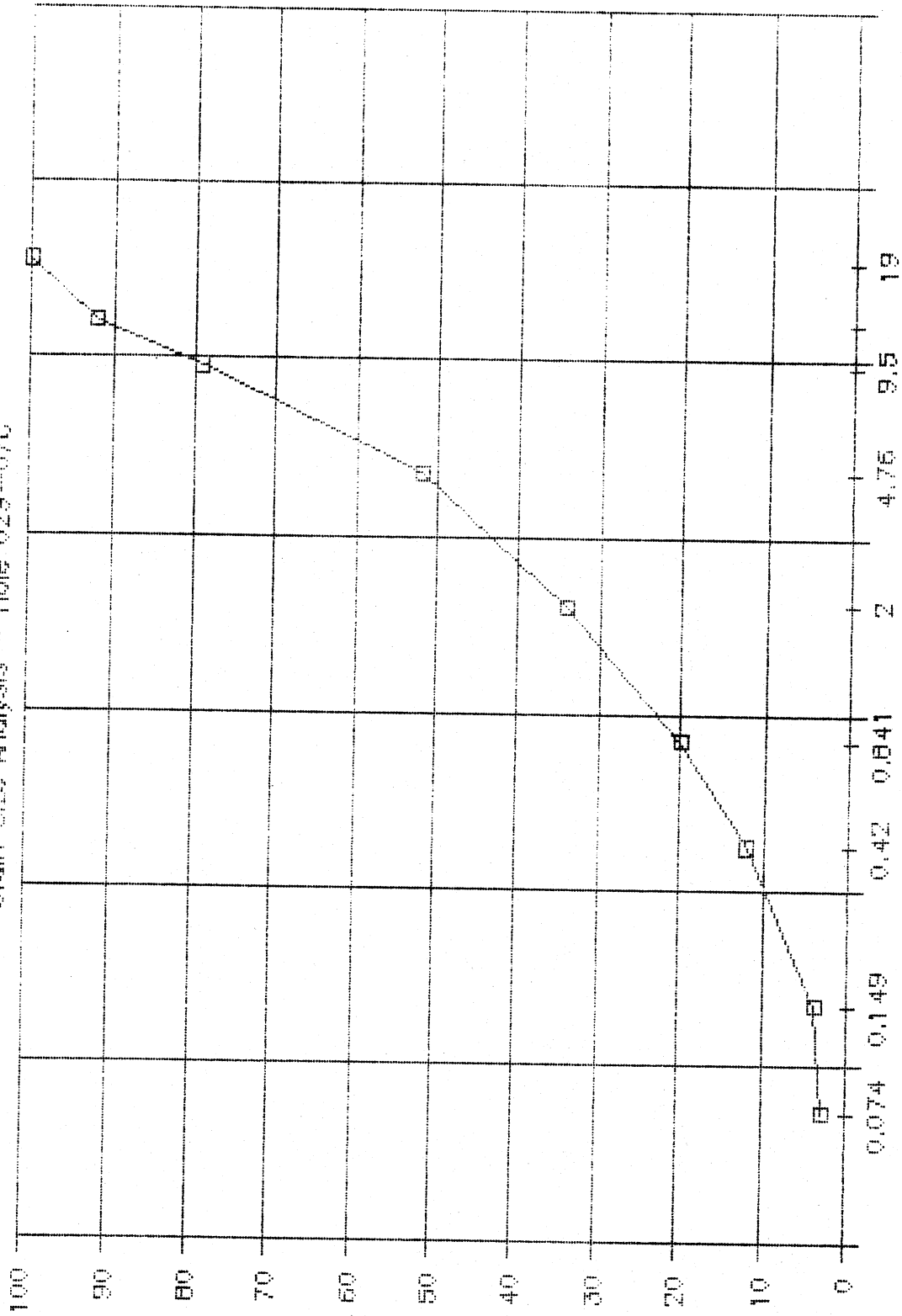
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 48
% SAND: 49
% FINES: 3

CLASSIFICATION:
WELL-GRADED SAND
WITH GRAVEL (SW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029--070



□ SAMP. 13 ◇ SAMP. Δ SAMP. × SAMP.

Grain Size Analysis

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-08C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.19

FIELD NO: 15
LAB NO: 2866
DEPTH: 3.5-4.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	95
9.5	81
4.76	55
2.38	--
2.00	38
1.19	--
0.841	22
0.595	--
0.42	13
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

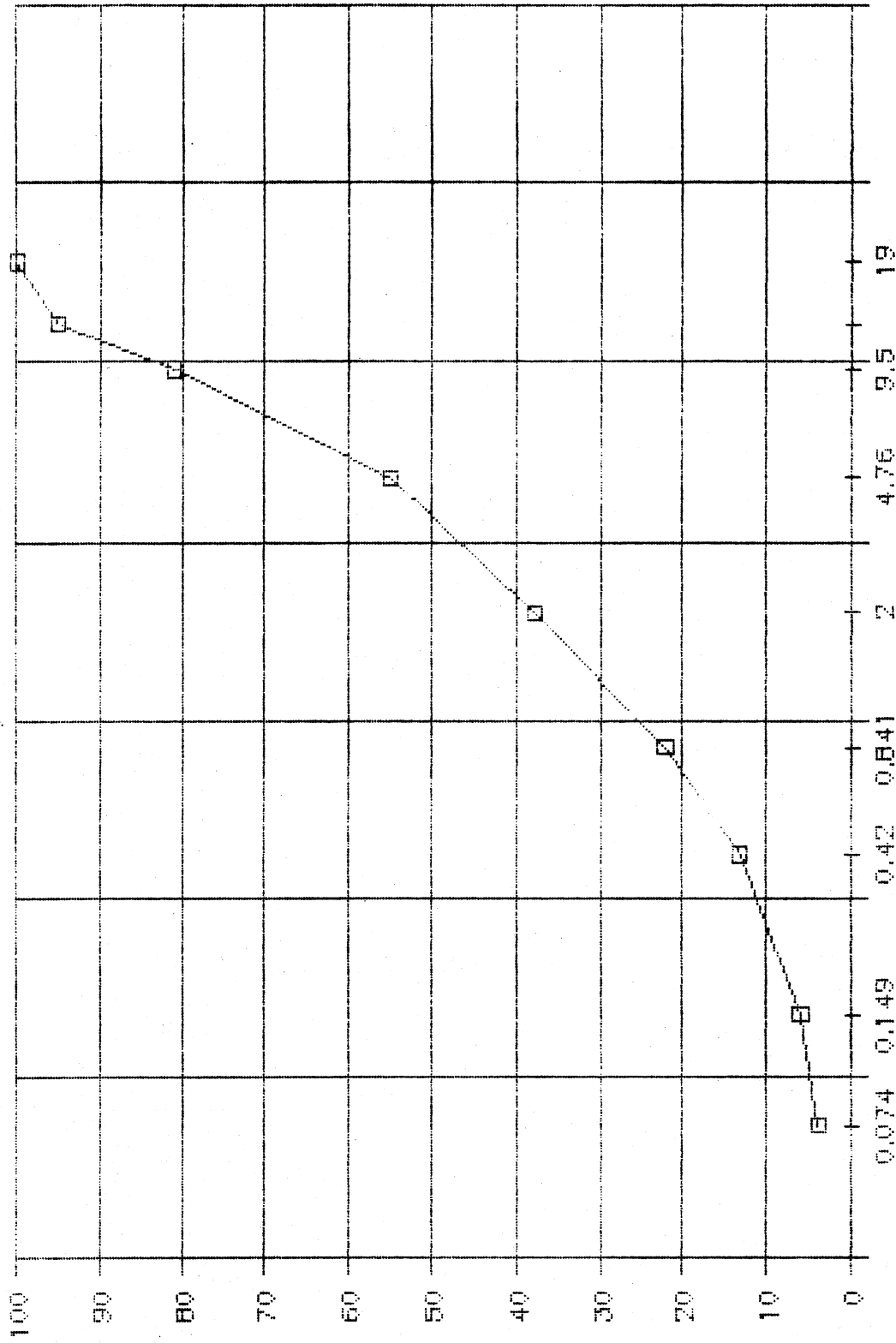
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 45
% SAND: 52
% FINES: 4

CLASSIFICATION:
WELL-GRADED SAND
WITH GRAVEL (SW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029--060



 SAMP. 15 $\diamond$ SAMP. Δ SAMP. X SAMP.

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-09C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 16	FIELD NO: 17	FIELD NO: 18
LAB NO: 2867	LAB NO: 2868	LAB NO: 2869
DEPTH: 1.4-1.8	DEPTH: 3.3-3.7	DEPTH: 5.0-5.5
TYPE: BULK	TYPE: BULK	TYPE: BULK
	CC = 79%	

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	100	19.0	100	19.0	100
12.7	95	12.7	93	12.7	98
9.5	85	9.5	77	9.5	89
4.76	61	4.76	50	4.76	65
2.38	--	2.38	--	2.38	--
2.00	46	2.00	33	2.00	46
1.19	--	1.19	--	1.19	--
0.841	36	0.841	24	0.841	31
0.595	--	0.595	--	0.595	--
0.42	29	0.42	18	0.42	23
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	19	0.149	8	0.149	12
0.074	13	0.074	5	0.074	7

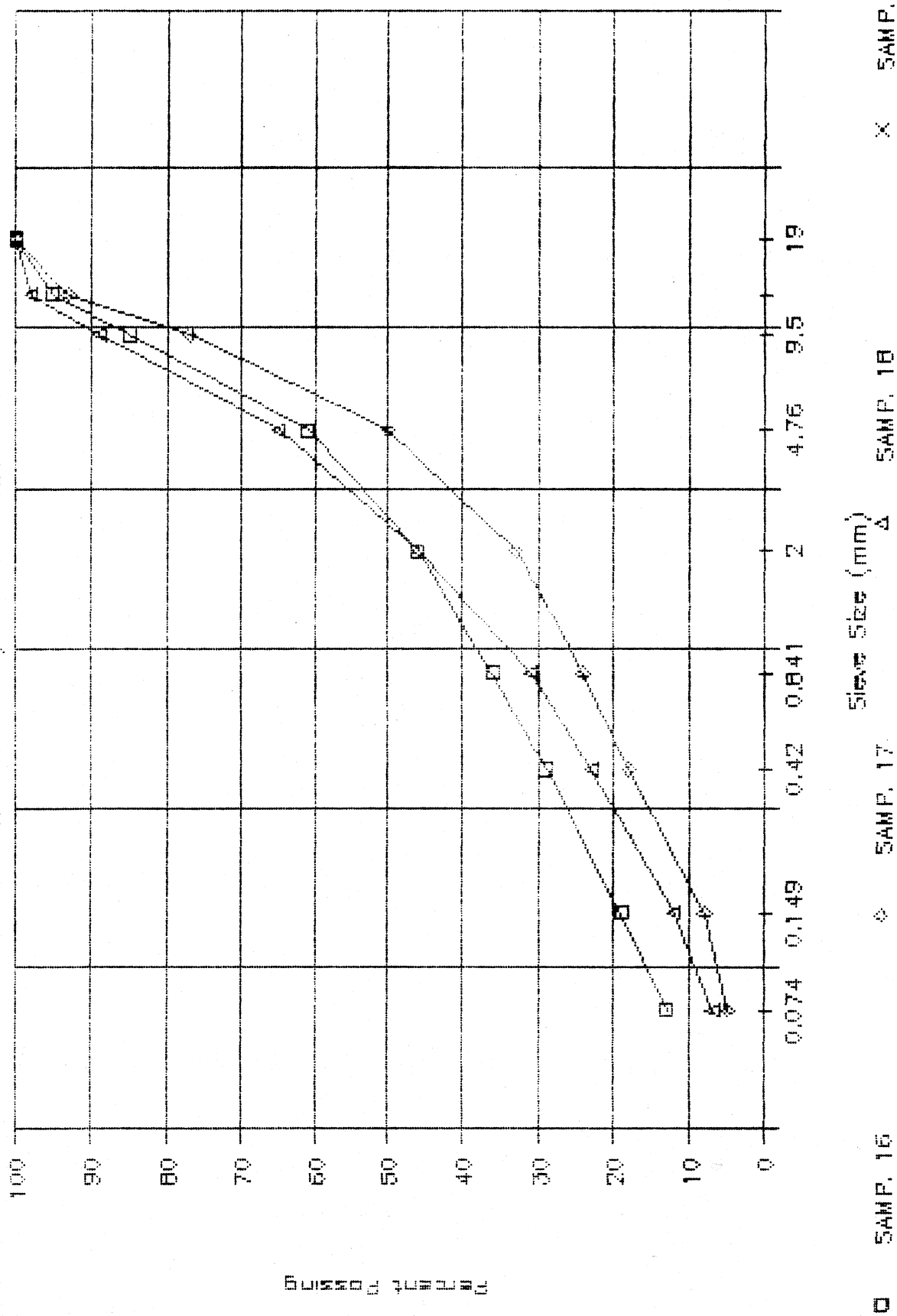
M.C.(%): --	M.C.(%): --	M.C.(%): --
LIMITS	LIMITS	LIMITS
LIQUID: --	LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.	P.I.: N.P.

% GRAVEL: 39	% GRAVEL: 50	% GRAVEL: 35
% SAND: 47	% SAND: 45	% SAND: 59
% FINES: 13	% FINES: 5	% FINES: 7

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
SILTY SAND WITH GRAVEL (SM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-09C



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-10C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 19	FIELD NO: 20
LAB NO: 2870	LAB NO: 2871
DEPTH: 1.6-2.1	DEPTH: 3.1-3.5
TYPE: BULK	TYPE: BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	100	19.0	100
12.7	99	12.7	98
9.5	91	9.5	91
4.76	76	4.76	70
2.38	--	2.38	--
2.00	63	2.00	57
1.19	--	1.19	--
0.841	55	0.841	49
0.595	--	0.595	--
0.42	48	0.42	43
0.297	--	0.297	--
0.177	--	0.177	--
0.149	32	0.149	30
0.074	22	0.074	21

M.C.(%): -- M.C.(%): --

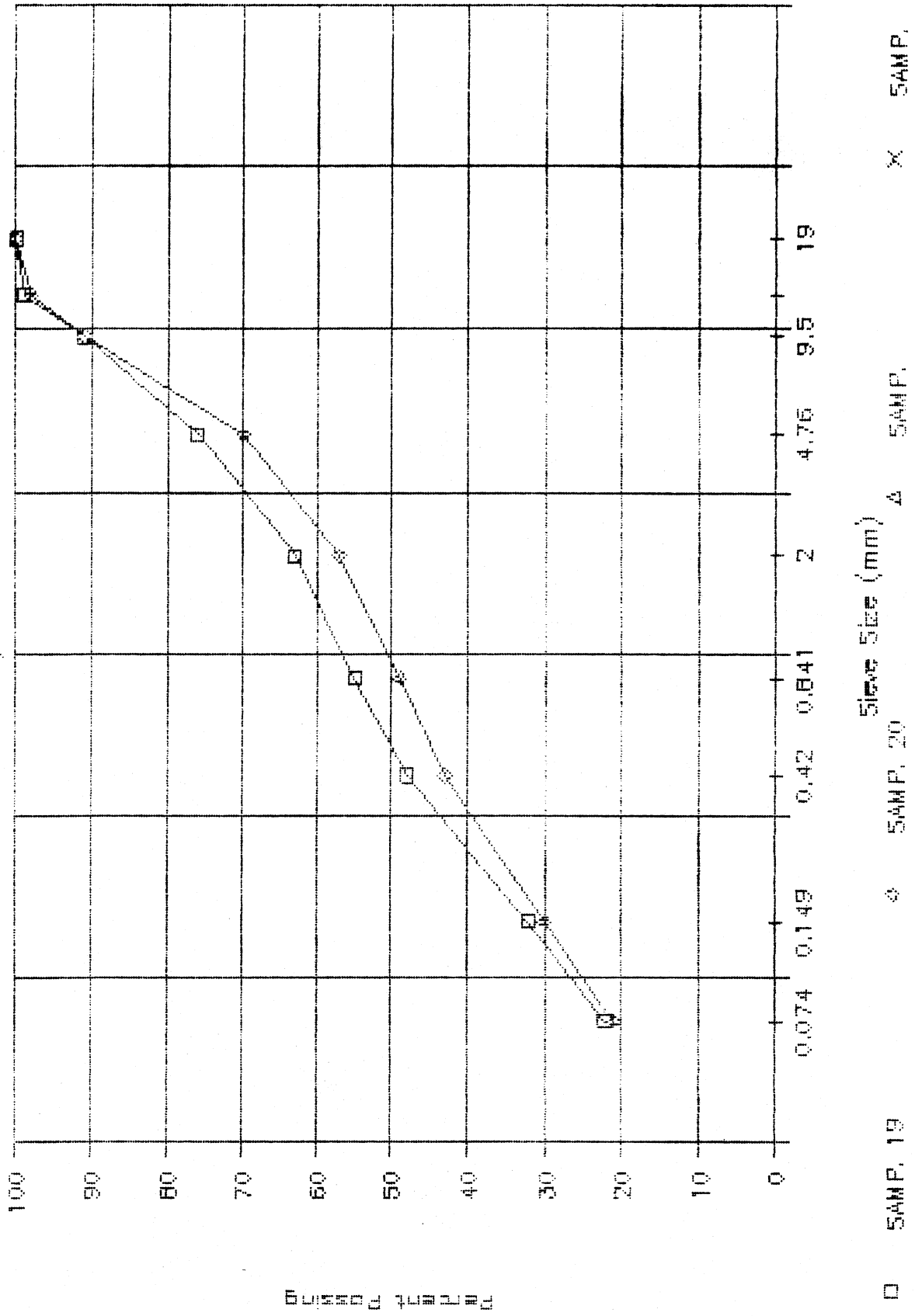
LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.

% GRAVEL:	24	% GRAVEL:	30
% SAND:	54	% SAND:	49
% FINES:	22	% FINES:	21

CLASSIFICATION:	CLASSIFICATION:
SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-100



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-11C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO:	21	FIELD NO:	22	FIELD NO:	23
LAB NO:	2872	LAB NO:	2873	LAB NO:	2874
DEPTH:	1.6-2.0	DEPTH:	3.3-3.7	DEPTH:	5.1-5.5
TYPE:	BULK	TYPE:	BULK	TYPE:	BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	100	19.0	100	19.0	--
12.7	99	12.7	90	12.7	100
9.5	93	9.5	77	9.5	93
4.76	76	4.76	53	4.76	79
2.38	--	2.38	--	2.38	--
2.00	62	2.00	38	2.00	66
1.19	--	1.19	--	1.19	--
0.841	51	0.841	29	0.841	56
0.595	--	0.595	--	0.595	--
0.42	42	0.42	23	0.42	49
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	22	0.149	13	0.149	31
0.074	11	0.074	8	0.074	17

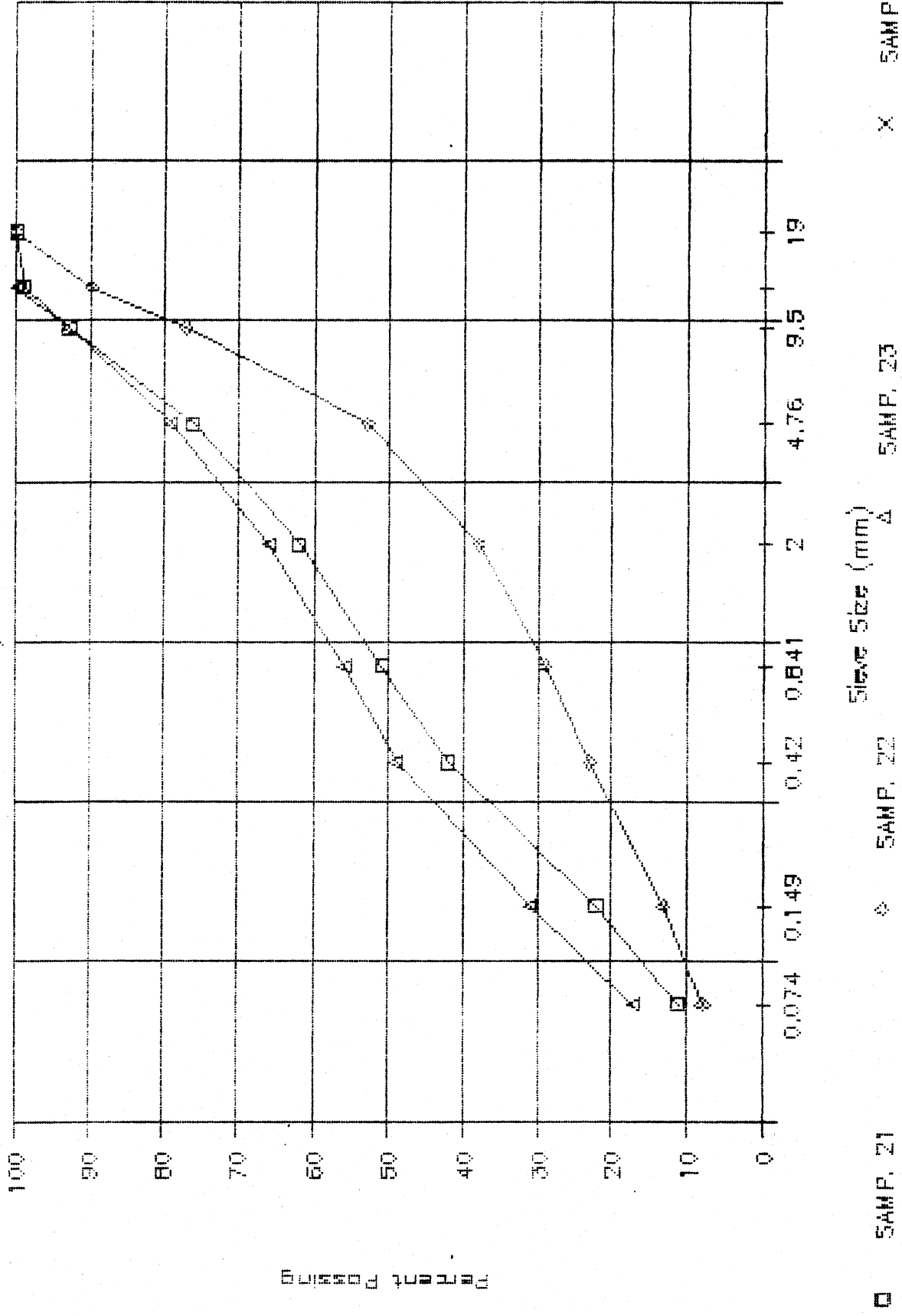
M.C.(%)	--	M.C.(%)	--	M.C.(%)	--
LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.	P.I.:	N.P.

% GRAVEL:	24	% GRAVEL:	47	% GRAVEL:	21
% SAND:	65	% SAND:	45	% SAND:	62
% FINES:	11	% FINES:	8	% FINES:	17

CLASSIFICATION:	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	CLASSIFICATION:	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)
-----------------	---	-----------------	---	-----------------	-----------------------------

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029--11C



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-12C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO:	LAB NO:	DEPTH:	TYPE:
24	2875	1.7-2.1	BULK
25	2876	3.3-3.6	BULK
26	2877	5.1-5.5	BULK

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	100	19.0	100	19.0	100
12.7	97	12.7	99	12.7	97
9.5	89	9.5	96	9.5	88
4.76	70	4.76	86	4.76	68
2.38	--	2.38	--	2.38	--
2.00	56	2.00	78	2.00	51
1.19	--	1.19	--	1.19	--
0.841	43	0.841	72	0.841	37
0.595	--	0.595	--	0.595	--
0.42	33	0.42	67	0.42	28
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	13	0.149	53	0.149	14
0.074	5	0.074	35	0.074	8

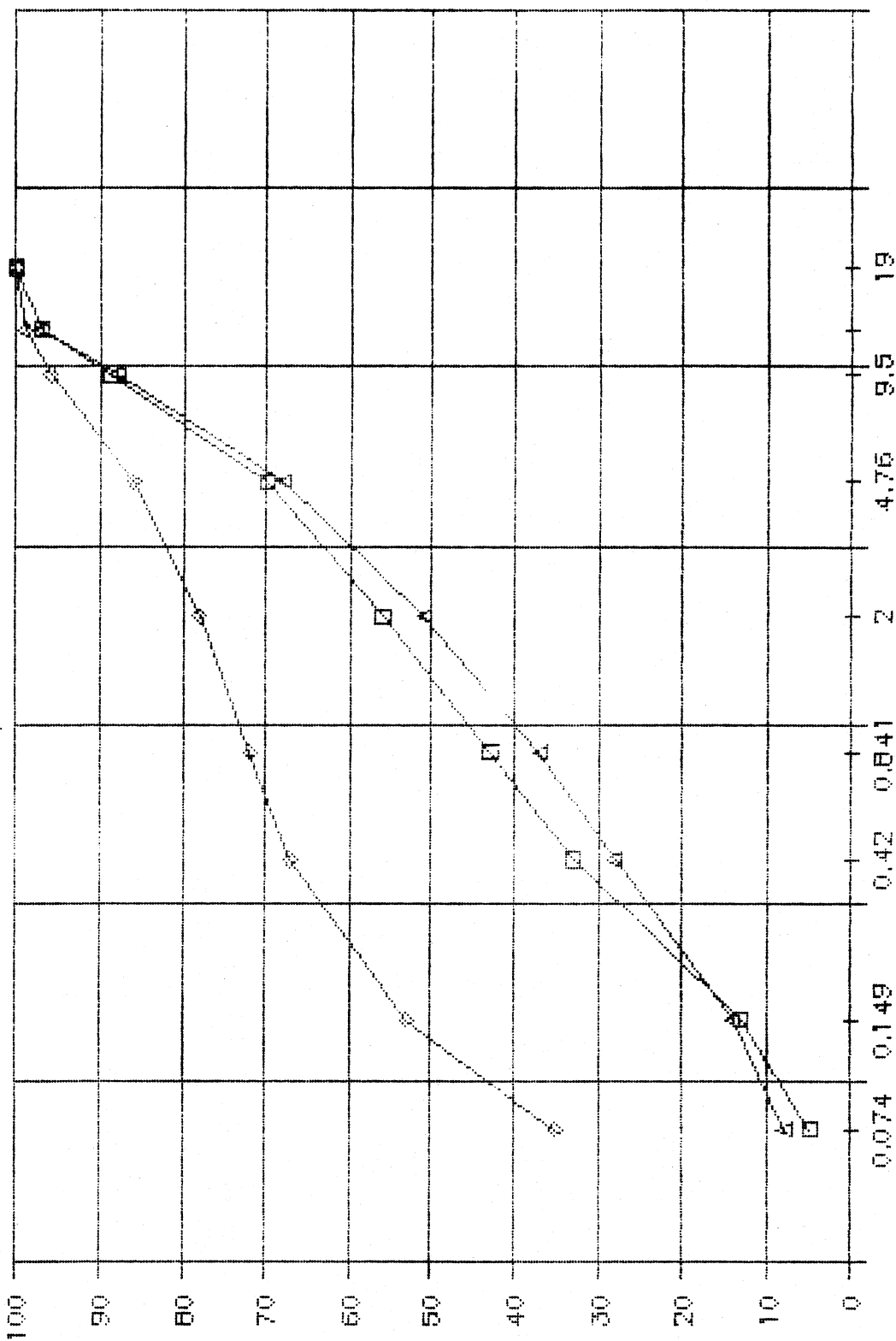
M.C. (%)	LIMITS	M.C. (%)	LIMITS	M.C. (%)	LIMITS
--	LIQUID: --	--	LIQUID: --	--	LIQUID: --
--	PLASTIC: --	--	PLASTIC: --	--	PLASTIC: --
--	P.I.: N.P.	--	P.I.: N.P.	--	P.I.: N.P.

% GRAVEL	% SAND	% FINES	% GRAVEL	% SAND	% FINES	% GRAVEL	% SAND	% FINES
30	65	5	14	51	35	32	60	8

CLASSIFICATION	CLASSIFICATION	CLASSIFICATION
POORLY GRADED SAND WITH SILT & GRAVEL (SP-SM)	SILTY SAND (SM)	POORLY GRADED SAND WITH SILT & GRAVEL (SP-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-120



SAMP. 24
 SAMP. 25
 SAMP. 26

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-13C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 27	FIELD NO: 28	FIELD NO: 29
LAB NO: 2878	LAB NO: 2879	LAB NO: 2880
DEPTH: 0.6-1.0	DEPTH: 3.1-3.6	DEPTH: 4.5-5.0
TYPE: BULK	TYPE: BULK	TYPE: BULK
		CC = 74%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	100	19.0	100	19.0	100
12.7	94	12.7	94	12.7	88
9.5	79	9.5	84	9.5	71
4.76	51	4.76	59	4.76	45
2.38	--	2.38	--	2.38	--
2.00	31	2.00	38	2.00	26
1.19	--	1.19	--	1.19	--
0.841	17	0.841	20	0.841	13
0.595	--	0.595	--	0.595	--
0.42	10	0.42	10	0.42	9
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	5	0.149	3	0.149	5
0.074	3	0.074	2	0.074	4

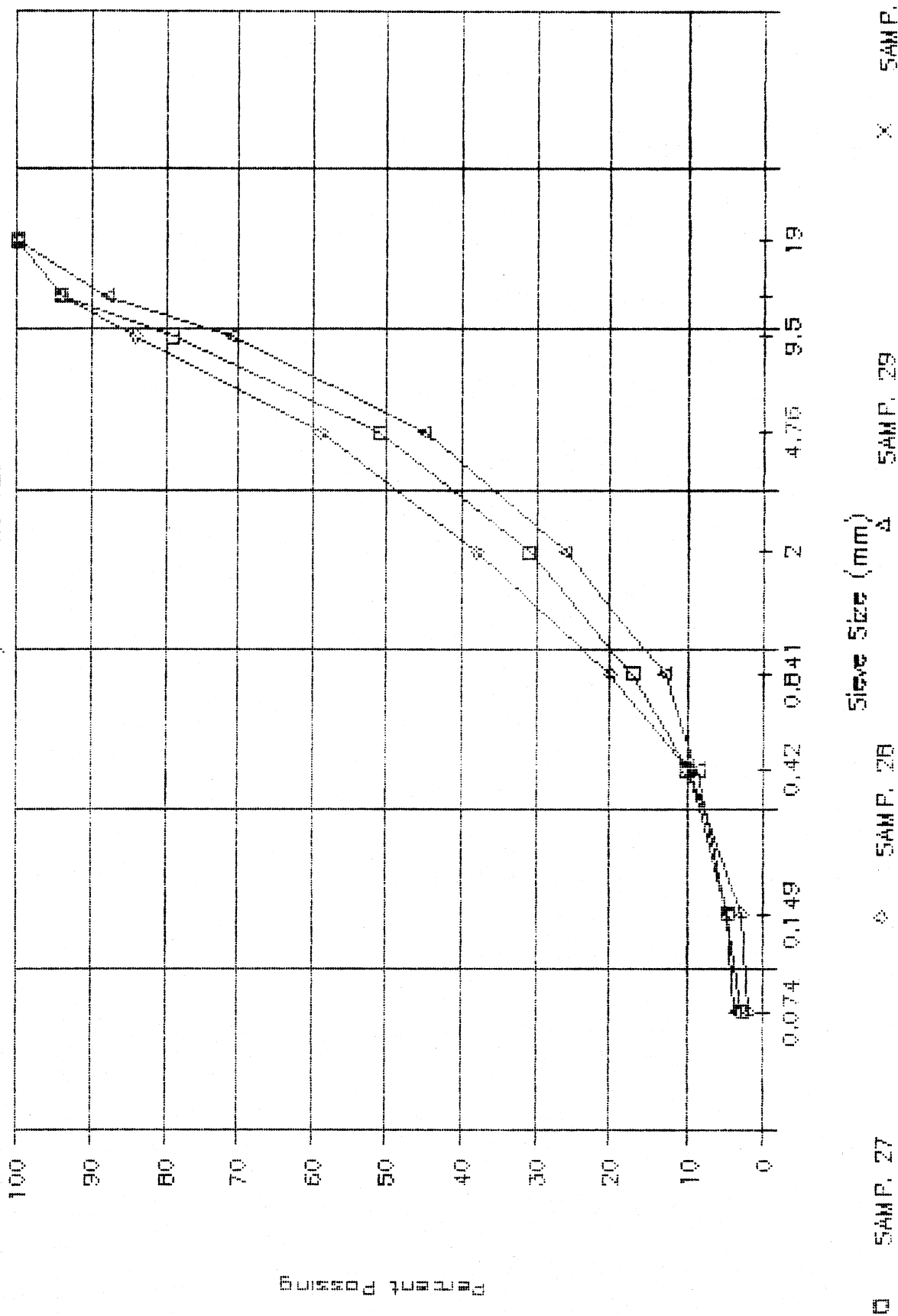
M.C.(%): --	M.C.(%): --	M.C.(%): --
LIMITS	LIMITS	LIMITS
LIQUID: --	LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.	P.I.: N.P.

% GRAVEL: 49	% GRAVEL: 41	% GRAVEL: 55
% SAND: 47	% SAND: 57	% SAND: 41
% FINES: 3	% FINES: 2	% FINES: 4

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED	POORLY GRADED	WELL-GRADED
GRAVEL WITH SAND (GW)	SAND WITH GRAVEL (SP)	GRAVEL WITH SAND (GW)

PUBLIC WORKS CANADA - WHITEHORSE, Y.T.

Grain Size Analysis - Hole 029-130



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-14C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 30
 LAB NO: 2881
 DEPTH: 1.6-2.0
 TYPE: BULK

FIELD NO: 31
 LAB NO: 2882
 DEPTH: 3.6-4.0
 TYPE: BULK

FIELD NO: 32
 LAB NO: 2883
 DEPTH: 5.2-5.4
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	81
4.76	54
2.38	--
2.00	32
1.19	--
0.841	17
0.595	--
0.42	10
0.297	--
0.177	--
0.149	4
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 46
 % SAND: 52
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED SAND
 WITH GRAVEL (SW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	84
4.76	69
2.38	--
2.00	55
1.19	--
0.841	43
0.595	--
0.42	35
0.297	--
0.177	--
0.149	25
0.074	17

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 31
 % SAND: 53
 % FINES: 17

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	98
9.5	90
4.76	69
2.38	--
2.00	54
1.19	--
0.841	42
0.595	--
0.42	33
0.297	--
0.177	--
0.149	19
0.074	12

M.C.(%): --

LIMITS

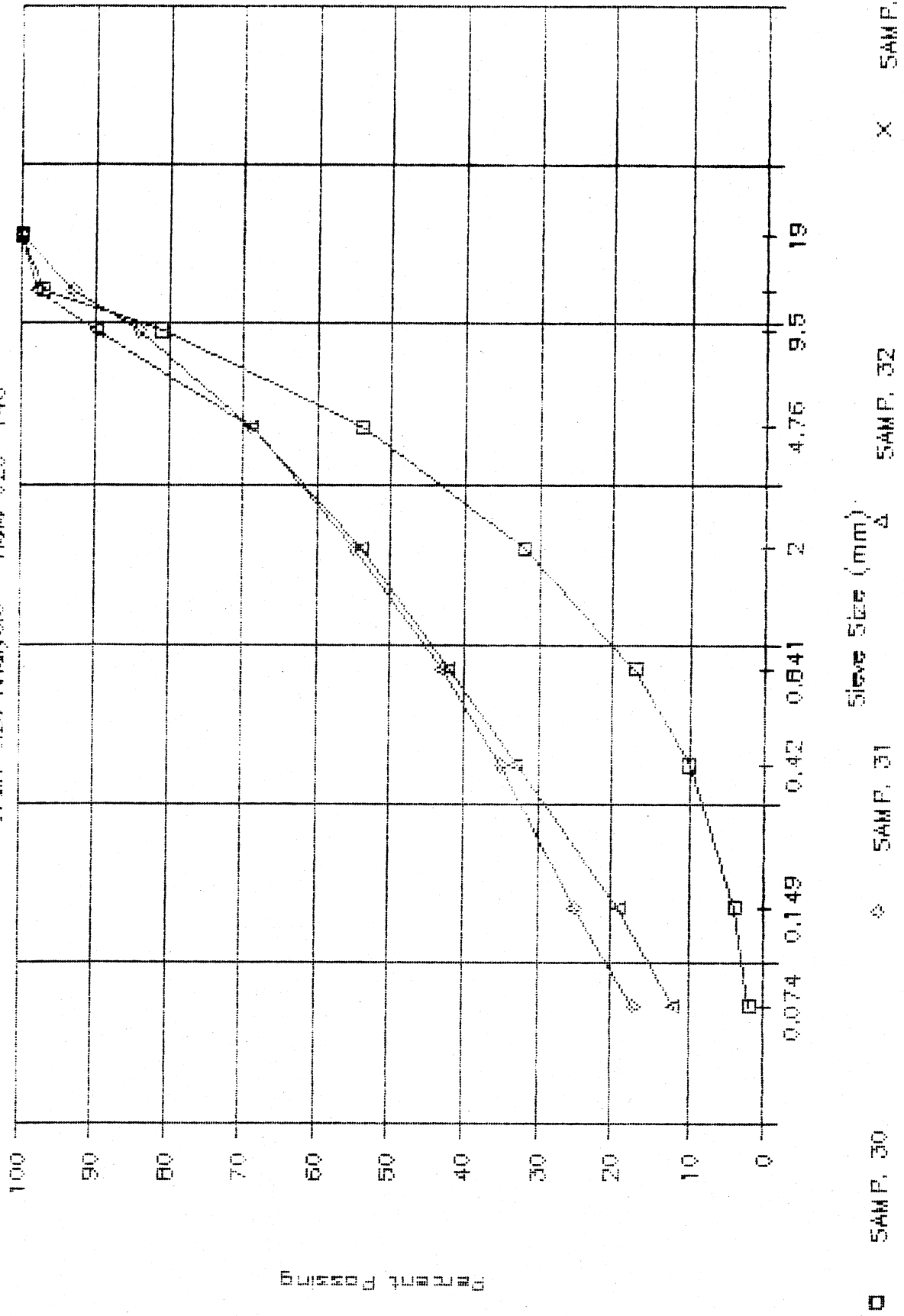
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 31
 % SAND: 57
 % FINES: 12

CLASSIFICATION:
 WELL-GRADED SAND
 WITH SILT &
 GRAVEL (SW-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029—140



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-15C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.20

FIELD NO: 33
 LAB NO: 2884
 DEPTH: 0.8-1.2
 TYPE: BULK

FIELD NO: 34
 LAB NO: 2885
 DEPTH: 3.0-3.4
 TYPE: BULK
 CC = 64%

FIELD NO: 35
 LAB NO: 2886
 DEPTH: 4.8-5.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	92
9.5	79
4.76	51
2.38	--
2.00	32
1.19	--
0.841	19
0.595	--
0.42	12
0.297	--
0.177	--
0.149	4
0.074	2

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 49
 % FINES: 2

CLASSIFICATION:
 WELL-GRADED SAND
 WITH GRAVEL (SW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	72
4.76	44
2.38	--
2.00	28
1.19	--
0.841	17
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 42
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	79
4.76	51
2.38	--
2.00	35
1.19	--
0.841	22
0.595	--
0.42	14
0.297	--
0.177	--
0.149	6
0.074	5

M.C.(%): --

LIMITS

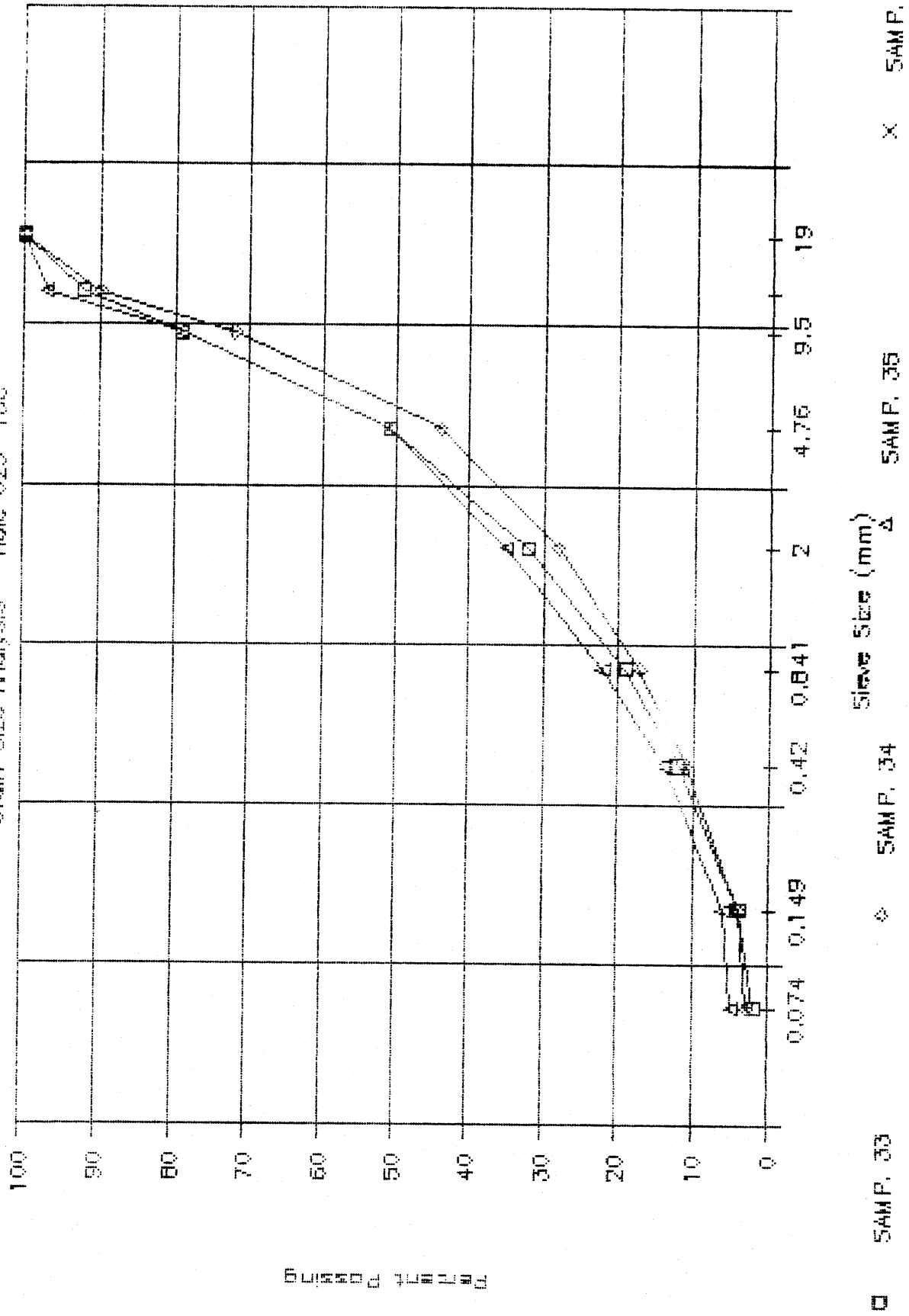
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 47
 % FINES: 5

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SILT
 & SAND (GW-GM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-150



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-16C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 36
 LAB NO: 2887
 DEPTH: 1.5-1.9
 TYPE: BULK

FIELD NO: 37
 LAB NO: 2888
 DEPTH: 2.6-3.0
 TYPE: BULK

FIELD NO: 38
 LAB NO: 2889
 DEPTH: 4.6-5.0
 TYPE: BULK
 CC = 84%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	76
4.76	51
2.38	--
2.00	34
1.19	--
0.841	21
0.595	--
0.42	13
0.297	--
0.177	--
0.149	6
0.074	4

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	80
4.76	52
2.38	--
2.00	33
1.19	--
0.841	20
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	3

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	77
4.76	50
2.38	--
2.00	32
1.19	--
0.841	5220
0.595	--
0.42	13
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 47
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 48
 % SAND: 49
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED SAND
 WITH GRAVEL (SW)

M.C.(%): --

LIMITS

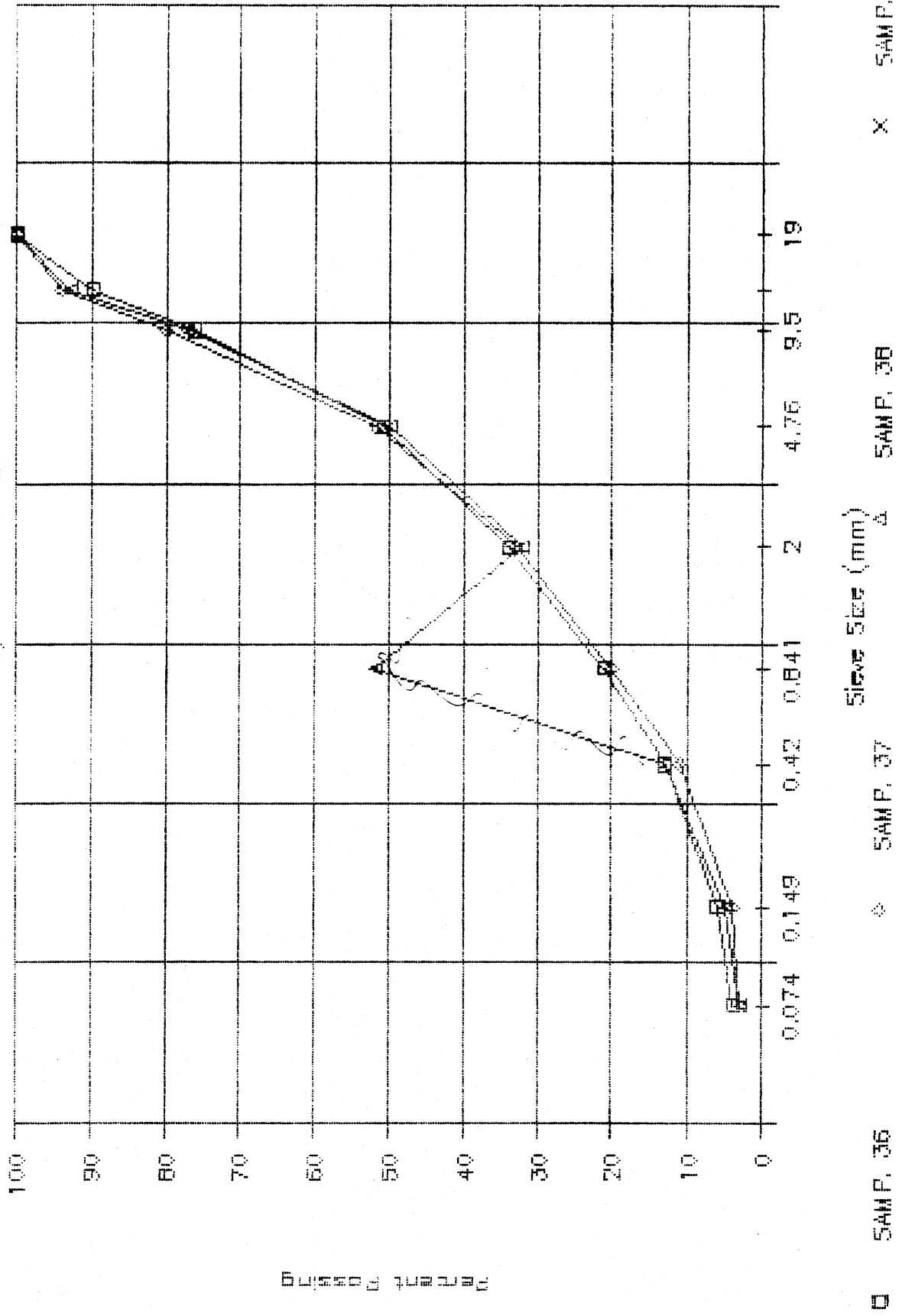
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 50
 % SAND: 47
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-160



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-17C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 39
 LAB NO: 2890
 DEPTH: 1.1-1.5
 TYPE: BULK

FIELD NO: 40
 LAB NO: 2891
 DEPTH: 2.6-3.0
 TYPE: BULK
 CC = 67%

FIELD NO: 41
 LAB NO: 2892
 DEPTH: 4.6-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	91
9.5	77
4.76	53
2.38	--
2.00	33
1.19	--
0.841	19
0.595	--
0.42	11
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 47
 % SAND: 50
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED SAND
 WITH GRAVEL (SW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	71
4.76	46
2.38	--
2.00	29
1.19	--
0.841	16
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 54
 % SAND: 43
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	79
4.76	51
2.38	--
2.00	33
1.19	--
0.841	20
0.595	--
0.42	11
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

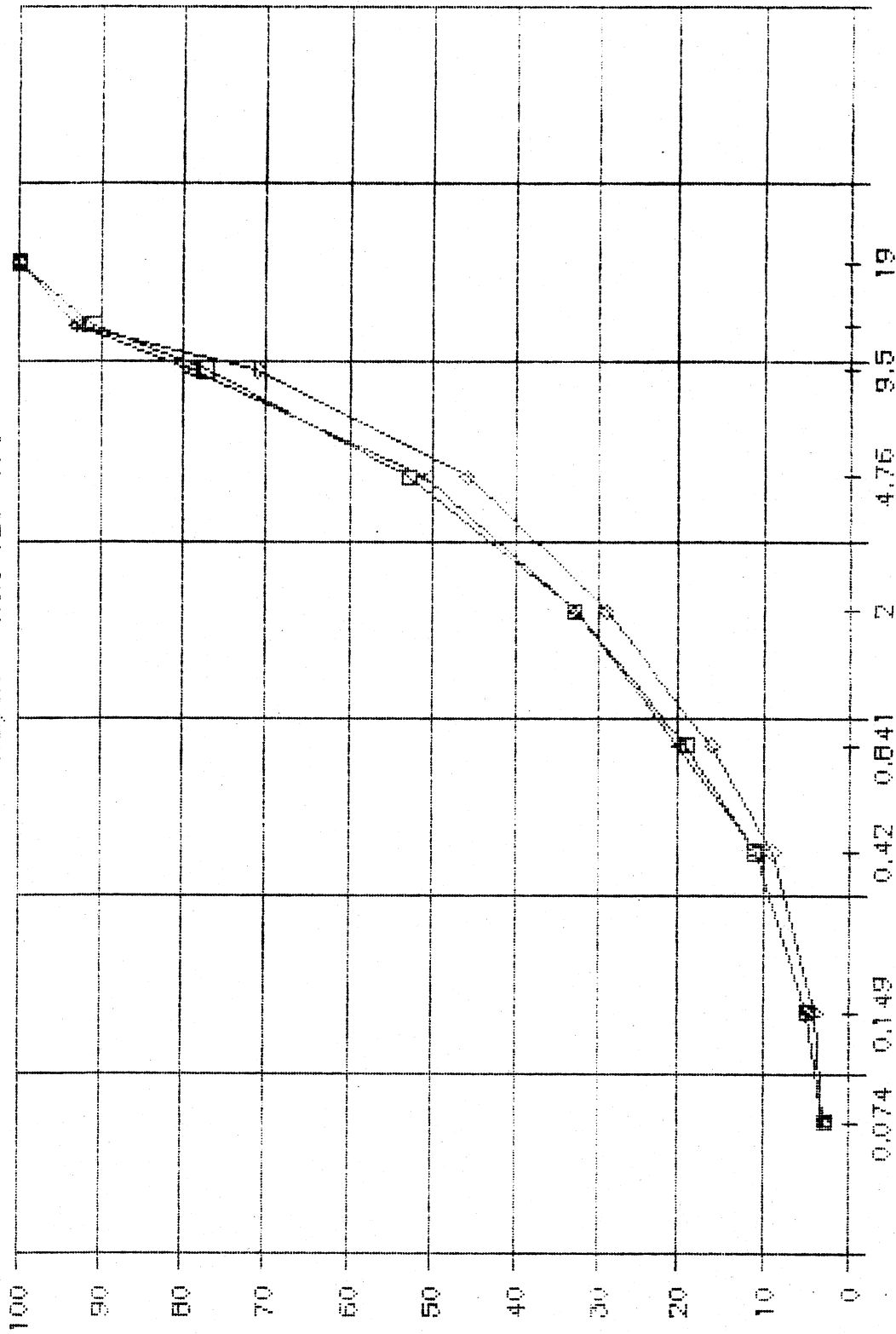
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 48
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029-17C



SAMP. 39
 SAMP. 40
 SAMP. 41

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-18C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 42
 LAB NO: 2893
 DEPTH: 2.4-2.8
 TYPE: BULK
 CC = 76%

FIELD NO: 43
 LAB NO: 2894
 DEPTH: 3.8-4.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	77
4.76	49
2.38	--
2.00	31
1.19	--
0.841	17
0.595	--
0.42	10
0.297	--
0.177	--
0.149	5
0.074	3

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	99
2.38	--
2.00	98
1.19	--
0.841	94
0.595	--
0.42	90
0.297	--
0.177	--
0.149	83
0.074	69

M.C.(%): --

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 51
 % SAND: 46
 % FINES: 3

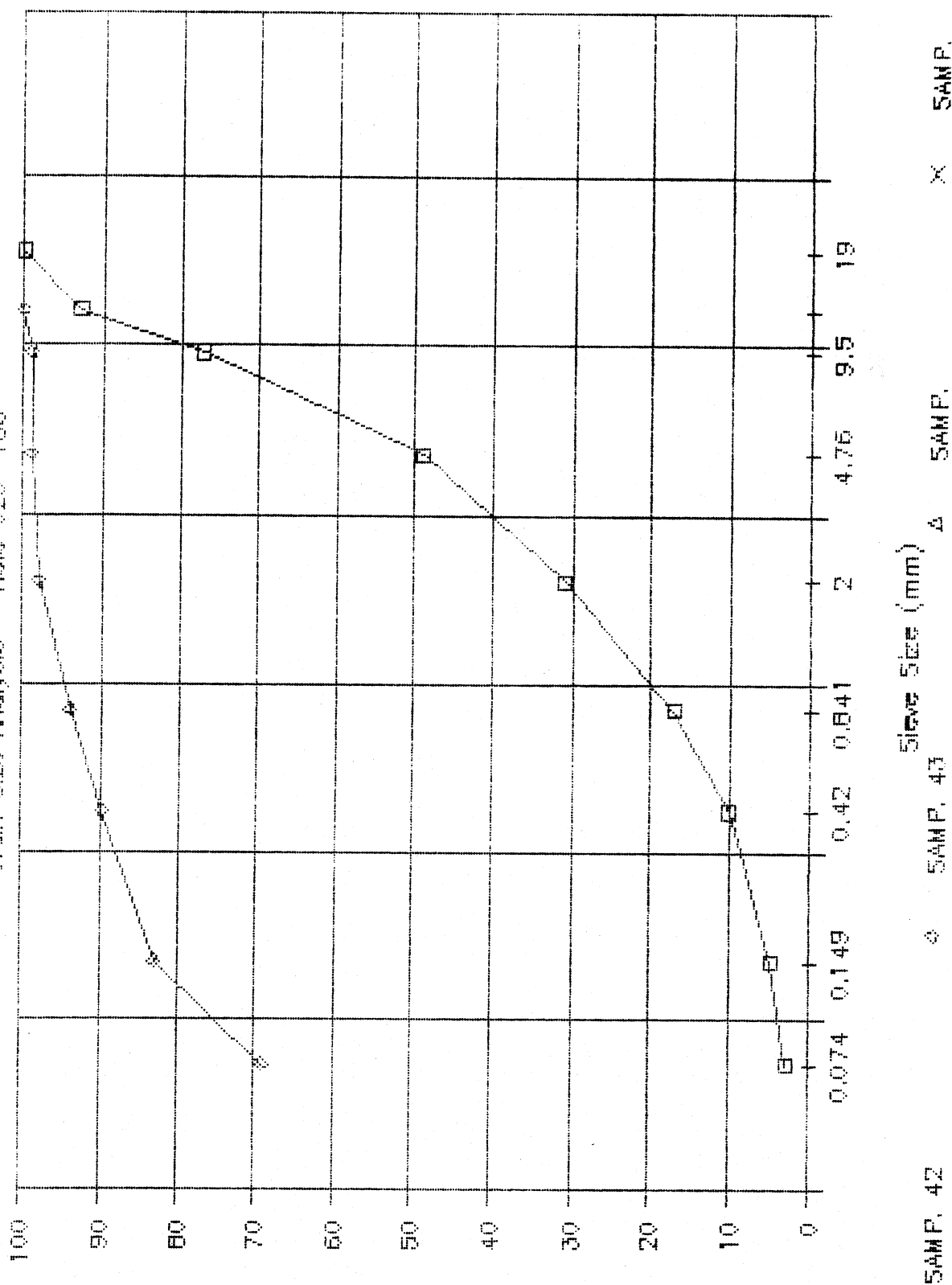
% GRAVEL: 1
 % SAND: 30
 % FINES: 69

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

CLASSIFICATION:
 SANDY SILT (ML)

PUBLIC WORKS CANADA - WHITEHORSE, Y.T.

Grain Size Analysis - Hole 029-160



Grain Size Analysis - Hole 029-160

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-19C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 44
LAB NO: 2895
DEPTH: 1.6-2.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	85
4.76	59
2.38	--
2.00	41
1.19	--
0.841	26
0.595	--
0.42	16
0.297	--
0.177	--
0.149	6
0.074	3

M.C.(%): --

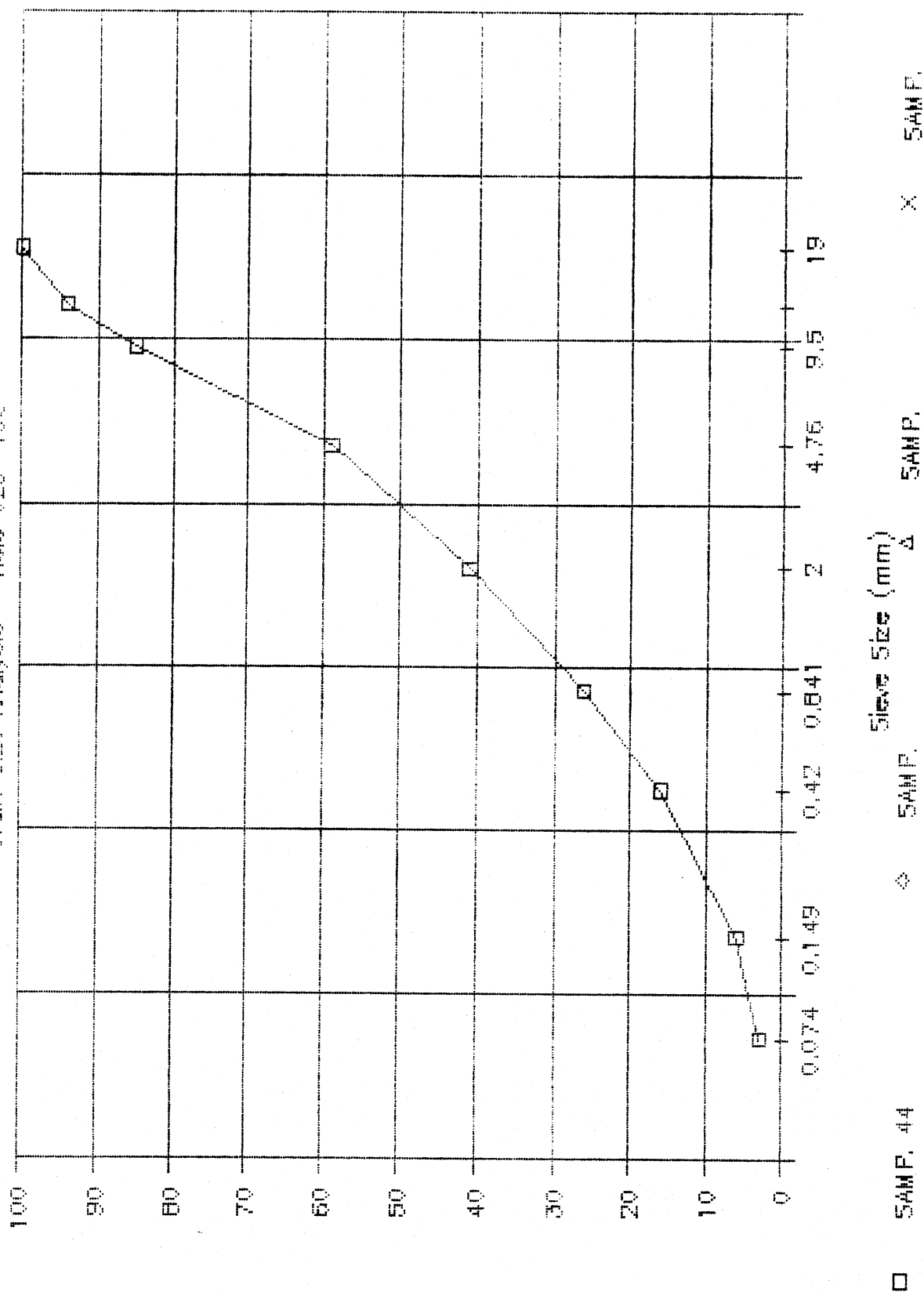
LIMITS

LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 41
% SAND: 56
% FINES: 3

CLASSIFICATION:
WELL-GRADED SAND
WITH GRAVEL (SW)

Grain Size Analysis - H&E 020-100



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 029-20C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 45
LAB NO: 2896
DEPTH: 0.8-1.2
TYPE: BULK
CC = 68%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	74
4.75	48
2.38	--
2.00	28
1.19	--
0.841	18
0.595	--
0.42	12
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

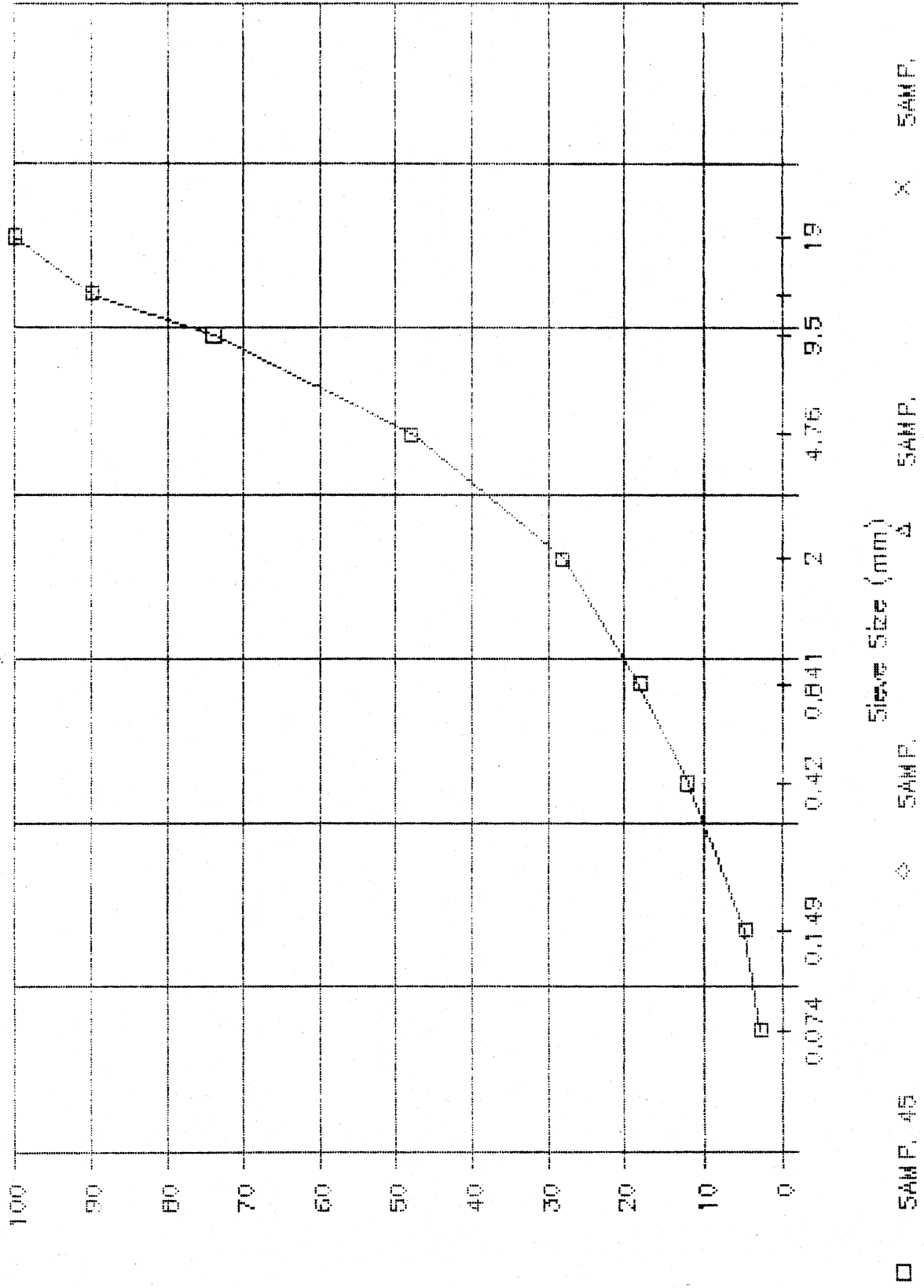
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 52
% SAND: 45
% FINES: 3

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 029—200



PERCENT PASSING

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-22C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.21

FIELD NO: 47	FIELD NO: 48	FIELD NO: 49
LAB NO: 2897	LAB NO: 2898	LAB NO: 2899
DEPTH: 0.8-1.2	DEPTH: 2.6-3.0	DEPTH: 4.3-4.7
TYPE: BULK	TYPE: BULK	TYPE: BULK
CC = 69%	CC = 80%	CC = 83%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	100	19.0	--	19.0	100
12.7	93	12.7	--	12.7	93
9.5	78	9.5	--	9.5	73
4.76	48	4.76	--	4.76	44
2.38	--	2.38	--	2.38	--
2.00	30	2.00	--	2.00	27
1.19	--	1.19	--	1.19	--
0.841	17	0.841	--	0.841	17
0.595	--	0.595	--	0.595	--
0.42	11	0.42	--	0.42	11
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	4	0.149	--	0.149	5
0.074	3	0.074	99	0.074	3

M.C.(%): -- M.C.(%): -- M.C.(%): --

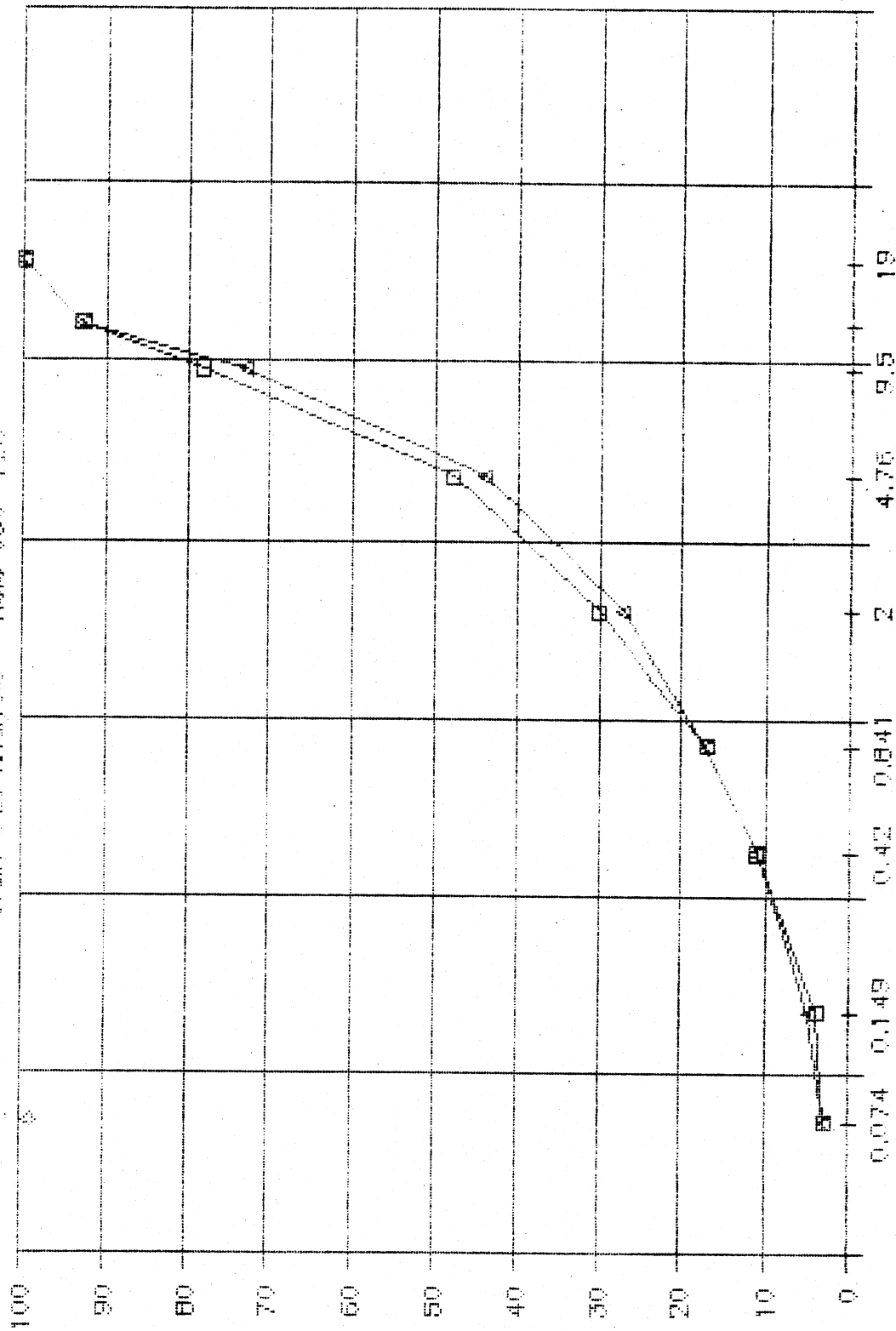
LIMITS	LIMITS	LIMITS
LIQUID: --	LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.	P.I.: N.P.

% GRAVEL: 52	% GRAVEL: --	% GRAVEL: 56
% SAND: 45	% SAND: --	% SAND: 41
% FINES: 3	% FINES: --	% FINES: 3

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED	WELL-GRADED	WELL-GRADED
GRAVEL WITH SAND	GRAVEL WITH SAND	GRAVEL WITH SAND
(GW)	(GW)	(GW)

PUBLIC WORKS CANADA -- WHITEHORSE, Y.T.

Grain Size Analysis -- Hole 030-735



5AMP. 47
 5AMP. 48
 5AMP. 49

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-23C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.22

FIELD NO: 50	FIELD NO: 51	FIELD NO: 52
LAB NO: 2900	LAB NO: 2901	LAB NO: 2902
DEPTH: 0.8-1.2	DEPTH: 2.8-3.2	DEPTH: 3.9-4.3
TYPE: BULK	TYPE: BULK	TYPE: BULK
CC = 61%	CC = 64%	CC = 80%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	100	19.0	100	19.0	100
12.7	93	12.7	93	12.7	93
9.5	82	9.5	77	9.5	77
4.76	54	4.76	50	4.76	53
2.38	--	2.38	--	2.38	--
2.00	36	2.00	31	2.00	36
1.19	--	1.19	--	1.19	--
0.841	22	0.841	19	0.841	23
0.595	--	0.595	--	0.595	--
0.42	14	0.42	12	0.42	15
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	5	0.149	5	0.149	6
0.074	3	0.074	3	0.074	4

M.C.(%): -- M.C.(%): -- M.C.(%): --

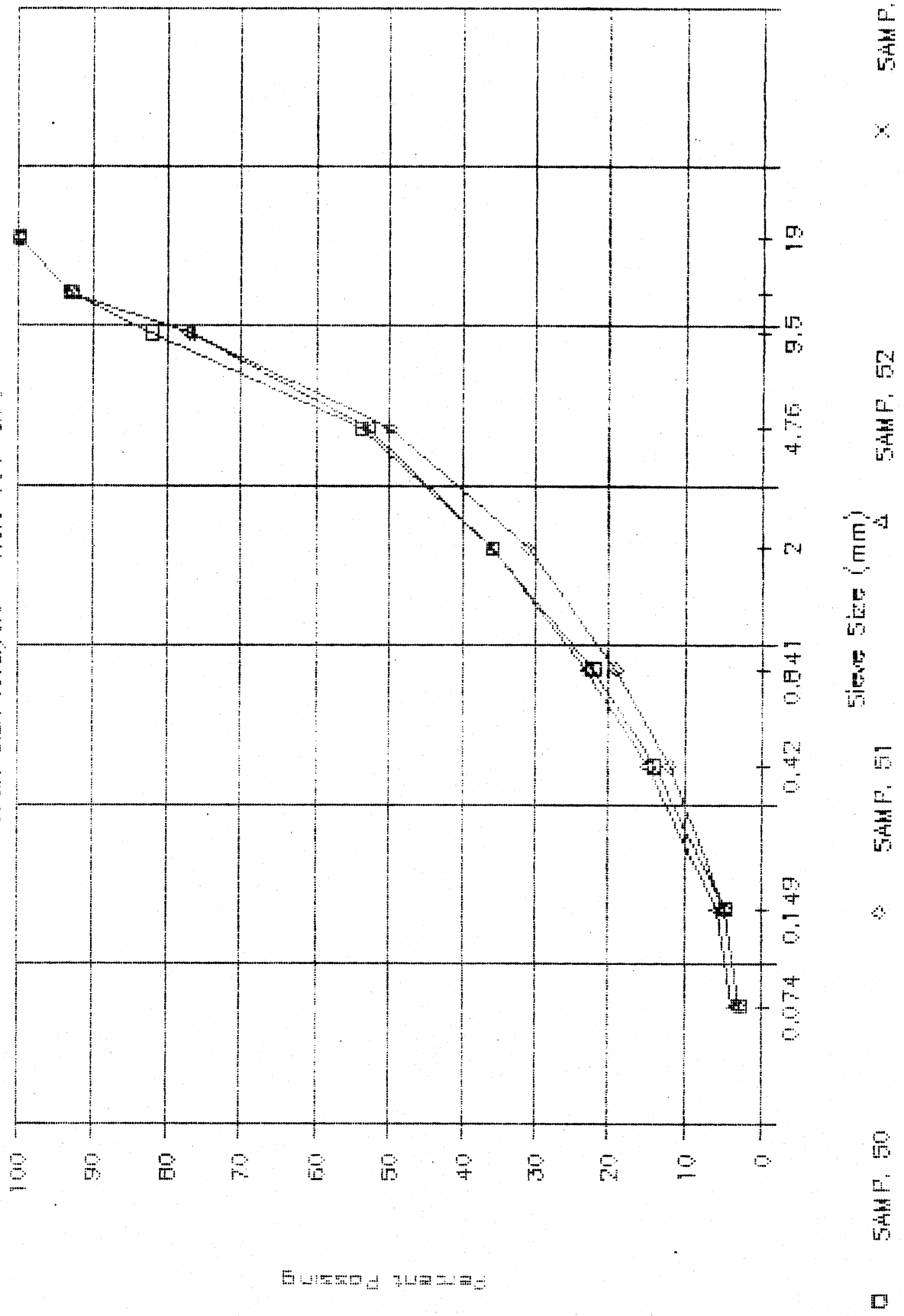
LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.	P.I.:	N.P.

% GRAVEL: 46	% GRAVEL: 50	% GRAVEL: 47
% SAND: 51	% SAND: 47	% SAND: 49
% FINES: 3	% FINES: 3	% FINES: 4

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED SAND	WELL-GRADED	WELL-GRADED SAND
WITH GRAVEL (SW)	GRAVEL WITH SAND	WITH GRAVEL (SW)
	(GW)	

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-230



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-24C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.22

FIELD NO: 53	FIELD NO: 54
LAB NO: 2903	LAB NO: 2904
DEPTH: 2.8-3.2	DEPTH: 4.0-4.4
TYPE: BULK	TYPE: BULK
CC = 69%	CC = 66%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	100	19.0	100
12.7	97	12.7	95
9.5	85	9.5	82
4.76	63	4.76	58
2.38	--	2.38	--
2.00	49	2.00	43
1.19	--	1.19	--
0.841	39	0.841	30
0.595	--	0.595	--
0.42	32	0.42	22
0.297	--	0.297	--
0.177	--	0.177	--
0.149	20	0.149	12
0.074	12	0.074	8

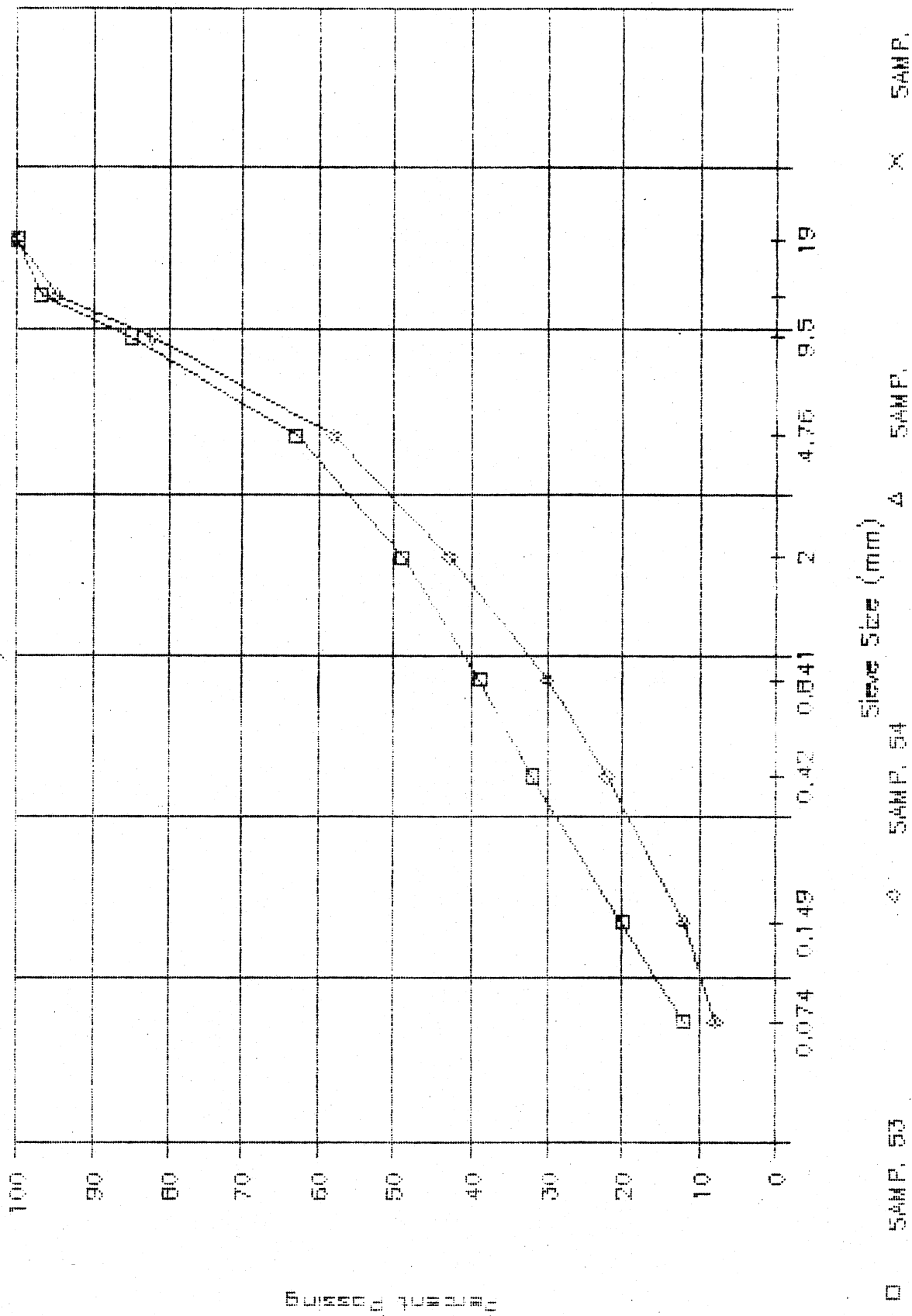
M.C. (%): --	M.C. (%): --
LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.

% GRAVEL: 37	% GRAVEL: 42
% SAND: 50	% SAND: 50
% FINES: 12	% FINES: 8

CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED SAND	WELL-GRADED SAND
WITH SILT &	WITH SILT &
GRAVEL (SW-SM)	GRAVEL (SW-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—240



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-25C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.22

FIELD NO: 55
LAB NO: 2905
DEPTH: 1.2-1.6
TYPE: BULK
CC = 45%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	89
4.76	69
2.38	--
2.00	53
1.19	--
0.841	42
0.595	--
0.42	35
0.297	--
0.177	--
0.149	15
0.074	7

M.C.(%): --

LIMITS

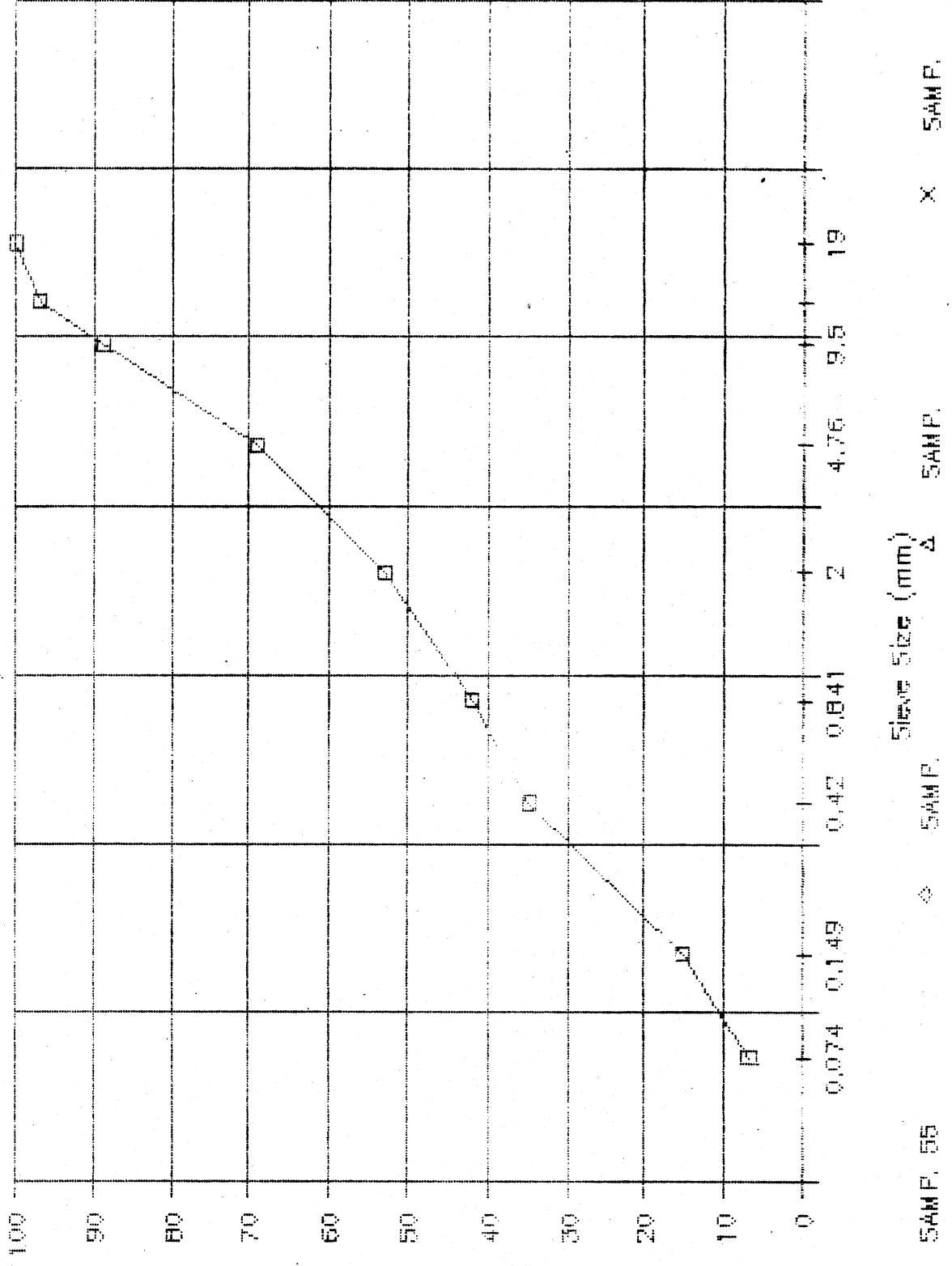
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 31
% SAND: 62
% FINES: 7

CLASSIFICATION:
POORLY GRADED
SAND WITH SILT &
GRAVEL (SP-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—250



GRAIN SIZE ANALYSIS

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-26C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.22

FIELD NO:	LAB NO:	DEPTH:	TYPE:	CC =
56	2906	0.9-1.3	BULK	65%
57	2907	2.6-3.0	BULK	62%
58	2908	4.2-4.6	BULK	72%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	100	19.0	100	19.0	100
12.7	90	12.7	94	12.7	94
9.5	78	9.5	77	9.5	82
4.76	52	4.76	49	4.76	52
2.38	--	2.38	--	2.38	--
2.00	34	2.00	30	2.00	36
1.19	--	1.19	--	1.19	--
0.841	20	0.841	17	0.841	23
0.595	--	0.595	--	0.595	--
0.42	11	0.42	10	0.42	16
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	5	0.149	5	0.149	8
0.074	3	0.074	4	0.074	5

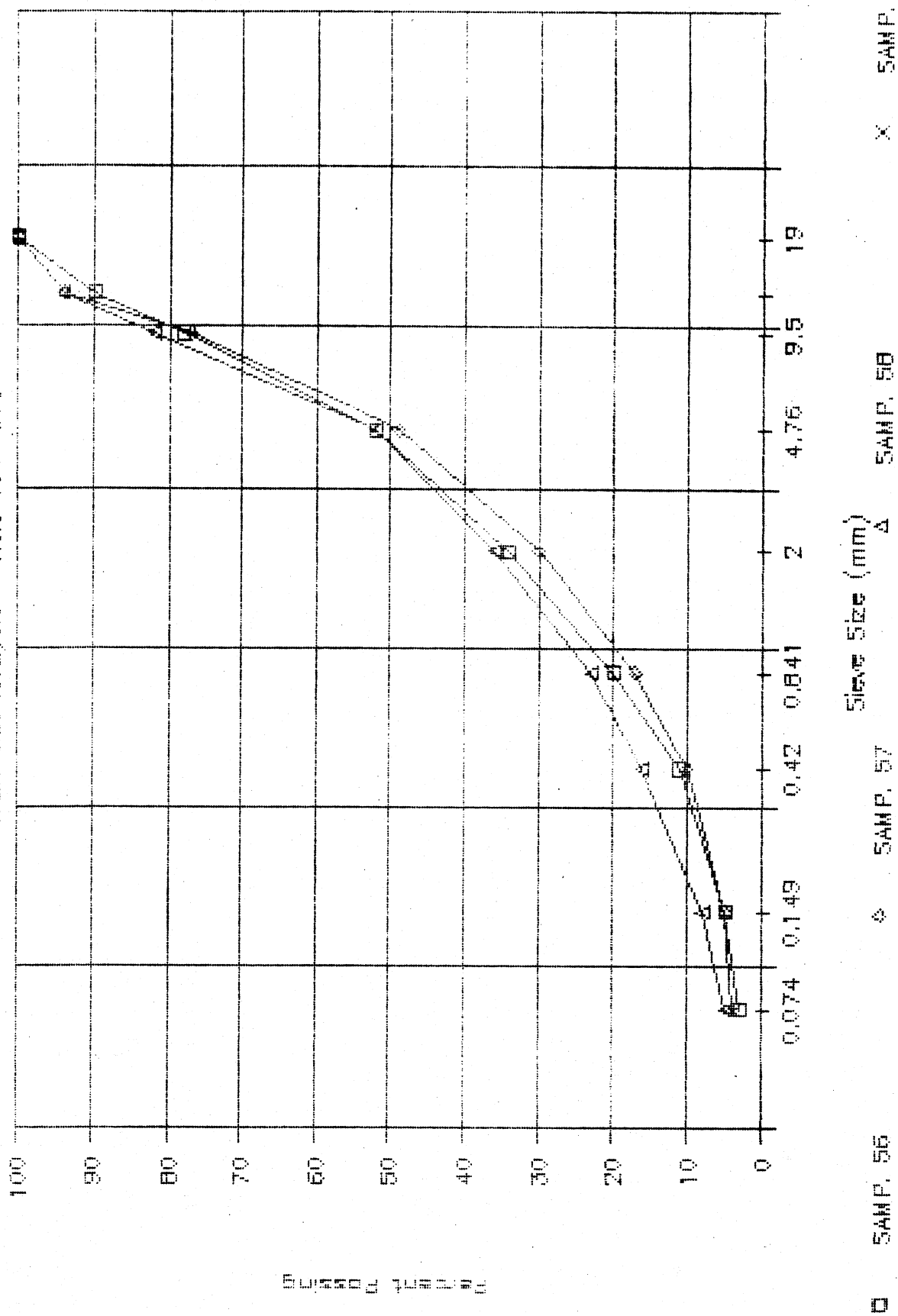
M.C.(%)	LIMITS	M.C.(%)	LIMITS	M.C.(%)	LIMITS
--	LIQUID: --	--	LIQUID: --	--	LIQUID: --
--	PLASTIC: --	--	PLASTIC: --	--	PLASTIC: --
--	P.I.: N.P.	--	P.I.: N.P.	--	P.I.: N.P.

% GRAVEL: 48	% GRAVEL: 51	% GRAVEL: 48
% SAND: 48	% SAND: 45	% SAND: 47
% FINES: 3	% FINES: 4	% FINES: 5

CLASSIFICATION: WELL-GRADED SAND WITH GRAVEL (SW)	CLASSIFICATION: WELL-GRADED GRAVEL WITH SAND (GW)	CLASSIFICATION: WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)
---	--	--

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-260



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-27C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.22

FIELD NO: 59
 LAB NO: 2909
 DEPTH: 1.7-2.1
 TYPE: BULK
 CC = 71%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	75
4.76	51
2.38	--
2.00	35
1.19	--
0.841	21
0.595	--
0.42	13
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 47
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 60
 LAB NO: 2910
 DEPTH: 3.0-3.4
 TYPE: BULK
 CC = 72%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	77
4.76	46
2.38	--
2.00	28
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 54
 % SAND: 43
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 61
 LAB NO: 2911
 DEPTH: 4.6-5.0
 TYPE: BULK
 CC = 76%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	73
4.76	45
2.38	--
2.00	29
1.19	--
0.841	17
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

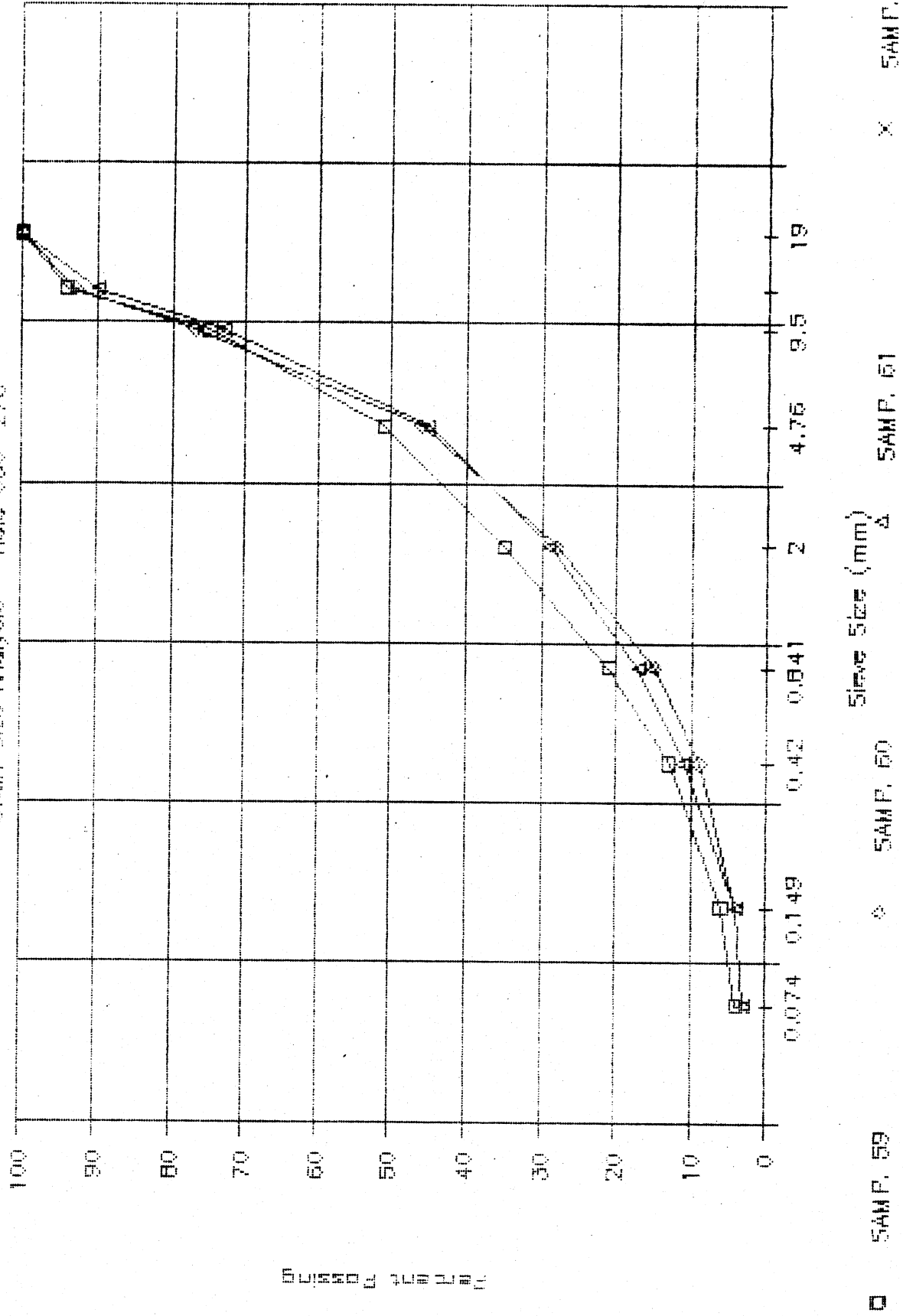
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 55
 % SAND: 42
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-270



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-28C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: DT DATE COMPLETED: 88.10.22

FIELD NO: 62
 LAB NO: 2912
 DEPTH: 1.6-2.0
 TYPE: BULK
 CC = 69%

FIELD NO: 63
 LAB NO: 2913
 DEPTH: 3.2-3.6
 TYPE: BULK
 CC = 51%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	87
4.76	71
2.38	--
2.00	58
1.19	--
0.841	48
0.595	--
0.42	40
0.297	--
0.177	--
0.149	24
0.074	15

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 29
 % SAND: 57
 % FINES: 15

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	96
9.5	85
4.76	69
2.38	--
2.00	57
1.19	--
0.841	49
0.595	--
0.42	43
0.297	--
0.177	--
0.149	33
0.074	20

M.C.(%): --

LIMITS

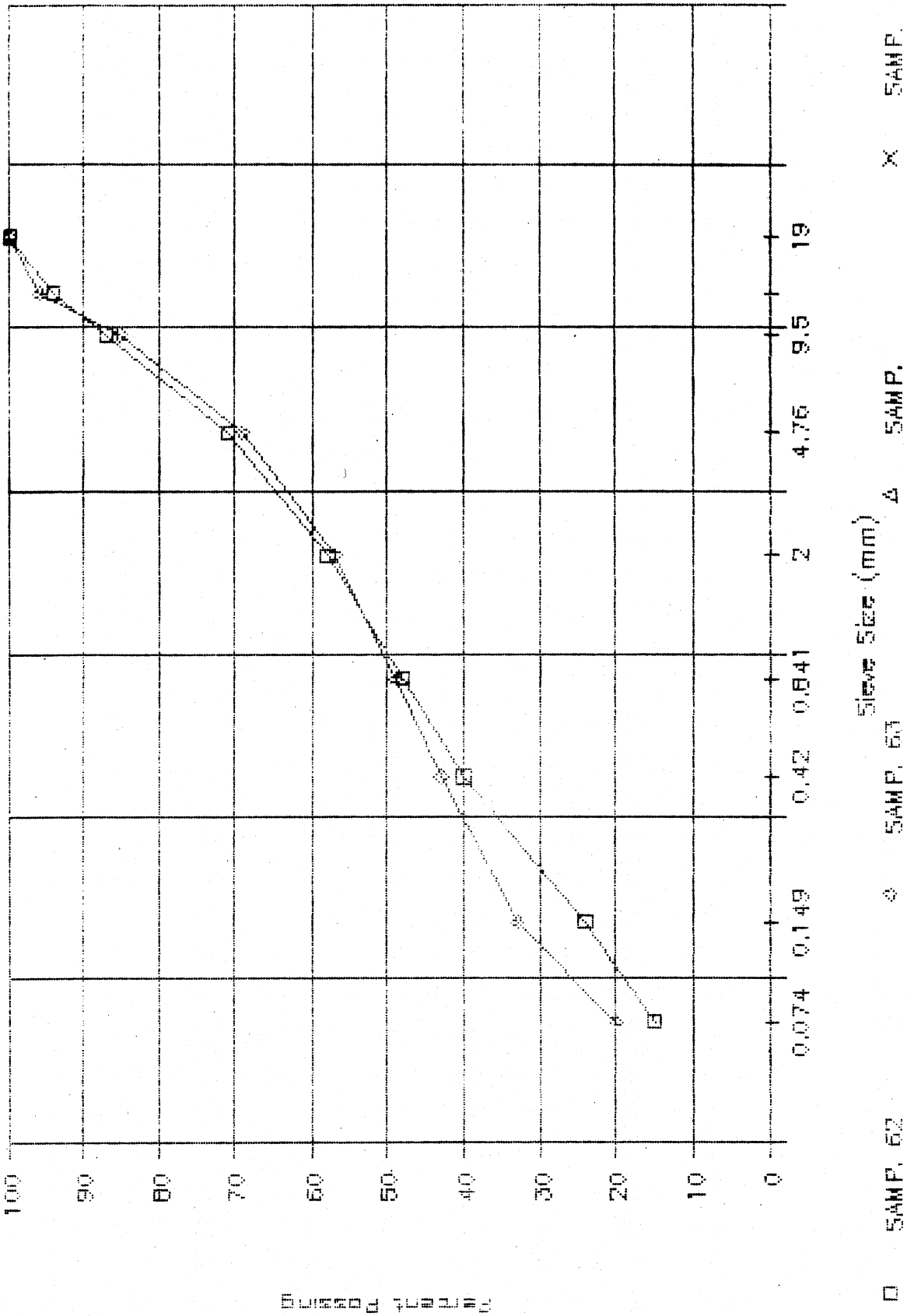
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 31
 % SAND: 49
 % FINES: 20

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-28C



PERCENT PASSING

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-29C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: DT DATE COMPLETED: 88.10.22

FIELD NO: 64
LAB NO: 2914
DEPTH: 2.0-2.4
TYPE: ERR
CC = 76%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	92
9.5	73
4.76	40
2.38	--
2.00	24
1.19	--
0.841	14
0.595	--
0.42	9
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

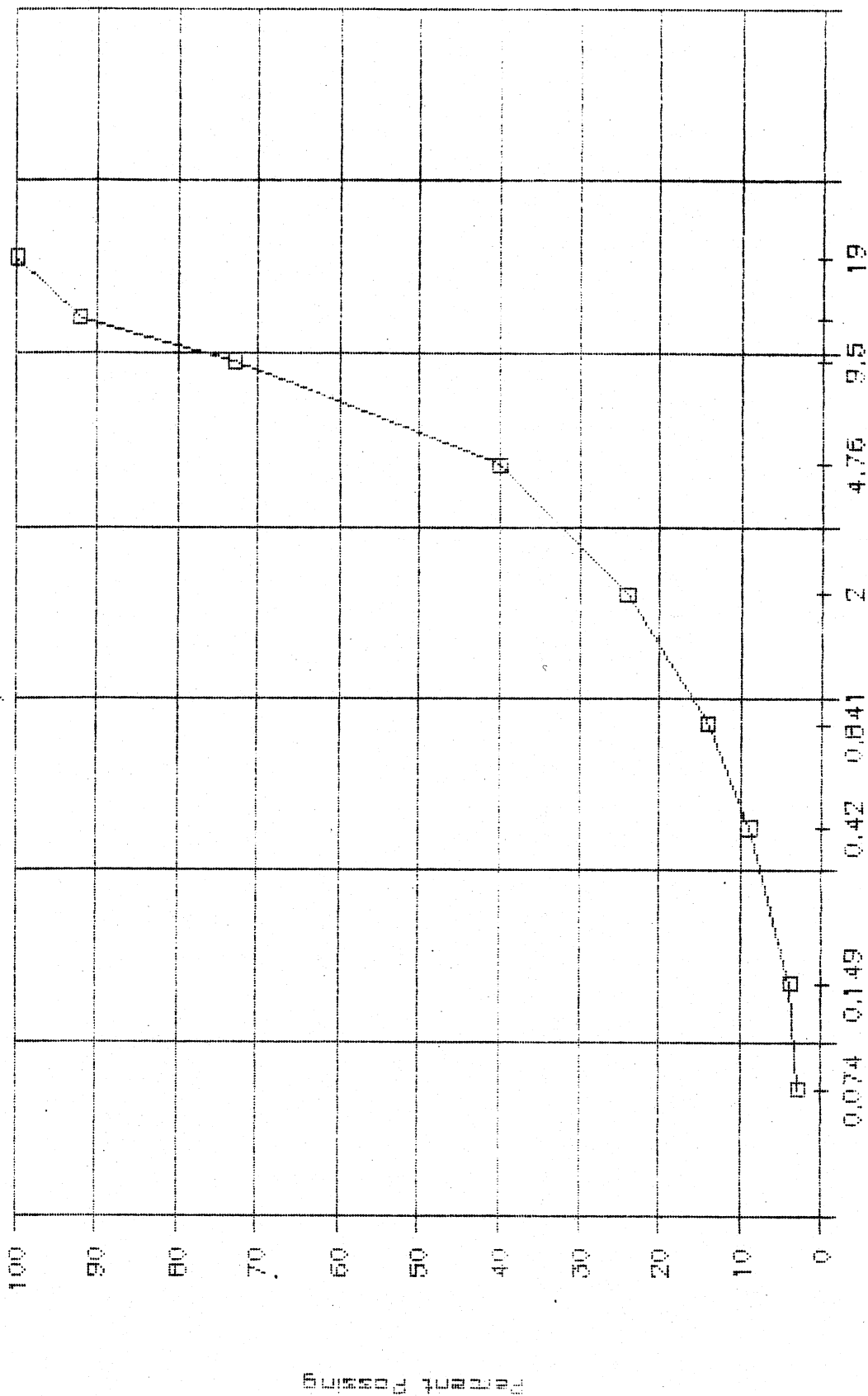
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 60
% SAND: 38
% FINES: 3

CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SAND
(GW)

PUBLIC WORKS CANADA -- WHITEHORSE, Y.T.

Grain Size Analysis -- Hole 030--29C



X SAMP.

Δ SAMP.

Sieve Size (mm)

Δ SAMP.

◇ SAMP.

□ SAMP. 64

□

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-30C
CLIENT: PWC CAPITAL - Y.T.
PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
PROJECT LOCATION: A/H KM 1749.5 LHS
DRILL UNIT: CAT 225 HOE
HOLE LOCATION: SEE PLAN
LOGGED BY: CB DATE COMPLETED: 88.10.22

FIELD NO: 65
LAB NO: 2915
DEPTH: 2.6-3.0
TYPE: BULK
CC = 71%

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	84
4.76	62
2.38	--
2.00	46
1.19	--
0.841	31
0.595	--
0.42	22
0.297	--
0.177	--
0.149	9
0.074	5

M.C. (%): --

LIMITS

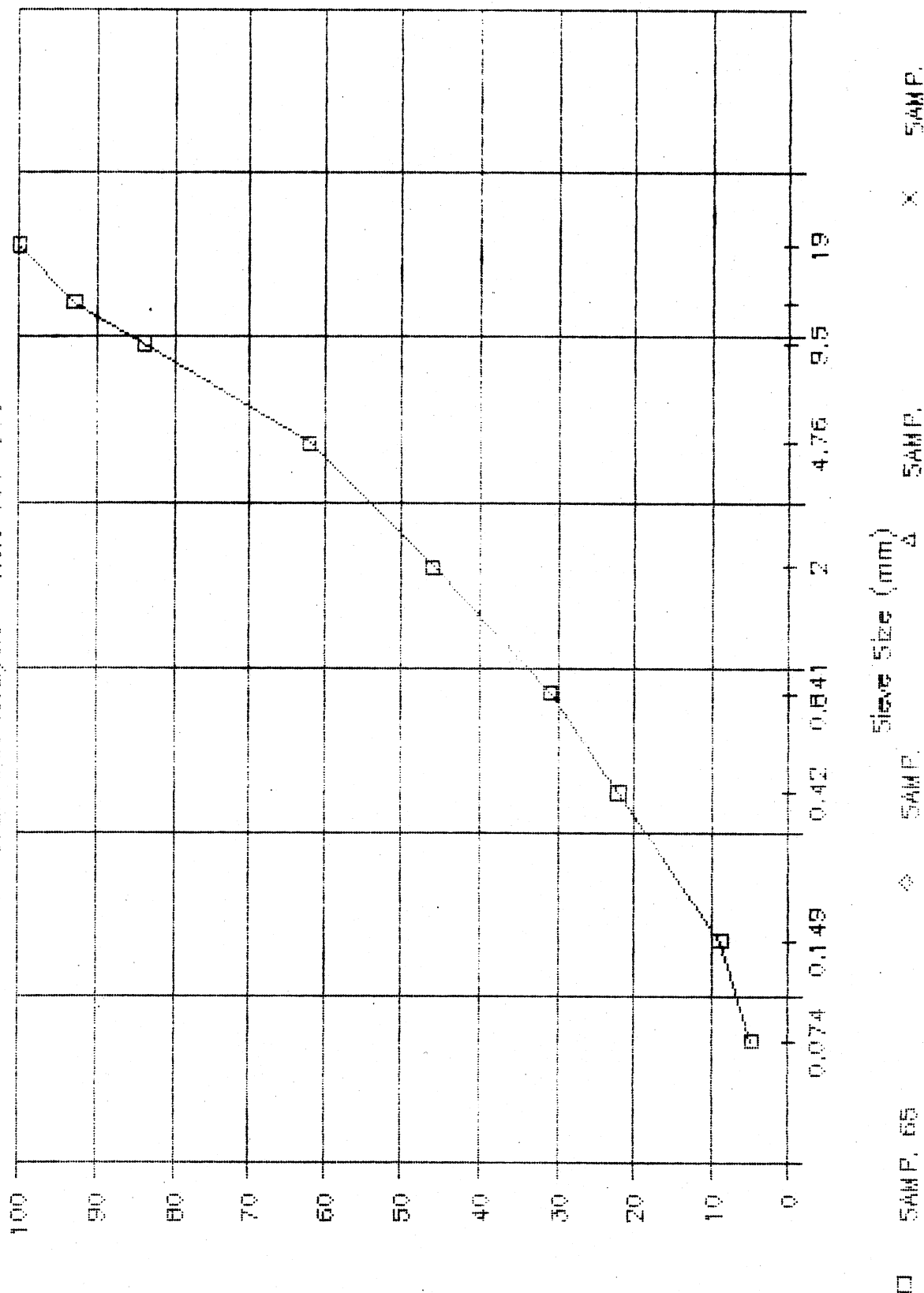
LIQUID: --
PLASTIC: --
P.I.: N.P.

% GRAVEL: 38
% SAND: 57
% FINES: 5

CLASSIFICATION:
POORLY GRADED
SAND WITH SILT &
GRAVEL (SP-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-300



Percent Passing

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-31C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.22

FIELD NO: 66	FIELD NO: 67
LAB NO: 2916	LAB NO: 2917
DEPTH: 1.2-1.6	DEPTH: 2.6-3.0
TYPE: BULK	TYPE: BULK
CC = 78%	CC = 78%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	100	19.0	100
12.7	98	12.7	92
9.5	85	9.5	82
4.76	53	4.76	57
2.38	--	2.38	--
2.00	33	2.00	41
1.19	--	1.19	--
0.841	19	0.841	30
0.595	--	0.595	--
0.42	12	0.42	21
0.297	--	0.297	--
0.177	--	0.177	--
0.149	5	0.149	9
0.074	3	0.074	5

M.C.(%): -- M.C.(%): --

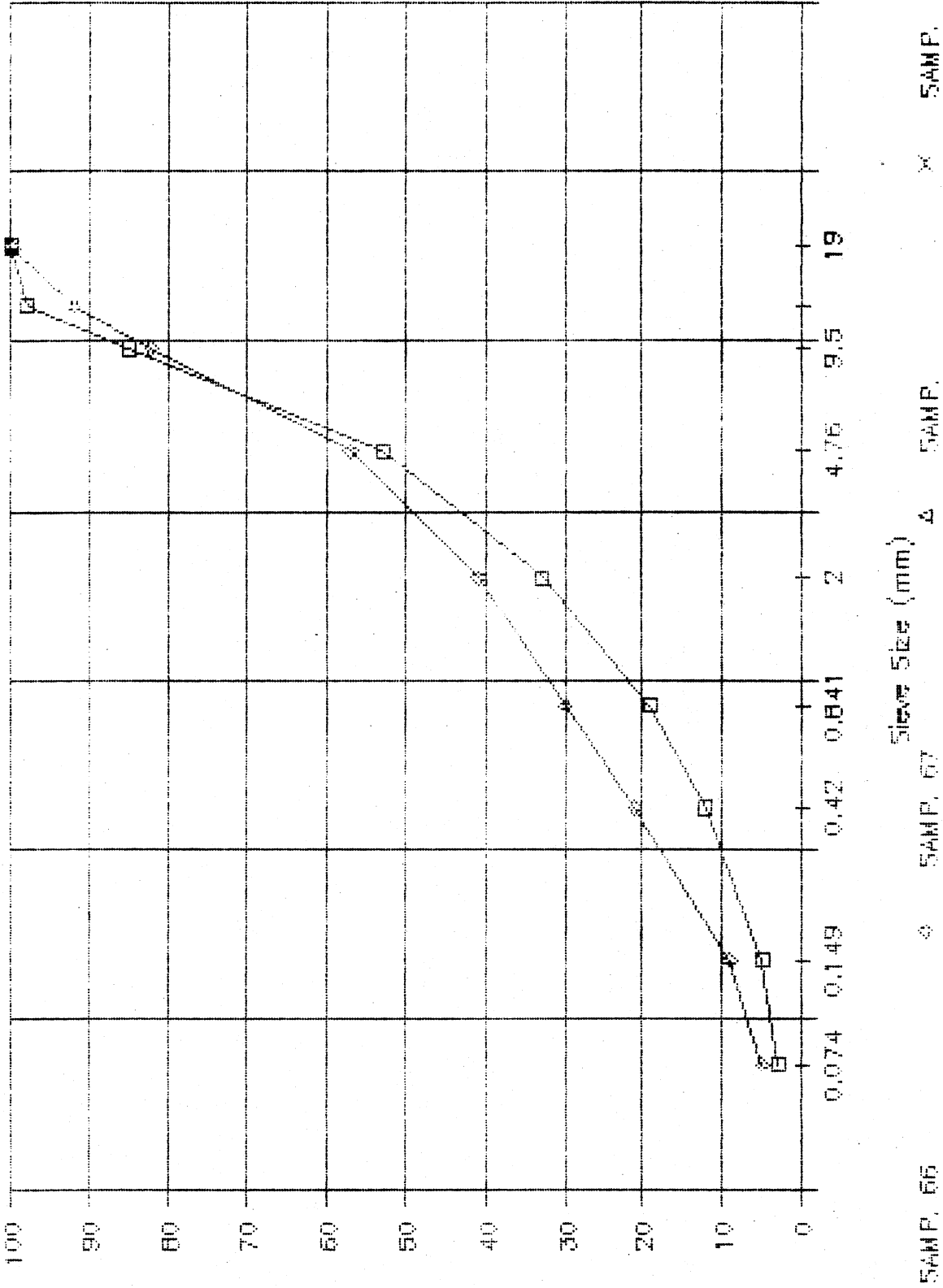
LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.

% GRAVEL: 47	% GRAVEL: 43
% SAND: 50	% SAND: 51
% FINES: 3	% FINES: 5

CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED SAND	POORLY GRADED
WITH GRAVEL (SW)	SAND WITH SILT & GRAVEL (SP-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-310



0.074 0.149 0.42 0.841 2 4.76 9.5 19

□ SAMP. 66 ○ SAMP. 67 Δ SAMP. 68 × SAMP. 69

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-32C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 68
 LAB NO: 2918
 DEPTH: 2.4-2.8
 TYPE: BULK
 CC = 75%

FIELD NO: 69
 LAB NO: 2919
 DEPTH: 3.8-4.2
 TYPE: BULK
 CC = 79%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	84
4.76	62
2.38	--
2.00	46
1.19	--
0.841	33
0.595	--
0.42	24
0.297	--
0.177	--
0.149	13
0.074	9

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	76
4.76	53
2.38	--
2.00	37
1.19	--
0.841	26
0.595	--
0.42	19
0.297	--
0.177	--
0.149	10
0.074	7

M.C. (%): --

M.C. (%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 38
 % SAND: 53
 % FINES: 9

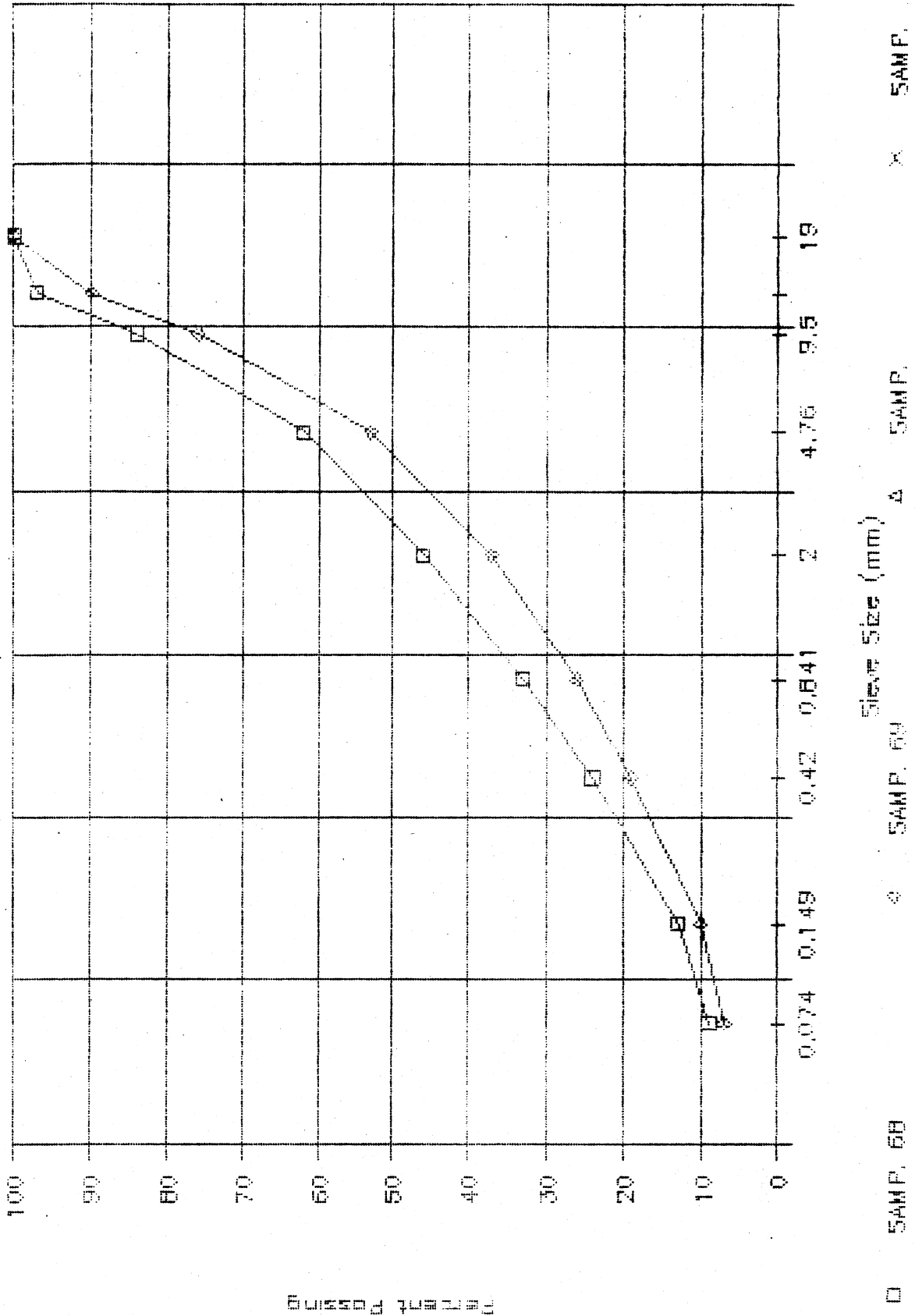
% GRAVEL: 47
 % SAND: 46
 % FINES: 7

CLASSIFICATION:
 WELL-GRADED SAND
 WITH SILT &
 GRAVEL (SW-SM)

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SILT
 & SAND (GW-GM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—320



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-33C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 70	FIELD NO: 71
LAB NO: 2920	LAB NO: 2921
DEPTH: 0.8-1.2	DEPTH: 2.2-2.6
TYPE: BULK	TYPE: BULK
CC = 72%	CC = 84%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	100	19.0	100
12.7	93	12.7	97
9.5	79	9.5	82
4.76	53	4.76	54
2.38	--	2.38	--
2.00	33	2.00	36
1.19	--	1.19	--
0.841	18	0.841	23
0.595	--	0.595	--
0.42	16	0.42	14
0.297	--	0.297	--
0.177	--	0.177	--
0.149	9	0.149	5
0.074	6	0.074	4

M.C.(%): -- M.C.(%): --

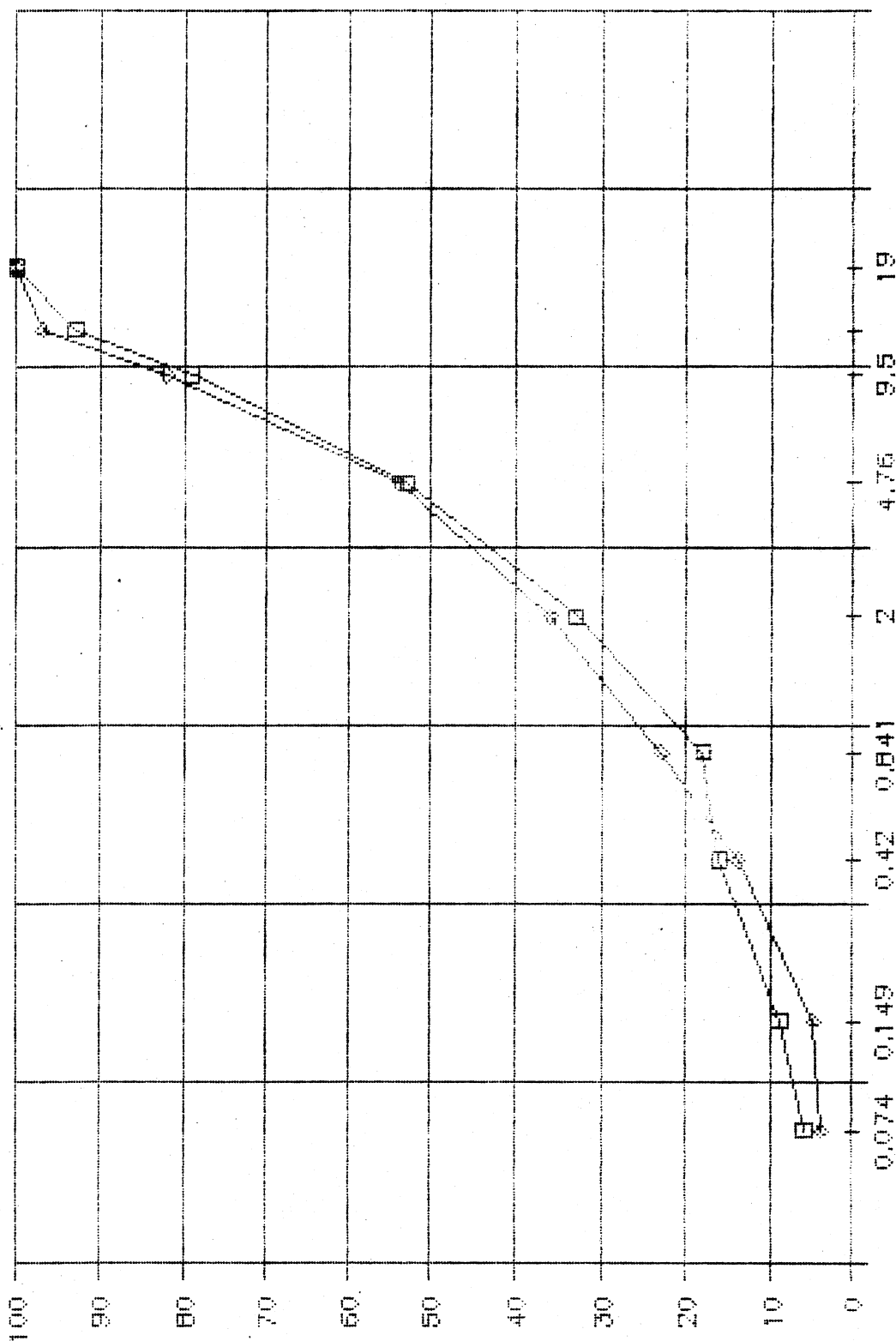
LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.

% GRAVEL: 47	% GRAVEL: 46
% SAND: 47	% SAND: 50
% FINES: 6	% FINES: 4

CLASSIFICATION:	CLASSIFICATION:
WELL-GRADED SAND	WELL-GRADED SAND
WITH SILT &	WITH GRAVEL (SW)
GRAVEL (SW-SM)	

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030--330



Sieve Size (mm)

5AMP

5AMP

5AMP, 71

5AMP, 70

0.074 0.149 0.42 0.841 2 4.76 9.5 19

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-34C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 72
 LAB NO: 2922
 DEPTH: 1.6-2.0
 TYPE: BULK
 CC = 72%

FIELD NO: 73
 LAB NO: 2923
 DEPTH: 3.2-3.6
 TYPE: BULK
 CC = 70%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	96
9.5	81
4.76	53
2.38	--
2.00	35
1.19	--
0.841	23
0.595	--
0.42	14
0.297	--
0.177	--
0.149	6
0.074	4

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	92
9.5	78
4.76	49
2.38	--
2.00	29
1.19	--
0.841	17
0.595	--
0.42	10
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 47
 % SAND: 48
 % FINES: 4

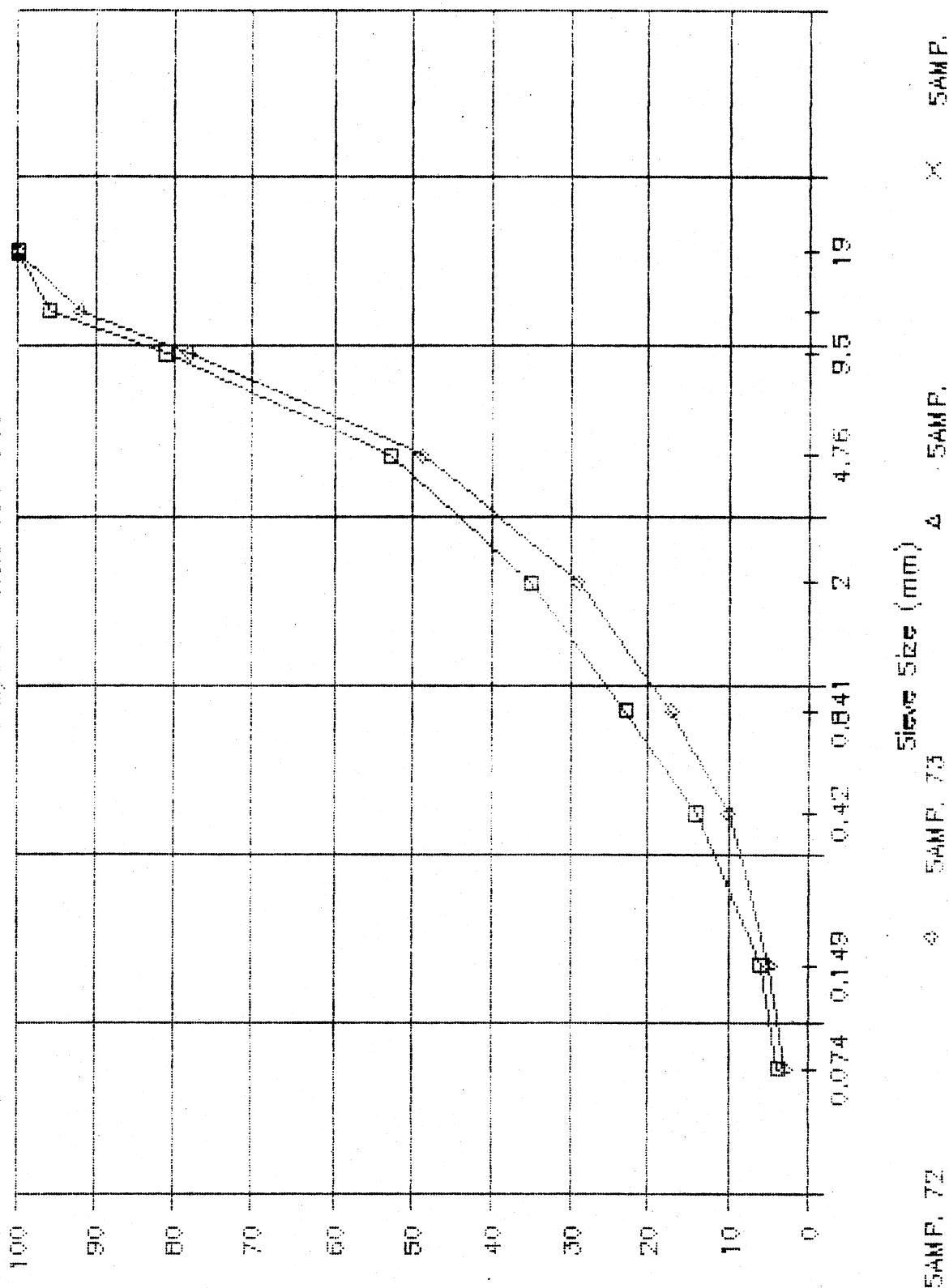
% GRAVEL: 51
 % SAND: 45
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED SAND
 WITH GRAVEL (SW)

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030--34C



0 10 20 30 40 50 60 70 80 90 100

□ 5AMP. 72

× 5AMP. 73

Sieve Size (mm)

△ 5AMP.

× 5AMP.

PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-35C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 74
 LAB NO: 2924
 DEPTH: 1.6-2.0
 TYPE: BULK
 CC = 74%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	79
4.76	55
2.38	--
2.00	36
1.19	--
0.841	21
0.595	--
0.42	13
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 45
 % SAND: 51
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED SAND
 WITH GRAVEL (SW)

FIELD NO: 75
 LAB NO: 2925
 DEPTH: 3.2-3.6
 TYPE: BULK
 CC = 79%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	95
9.5	80
4.76	48
2.38	--
2.00	29
1.19	--
0.841	18
0.595	--
0.42	12
0.297	--
0.177	--
0.149	6
0.074	5

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 52
 % SAND: 44
 % FINES: 5

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SILT
 & SAND (GW-GM)

FIELD NO: 76
 LAB NO: 2926
 DEPTH: 4.2-4.6
 TYPE: BULK
 CC = 90%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	74
4.76	44
2.38	--
2.00	29
1.19	--
0.841	19
0.595	--
0.42	13
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

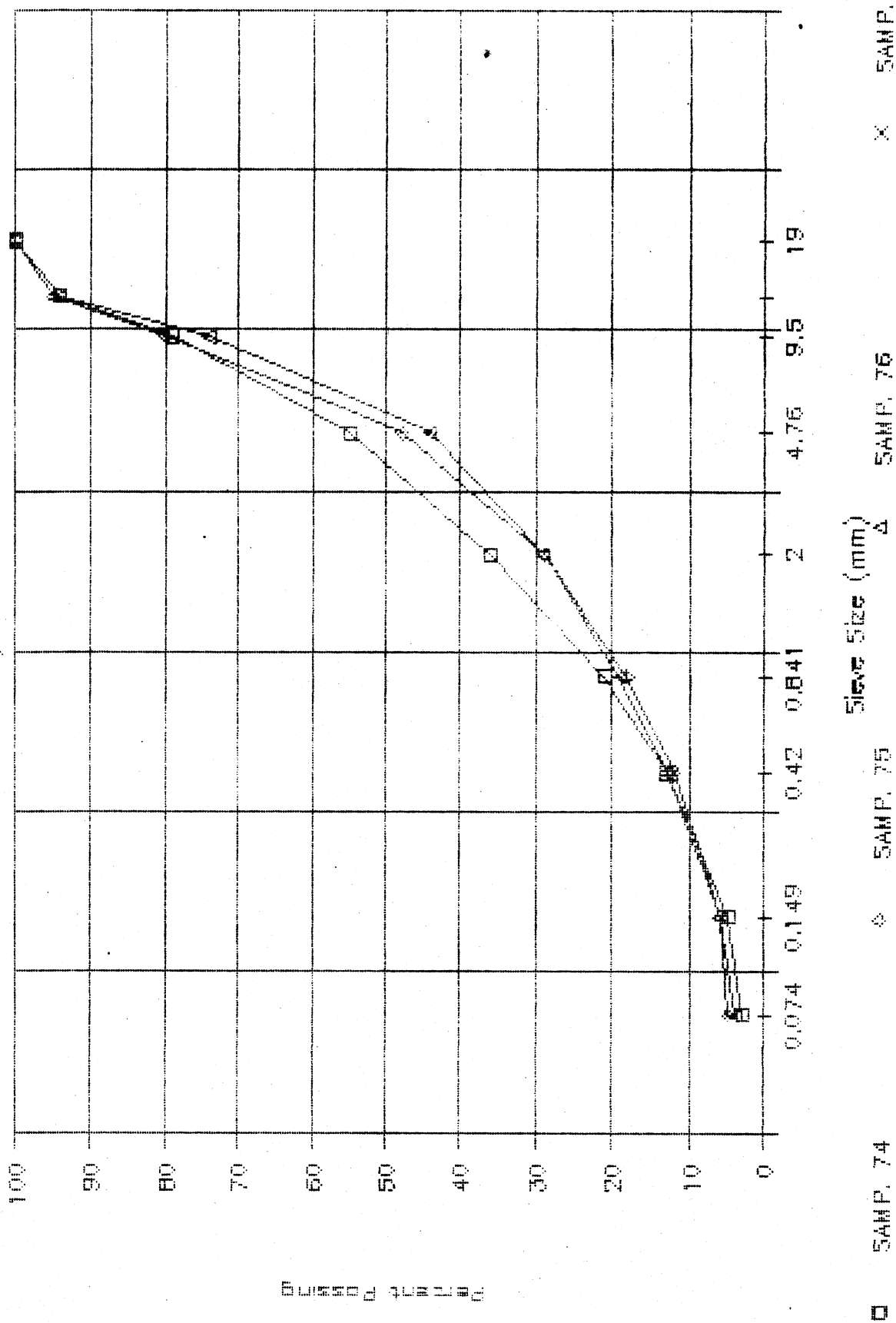
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 56
 % SAND: 41
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030—350



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-36C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 77	FIELD NO: 78
LAB NO: 2927	LAB NO: 2928
DEPTH: 2.6-3.0	DEPTH: 4.0-4.4
TYPE: BULK	TYPE: BULK
CC = 66%	CC = 71%

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
------------	-----------------	------------	-----------------

101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	100	19.0	100
12.7	94	12.7	93
9.5	86	9.5	81
4.76	62	4.76	57
2.38	--	2.38	--
2.00	43	2.00	40
1.19	--	1.19	--
0.841	29	0.841	27
0.595	--	0.595	--
0.42	19	0.42	19
0.297	--	0.297	--
0.177	--	0.177	--
0.149	7	0.149	8
0.074	4	0.074	5

M.C. (%):	--	M.C. (%):	--
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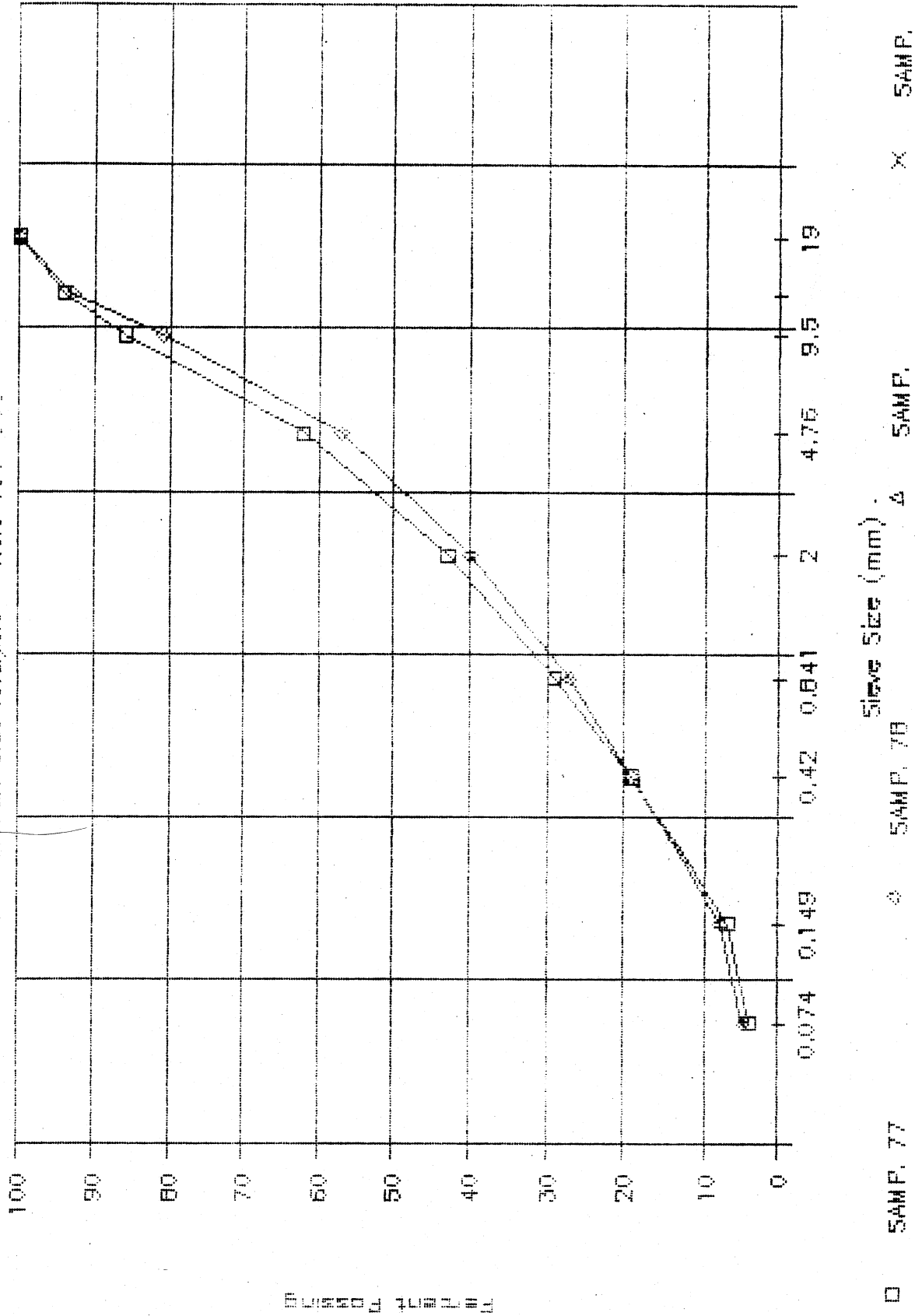
LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.

% GRAVEL:	38	% GRAVEL:	43
% SAND:	58	% SAND:	52
% FINES:	4	% FINES:	5

CLASSIFICATION:	CLASSIFICATION:
POORLY GRADED	WELL-GRADED SAND
SAND WITH GRAVEL	WITH SILT &
(SP)	GRAVEL (SW-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-360



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-37C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 79
 LAB NO: 2929
 DEPTH: 1.4-1.8
 TYPE: BULK
 CC = 78%

FIELD NO: 80
 LAB NO: 2930
 DEPTH: 3.0-3.4
 TYPE: BULK
 CC = 77%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	75
4.75	46
2.38	--
2.00	29
1.19	--
0.841	18
0.595	--
0.42	12
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 54
 % SAND: 42
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	91
9.5	77
4.75	49
2.38	--
2.00	33
1.19	--
0.841	19
0.595	--
0.42	12
0.297	--
0.177	--
0.149	6
0.074	4

M.C.(%): --

LIMITS

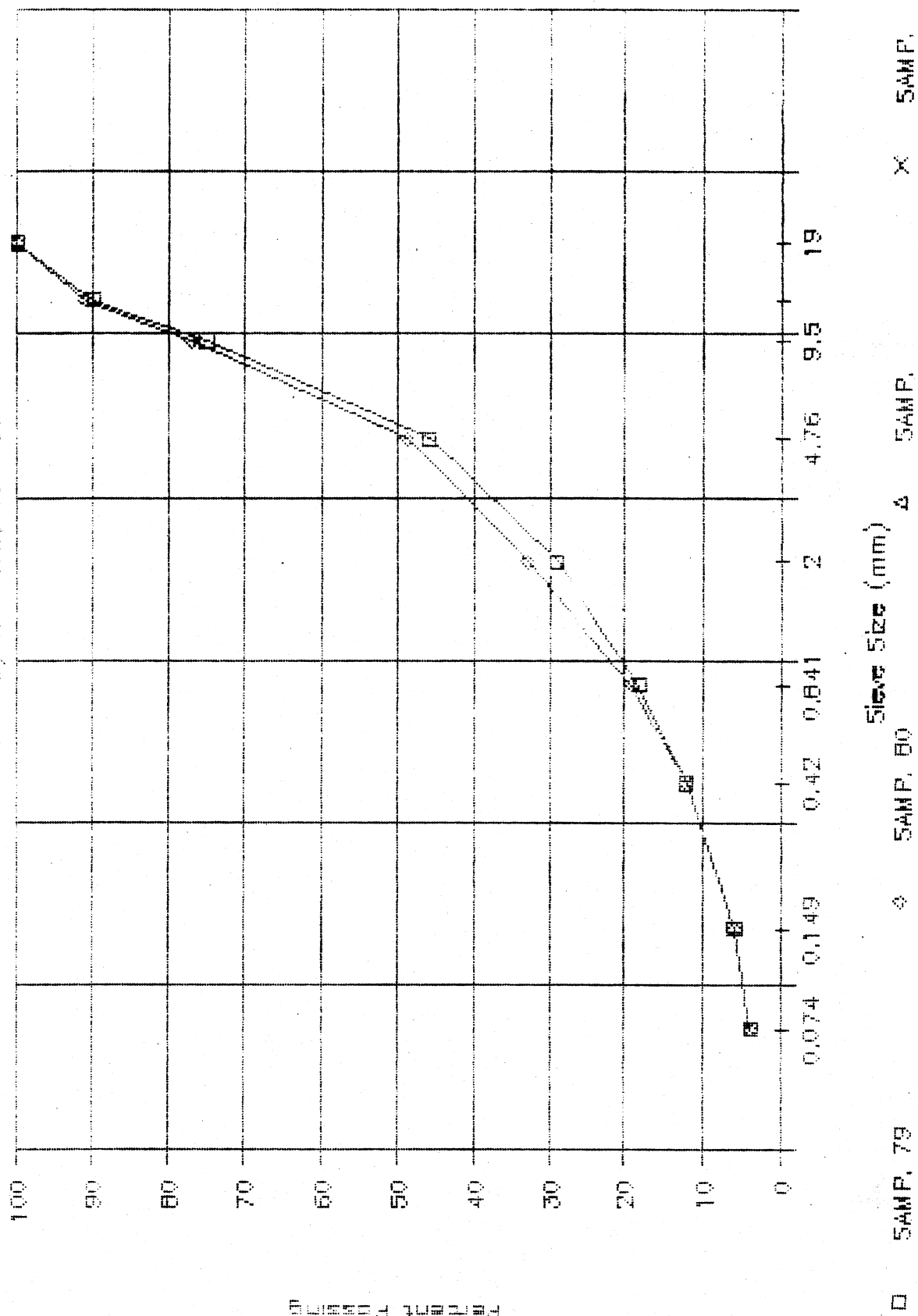
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 51
 % SAND: 45
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-370



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-380
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 81
 LAB NO: 2931
 DEPTH: 1.4-1.8
 TYPE: BULK
 CC = 83%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	68
4.76	39
2.38	--
2.00	24
1.19	--
0.841	15
0.595	--
0.42	9
0.297	--
0.177	--
0.149	5
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 61
 % SAND: 36
 % FINES: 3

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 82
 LAB NO: 2932
 DEPTH: 2.4-2.8
 TYPE: BULK
 CC = 85%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	91
9.5	76
4.76	51
2.38	--
2.00	37
1.19	--
0.841	27
0.595	--
0.42	19
0.297	--
0.177	--
0.149	7
0.074	4

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 49
 % SAND: 47
 % FINES: 4

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SAND
 (GW)

FIELD NO: 83
 LAB NO: 2933
 DEPTH: 4.4-4.8
 TYPE: BULK
 CC = 80%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	89
9.5	75
4.76	48
2.38	--
2.00	32
1.19	--
0.841	22
0.595	--
0.42	17
0.297	--
0.177	--
0.149	10
0.074	7

M.C.(%): --

LIMITS

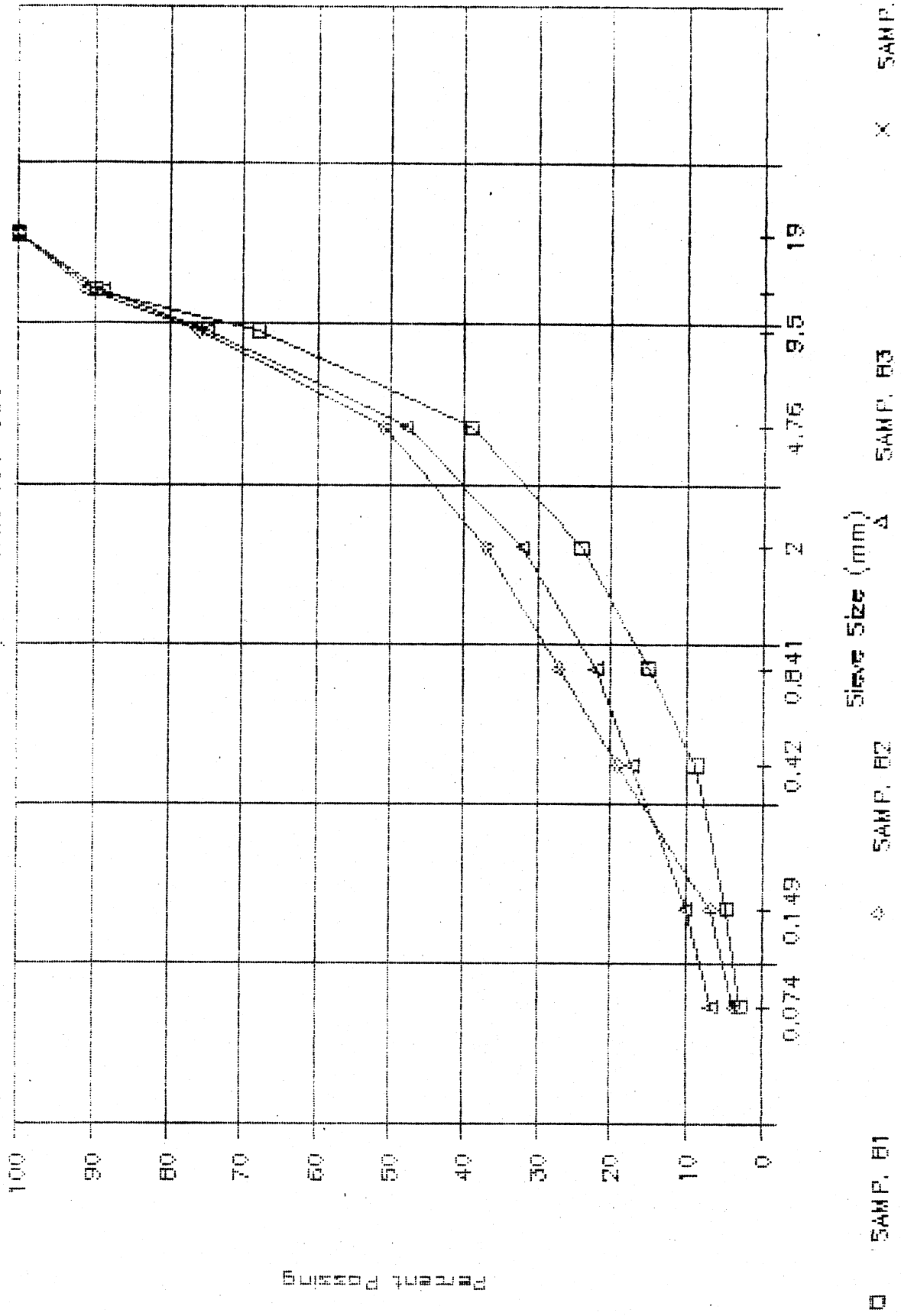
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 52
 % SAND: 41
 % FINES: 7

CLASSIFICATION:
 WELL-GRADED
 GRAVEL WITH SILT
 & SAND (GW-GM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-350



PROJECT NUMBER: 115-G-04 HOLE NUMBER: 030-39C
 CLIENT: PWC CAPITAL - Y.T.
 PROJECT NAME: ALASKA HIGHWAY PRE-ENGINEERING
 PROJECT LOCATION: A/H KM 1749.5 LHS
 DRILL UNIT: CAT 225 HOE
 HOLE LOCATION: SEE PLAN
 LOGGED BY: CB DATE COMPLETED: 88.10.23

FIELD NO: 84
 LAB NO: 2934
 DEPTH: 1.6-2.0
 TYPE: BULK
 CC = 79%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	90
9.5	77
4.76	50
2.38	--
2.00	35
1.19	--
0.841	21
0.595	--
0.42	11
0.297	--
0.177	--
0.149	4
0.074	3

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 50
 % SAND: 48
 % FINES: 3

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

FIELD NO: 85
 LAB NO: 2935
 DEPTH: 3.4-3.8
 TYPE: BULK
 CC = 70%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	93
9.5	81
4.76	57
2.38	--
2.00	41
1.19	--
0.841	29
0.595	--
0.42	20
0.297	--
0.177	--
0.149	10
0.074	7

M.C.(%): --

LIMITS

LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 43
 % SAND: 50
 % FINES: 7

CLASSIFICATION:
 WELL-GRADED SAND
 WITH SILT &
 GRAVEL (SW-SM)

FIELD NO: 86
 LAB NO: 2936
 DEPTH: 4.8-5.2
 TYPE: BULK
 CC = 60%

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	87
4.76	61
2.38	--
2.00	44
1.19	--
0.841	31
0.595	--
0.42	22
0.297	--
0.177	--
0.149	11
0.074	8

M.C.(%): --

LIMITS

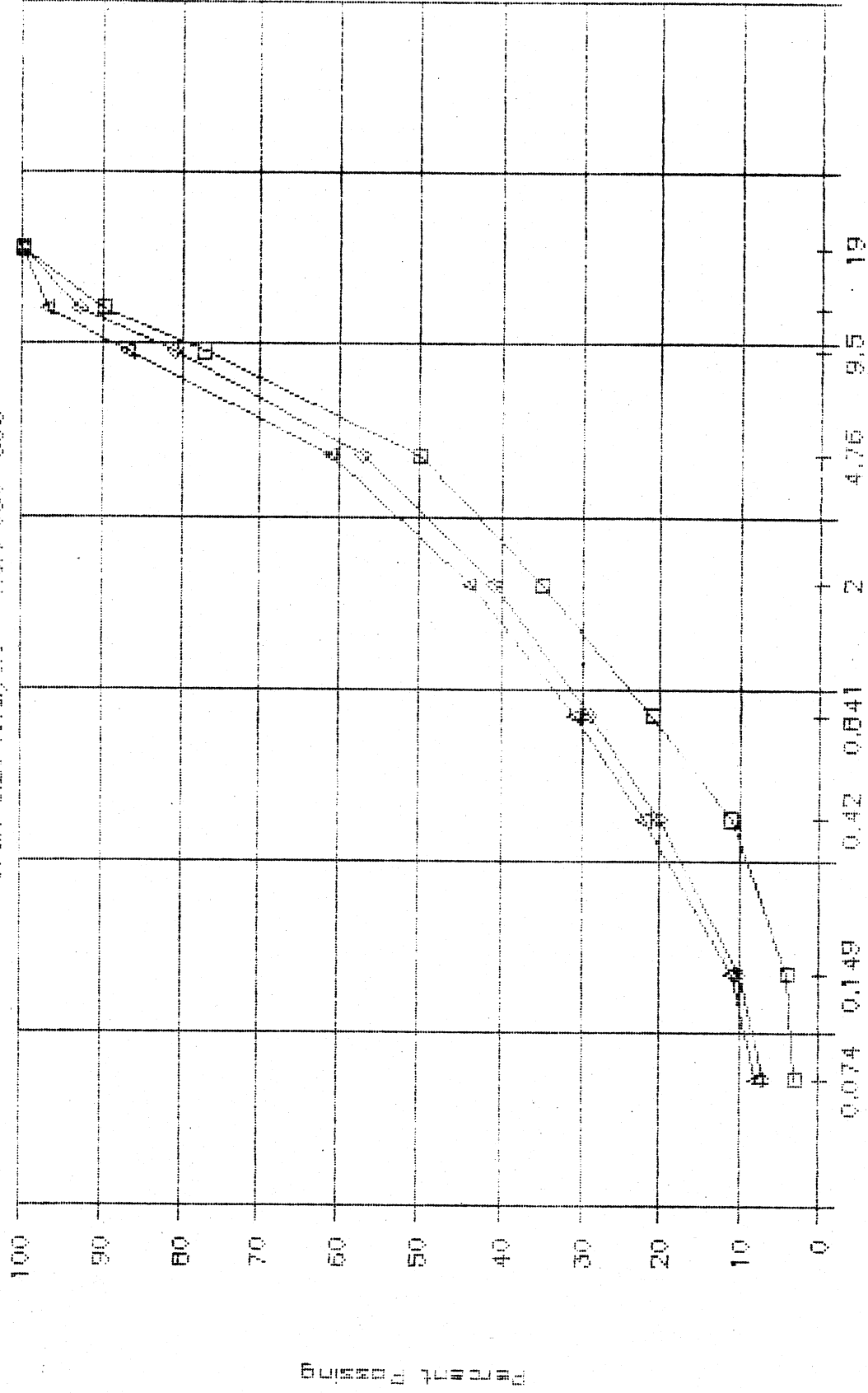
LIQUID: --
 PLASTIC: --
 P.I.: N.P.

% GRAVEL: 39
 % SAND: 54
 % FINES: 8

CLASSIFICATION:
 WELL-GRADED SAND
 WITH SILT &
 GRAVEL (SW-SM)

PUBLIC WORKS CANADA — WHITEHORSE, Y.T.

Grain Size Analysis — Hole 030-390



SAMP. B4
 SAMP. B5
 SAMP. B6

Pit 115 G-04
Km 1750 LHS Alaska Highway

2001
Test Pit Logs

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-01	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	SILTY SAND / SANDY SILT										0.0		
	POORLY GRADED GRAVEL WITH SAND (GP) -grey/brown -dry -medium dense -cobbles to 200mm (50-75% gravels)		1				GP						
2.0	SILTY SAND (SM) -dark brown -damp -firm -excessive organics (+200mm wood, roots etc,) see photo		2				SM						
3.0	POORLY GRADED GRAVEL WITH SAND (GP) -dark brown -damp -loose -cobbles to 200mm (40-60% gravels)		3				GP						
4.0			4				GP						
4.5	END HOLE @ 4.5m												

Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/02/11
	Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-02	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	SILTY SAND / SANDY SILT											0.0
	WELL-GRADED SAND WITH GRAVEL (SW) -grey/brown -dry -medium dense -cobbles to 200mm (50-75% gravels)		5					SW				
1.0												
2.0	SANDY SILT (ML) -dark brown -damp -firm -excessive organics		6					ML				
3.0												
4.0	SILTY SAND WITH GRAVEL (SM) -dark brown -damp -loose		7					SM				
4.0	END HOLE @ 4.0M											
5.0												
6.0												

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
		REVIEWED BY:	COMPLETE: 02/02/11
		Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-03	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	SILTY SAND/SANDY SILT												0.0
0.0 - 1.0	POORLY GRADED GRAVEL WITH SAND (GP) -grey/brown -dry -medium dense -cobbles to 150mm (50-75% gravels)		8					GP					0.0 - 1.0
1.0 - 2.0	SILTY SAND WITH GRAVEL (SM) -dark brown -damp -firm -highly organic		9					SM					1.0 - 2.0
2.0 - 3.0	SILT WITH SAND TO SILTY SAND WITH GRAVEL (ML)-(SM) -dark brown -damp -loose -40mm max size gravel (5-20% gravels)		10					ML					2.0 - 3.0
3.0 - 4.0			11					SM					3.0 - 4.0
4.0 - 4.3	END HOLE @ 4.3m												4.0 - 4.3

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.0 m
		REVIEWED BY:	COMPLETE: 02/02/11
		Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-04	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■		
										20	
0.0	SILTY SAND/SANDY SILT										0.0
	POORLY TO WELL-GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GW)-(GP-GM) -grey/brown -dry -medium dense -cobbles to 150mm (50-75% gravels)										
1.0											1.0
	-damp to moist below 2.1m										
2.0											2.0
3.0											3.0
4.0											4.0
	END HOLE @ 4.2m										
5.0											5.0
6.0											6.0

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.2 m
		REVIEWED BY:	COMPLETE: 02/02/11
		Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-05	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)			
				PLASTIC	M.C.	LIQUID							PERCENT GRAVEL ■		
				20	40	60	80								
0.0	SILTY SAND /SANDY SILT											0.0			
	POORLY GRADED GRAVEL WITH SAND (GP)														
	-grey/brown														
	-dry														
	-medium dense														
	-cobbles to 150mm (50-75% gravels)														
1.0												1.0			
2.0			16					GP							
	SILTY SAND WITH GRAVEL (SM)														
	-with organic														
	-dark brown														
	-damp														
	-firm														
3.0			17					SM							
	POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (GP)-(SW-SM)														
	-dark brown														
	-damp														
	-loose														
	-cobbles to 150mm (40-60% gravels)														
4.0			18					GP							
5.0			19					SW-SM							
	END HOLE @ 4.4m														
6.0												6.0			

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.4 m
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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-06	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	SILTY SAND / SANDY SILT											0.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-grey/brown											
	-dry											
	-medium dense											
	-cobbles to 150mm (50-75% gravels)											
1.0												1.0
2.0												2.0
	ORGANIC & SILT (ML)											
	-dark brown											
	-damp											
	-firm											
3.0												3.0
	SILTY SAND (SM)											
	-dark brown											
	-damp											
	-loose											
	-trace organics											
4.0												4.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-dark brown											
	-damp to moist											
	-gravel to 50mm (40-70% gravels)											
5.0												5.0
6.0												6.0
	END HOLE @ 4.4m											

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-07	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	SILTY SAND/SANDY SILT										0.0
	POORLY GRADED GRAVEL WITH SAND (GP)										
	- grey/brown - dry - medium dense - cobbles to 200mm (50-75% gravels) - wood encountered throughout		24					GP			
1.0											1.0
2.0	ORGANIC SANDY SILT TO SILTY SAND (ML)-(SM)										2.0
	- dark brown - damp - loose - variable organic silt seams throughout - slight decrease silt with depth		25					ML			
3.0											3.0
4.0	-lost sample #26		26								4.0
4.6	END HOLE @ 4.6m		27					SM			4.6
5.0											5.0
6.0											6.0

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.6 m
		REVIEWED BY:	COMPLETE: 02/02/12
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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-08	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	SILTY SAND/SANDY SILT											0.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-grey/brown											
	-dry											
	-medium dense											
	-cobbles to 200mm (50-75% gravels)											
1.0			28					GP				1.0
2.0			29					GP				2.0
3.0			30					GP				3.0
4.0			31					GP				4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-09	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	SILTY SAND/SANDY SILT												0.0
0.0 - 1.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP-(GP-GM)) -grey/brown -dry -medium dense -cobbles to 200mm (50-75% gravels)		32				GP						1.0
1.0 - 2.0	-dark brown below 1.6m -damp to moist -loose -cobbles to 150mm (50-75% gravels) -wood noted between 1.6-2.5m -some silt seams to 150mm thick between 1.6-2.5m		33				GP						2.0
2.0 - 3.0			34				GP-GM						3.0
3.0 - 4.0	SILTY GRAVEL WITH SAND (GM) -dark brown -damp -loose -gravels to 40mm (10-25% gravels)		35				GM						4.0
4.0 - 4.5	END HOLE @ 4.5m												4.5

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-10	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	SILTY SAND/SANDY SILT WELL TO POORLY GRADED GRAVEL WITH SAND (GW)-(GP) - grey/brown - dry - medium dense - cobbles to 200mm (50-75% gravels)										0.0	
1.0											1.0	
2.0											2.0	
3.0	- dark brown below 2.8m - damp to moist - loose - cobbles to 150mm (40-70% gravels)										3.0	
4.0	ORGANIC & SILT WITH SAND (ML) - dark brown, damp, firm - roots & wood encountered SANDY GRAVEL - dark brown, damp, loose END HOLE @ 4.5m										4.0	
5.0											5.0	
6.0											6.0	

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-11			
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361			
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)			
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE							
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	DEPTH (m)
				◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80			
0.0	SILTY SAND/SANDY SILT						0.0
	POORLY GRADED GRAVEL WITH SAND (GP)						
	-grey/brown						
	-dry						
	-medium dense						
1.0	-cobbles to 150mm (50-75% gravels)						1.0
	-wood encountered @ 1.0m						
2.0							2.0
	-dark brown below 2.2m						
	-damp to moist below 2.2m						
	-gravel to 60mm below 2.2m (40-75% gravel)						
3.0	ORGANIC & SILT WITH SAND (ML)						3.0
	-dark brown, damp, firm						
	SILTY SAND (SM)						
	-dark brown						
	-damp						
	-loose						
4.0							4.0
	END HOLE @ 4.4m						
5.0							5.0
6.0							6.0

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COMPLETION DEPTH: 4.4 m

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-12	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL		DEPTH (m)
			PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	SILTY SAND/SANDY SILT									0.0
	POORLY GRADED GRAVEL WITH SAND (GP)									
	-grey/brown									
	-dry									
	-medium dense									
	-cobbles to 150mm (50-75% gravels)									
1.0		44				GP				1.0
2.0	-damp below 1.8m									
	-medium dense to loose below 1.8m									
	-gravels to 40mm (50 to 70% gravels)									
	ORGANIC & SILT WITH SAND (ML)									
	-dark brown									
	-damp									
	-firm									
3.0		46				ML				3.0
4.0	SILTY GRAVEL WITH SAND (GM)									
	-dark brown									
	-damp									
	-loose									
	-gravel to 40mm (40-60% gravels)									
	END HOLE @ 4.4m									
		47				GM				

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-13			
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361			
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)			
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE							
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	DEPTH (m)
				◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80			
0.0	SILTY SAND /SANDY SILT						0.0
	POORLY GRADED GRAVEL WITH SAND (GP)						
	-grey/brown						
	-cobbles to 150mm (50-75% gravels)						
	-dry						
	-medium dense						
1.0	-sandy silt/silty sand layer 0.9m-1.0m (100mm thick)						1.0
			48			GP	
2.0							2.0
	-dark brown below 2.1m						
	-damp to moist below 2.1m						
	-loose below 2.1m						
	-some wood encountered 2.1-3.0m						
			49			GP	
3.0	ORGANIC @ SANDY SILT (ML)		50			ML	3.0
	-dark brown,damp,loose						
4.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM)						4.0
	-dark brown						
	-damp						
	-loose						
	-40mm maximum (30-60% gravels)						
			51			GP-GM	
5.0	END HOLE @ 4.6m						5.0
6.0							6.0
Government of Yukon Transportation Engineering				LOGGED BY: JRP		COMPLETION DEPTH: 4.6 m	
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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-14	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	SILTY SAND/SANDY SILT POORLY GRADED GRAVEL WITH SAND (GP) -grey/brown -dry -medium dense -cobbles to 150mm (50-70% gravels)											0.0
1.0			52					GP				1.0
2.0	-dark brown below 2.1m -damp to moist -loose -(40-70% gravels)		53					GP				2.0
3.0			54					GP				3.0
4.0			55					GP				4.0
4.2	END HOLE @ 4.2m											
5.0												5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-15	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
0.0	SILTY SAND/SANDY SILT			20	40	60			20	40	60	80	0.0
	POORLY GRADED GRAVEL WITH SAND (GP)												
	-grey brown												
	-dry												
	-medium dense												
1.0	-cobbles to 150mm (50-70 gravels)												1.0
	-wood encountered @ 1.0m												
	-lost sample # 56		56										
2.0	-dark brown below 1.9m												2.0
	-moist												
	-loose												
	-cobbles to 150mm (40-70% gravels)		57				GP						
3.0													3.0
			58				GP						
4.0													4.0
			59				GP						
	END HOLE @ 4.4m												
5.0													5.0
6.0													6.0

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-16	
ENGINEERING CAPITAL		PTT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	SILTY SAND/SANDY SILT											0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -grey/brown -dry -medium dense -cobbles to 150mm (50-75% gravels) -wood encountered to 1.0m											
1.0			60					GP				1.0
2.0	ORGANIC SILT & SAND (ML) -dark brown, damp, firm		61					ML				2.0
	POORLY GRADED GRAVEL WITH SAND (GP) -dark brown -damp -loose -60mm max size (40-60% gravels)		62					GP				
3.0	SILT (ML) -dark brown -damp -firm		63					ML				3.0
4.0	WELL-GRADED SAND WITH GRAVEL (SW) -dark brown -damp -loose -60mm max size (40-60% gravels)		64					SW				4.0
5.0	END HOLE @ 4.6m											5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-17	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)			
									PERCENT SAND	PERCENT GRAVEL				
				PLASTIC	M.C.	LIQUID								
0.0	SILTY SAND/SANDY SILT			20	40	60	80			20	40	60	80	0.0
	POORLY GRADED GRAVEL WITH SAND (GP)													
	-grey/brown													
	-dry													
	-medium dense													
	-cobbles to 150mm (50-75% gravels)													
1.0			65											1.0
	ORGANIC SILTS & SAND													
	POORLY GRADED GRAVEL WITH SAND (GP)													
	-dark brown													
	-damp													
	-loose													
	-cobbles to 100mm (40-60% gravels)													
2.0			66											2.0
	ORGANIC SANDY SILT (ML)													
	-dark brown													
	-damp													
	-firm													
3.0			67											3.0
	POORLY GRADED GRAVEL WITH SAND (GP)													
	-dark brown													
	-damp													
	-loose													
	-gravels to 60mm (40-60% gravels)													
4.0			68											4.0
	END HOLE @ 4.4m													
5.0														5.0
6.0														6.0

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Transportation Engineering		REVIEWED BY:	COMPLETE: 02/02/13
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SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-18	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	SILTY SAND/SANDY SILT										0.0
	POORLY GRADED GRAVEL WITH SAND (GP)										
	-grey/brown										
	-dry										
	-medium brown										
	-cobbles to 150mm (50-75% gravels)										
1.0											1.0
			69					GP			
2.0											2.0
	-dark brown below 2.1m										
	-damp to moist below 2.1m										
3.0											3.0
			70					GP			
4.0											4.0
	ORGANIC SANDY SILT (ML)										
	-dark brown, damp, firm							ML			
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)										
	-dark brown										
	-damp										
	-loose										
	-gravels to 60mm (40-60% gravel)							SW-SM			
5.0											5.0
	END HOLE @ 4.5m										
6.0											6.0
			71								
			72								

Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/02/13
	Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-19	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	SILTY SAND/SANDY SILT											0.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-grey/brown											
	-dry											
	-medium dense											
	-cobbles to 150mm (50-75% gravels)											
1.0			73				GP					1.0
2.0			74				GP					2.0
3.0	-dark brown below 2.8m -damp below 2.8m		75				GP					3.0
4.0	ORGANIC SILT (ML)		76				ML					4.0
	-dark brown											
	-damp											
	-firm											
	END HOLE @ 4.4m											
5.0												5.0
6.0												6.0

Government of Yukon		LOGGED BY: JRP	COMPLETION DEPTH: 4.4 m
Transportation Engineering		REVIEWED BY:	COMPLETE: 02/02/13
		Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-20	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC M.C. LIQUID					PERCENT SAND			
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	SILTY SAND/SANDY SILT											0.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-trace of silt in seams 150mm thick											
	-grey/brown											
	-dry											
	-medium dense											
1.0	-cobbles to 150mm (50-75% gravels)											1.0
	-some wood in top 1.0m											
			77				GP					
2.0							GP					2.0
			78									
3.0	ORGANIC SILTS & SAND											3.0
	-dark brown											
	-damp											
	-firm											
4.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)						GP-GM					4.0
	-dark brown											
	-damp to moist											
	-cobbles to 100mm (30-70% gravels)											
			79									
5.0	END HOLE @ 4.6m						GP-GM					5.0
			80									
6.0												6.0

Government of Yukon		LOGGED BY: JRP	COMPLETION DEPTH: 4.6 m
Transportation Engineering		REVIEWED BY:	COMPLETE: 02/02/13
		Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-21	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC M.C. LIQUID					PERCENT SAND PERCENT GRAVEL			
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	SILTY SAND/SANDY SILT											0.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-grey/brown											
	-dry											
	-medium dense											
	-cobbles to 200mm (50-75% gravel)											
1.0			81				GP					1.0
2.0			82				GP					2.0
3.0	ORGANIC SILTS & SAND											3.0
	-dark brown, damp, firm											
	-wood encountered											
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-dark brown											
	-damp											
	-loose											
	-cobbles to 200mm (50-75% gravels)											
4.0			83				GP					4.0
			84				GP					4.0
	END HOLE @ 4.2m											

Government of Yukon		LOGGED BY: JRP		COMPLETION DEPTH: 4.2 m	
Transportation Engineering		REVIEWED BY:		COMPLETE: 02/02/13	
		Fig. No: 115-G-04A		Page 1 of 1	

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-22	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 H0E		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				▲ PERCENT FINES ▲ 20 40 60 80					◆ PERCENT SAND ◆ 20 40 60 80		■ PERCENT GRAVEL ■ 20 40 60 80		
				PLASTIC 20 40 60 80	M.C. 20 40 60 80	LIQUID 20 40 60 80							
0.0	SILTY SAND/SANDY SILT											0.0	
	POORLY GRADED GRAVEL WITH SAND (G)												
	- grey/brown - dry - medium dense - cobbles to 200mm (50-75% gravels) - wood encountered throughout												
1.0												1.0	
			85				GP						
2.0												2.0	
			86				GP						
3.0	ORGANIC SILTS & SANDS											3.0	
	- dark brown, damp, firm - wood encountered												
4.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)											4.0	
	- dark brown - damp to moist - loose - cobbles to 200mm (40-75% gravels)		87				GP-GM						
			88				GP-GM						
5.0	END HOLE @ 4.5m											5.0	
6.0												6.0	

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
		REVIEWED BY:	COMPLETE: 02/02/13
		Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-23	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	SILTY SAND/SANDY SILT											0.0
	POORLY GRADED GRAVEL WITH SAND (GP)											
	-grey/brown											
	-dry											
	-medium dense											
	-cobbles to 150mm (50-75% gravels)											
1.0												1.0
			89					GP				
2.0												2.0
	-dark brown below 2.1m											
	-damp											
	-loose											
	-cobbles to 150mm 50-75% gravels)											
3.0												3.0
	ORGANIC SILTS & SANDS											
	-dark brown, damp, firm											
	-wood encountered											
4.0												4.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP)		91					GP-GM				
	-dark brown											
	-damp											
	-loose											
	-cobbles to 100mm (40-65% gravels)											
5.0												5.0
	END HOLE @ 4.4m											
6.0												6.0
			92					GP				

Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.4 m
		REVIEWED BY:	COMPLETE: 02/02/13
		Fig. No: 115-G-04A	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-24				
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361				
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	SILTY SAND/SANDY SILT							0.0
1.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -grey/brown -dry -medium dense -cobbles to 200mm (50-75% gravels) -silt seams between 1.2m-1.5m							1.0
2.0			93		GP			2.0
3.0	ORGANIC SILTS & SAND -dark brown -damp -firm							3.0
4.0	WELL TO POORLY GRADED GRAVEL WITH SAND (GW)-(GP) -dark brown -damp -loose -cobbles to 250mm (50-75% gravels)							4.0
5.0			95		GW			5.0
6.0			96		GP			6.0
	END HOLE @ 4.5m							
Government of Yukon Transportation Engineering				LOGGED BY: JRP		COMPLETION DEPTH: 4.5 m		
				REVIEWED BY:		COMPLETE: 02/02/13		
				Fig. No: 115-G-04A		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT		LEWIS CREEK GRANULAR INVESTIGATION		TEST PIT NO: 631-25	
ENGINEERING CAPITAL		PIT 115-G-04A		Project No: 092-202101-361	
KOEHRING 6625 HOE		LOCATION: KM 1749.5 A/H LHS SEE PLAN		ELEVATION: 0.00 (m)	
SAMPLE TYPE		RETURN		S.P.T.	
AUGER		BULK		TUBE	
CORE					
DEPTH (m)		SOIL DESCRIPTION		SAMPLE NO	
				PERCENT FINES	
				PLASTIC M.C. LIQUID	
				PERCENT SAND PERCENT GRAVEL	
0.0	SILTY SAND/SANDY SILT				
	POORLY GRADED GRAVEL WITH SAND (GP)				
	-grey/brown				
	-dry				
	-medium dense				
	-cobbles to 200mm (50-75% gravels)				
1.0					
2.0					
	-cobbles to 300mm below 2.8m				
3.0					
4.0	POORLY GRADED GRAVEL WITH SILT (GP-GM)				
	-grey/brown				
	-dry				
	-medium dense				
	END HOLE @ 4.5m				
5.0					
6.0					

Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No: 115-G-04A

COMPLETION DEPTH: 4.5 m
COMPLETE: 02/02/13
Page 1 of 1

**Pit 115 G-04
Km 1750 LHS Alaska Highway**

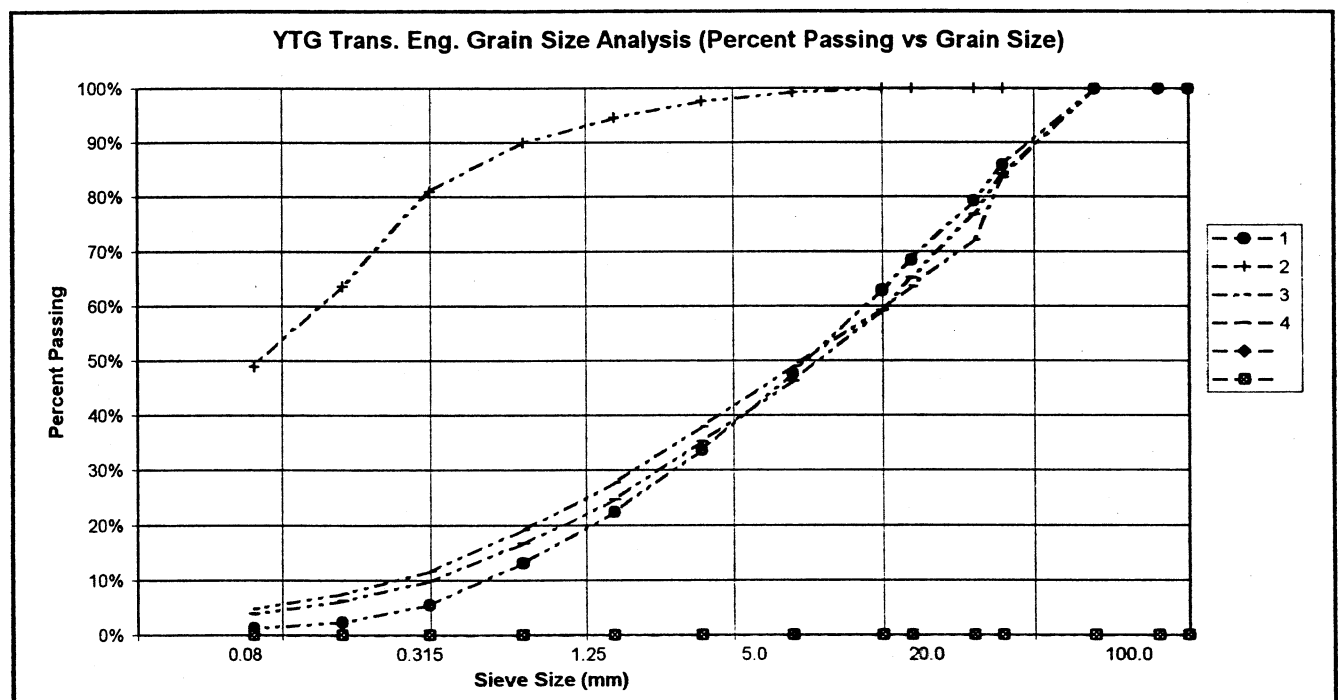
**2001
Pit Run Sample Results**

PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-01

DATE COMP: 2002/02/02

FIELD NO:	1	2	3	4		
LAB NO:	1	2	3	4		
DEPTH:	0.3-1.0	2.0-2.5	3.0-3.8	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	86%	100%	84%	84%		
20.0	79%	100%	72%	77%		
12.5	68%	100%	63%	65%		
10.0	63%	100%	59%	59%		
5.0	48%	99%	49%	46%		
2.5	34%	98%	38%	35%		
1.25	22%	95%	28%	25%		
0.630	13%	90%	19%	17%		
0.315	5%	81%	12%	10%		
0.160	2%	64%	7%	6%		
0.080	1%	49%	5%	4%		
M.C.(%)	2%	50%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	52	1	51	54		
% SAND:	46	50	44	42		
% FINES:	1	49	5	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

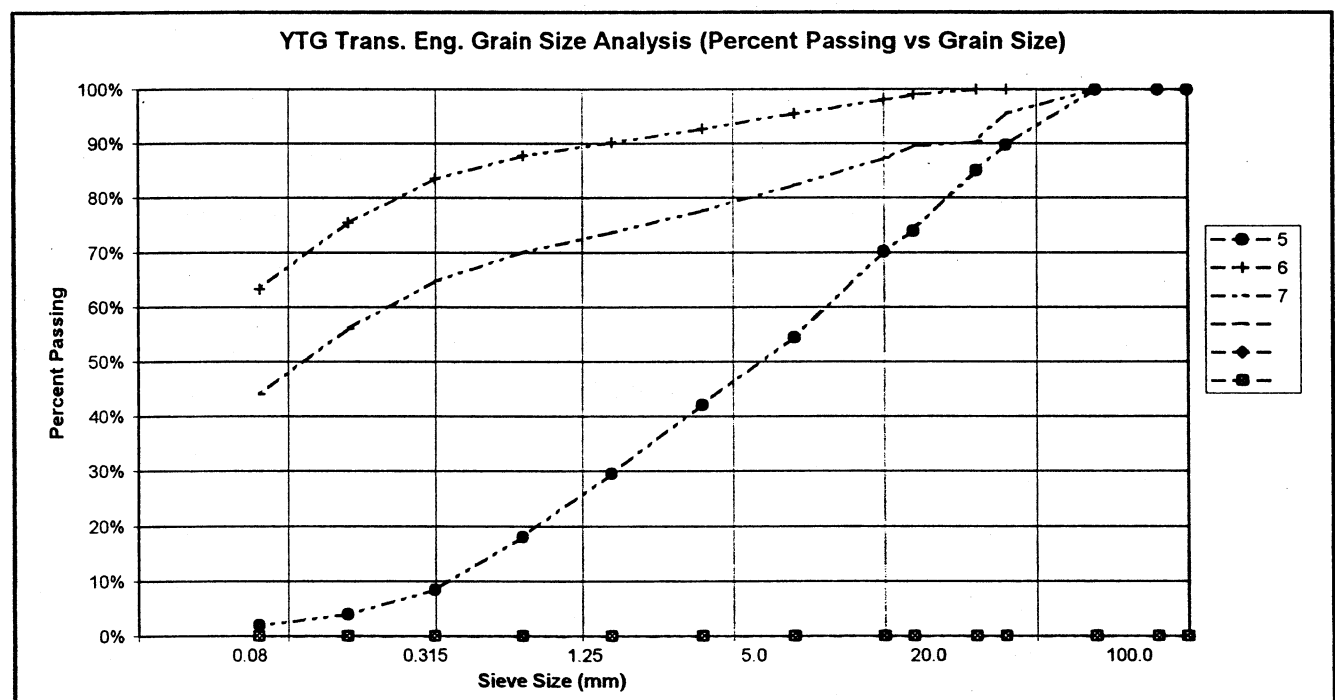


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-02

DATE COMP: 2002/02/02

FIELD NO:	5	6	7			
LAB NO:	5	6	7			
DEPTH:	0.4-1.0	2.5-2.8	3.5-4.0			
TYPE:	BULK	BULK	BULK			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	90%	100%	96%			
20.0	85%	100%	90%			
12.5	74%	99%	90%			
10.0	70%	98%	87%			
5.0	54%	96%	82%			
2.5	42%	93%	78%			
1.25	30%	90%	74%			
0.630	18%	88%	70%			
0.315	8%	84%	65%			
0.160	4%	75%	56%			
0.080	2%	63%	44%			
M.C.(%)	2%	23%	19%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX:	0.0	0.0	0.0			
% GRAVEL:	46	4	18			
% SAND:	52	32	38			
% FINES:	2	63	44			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)			

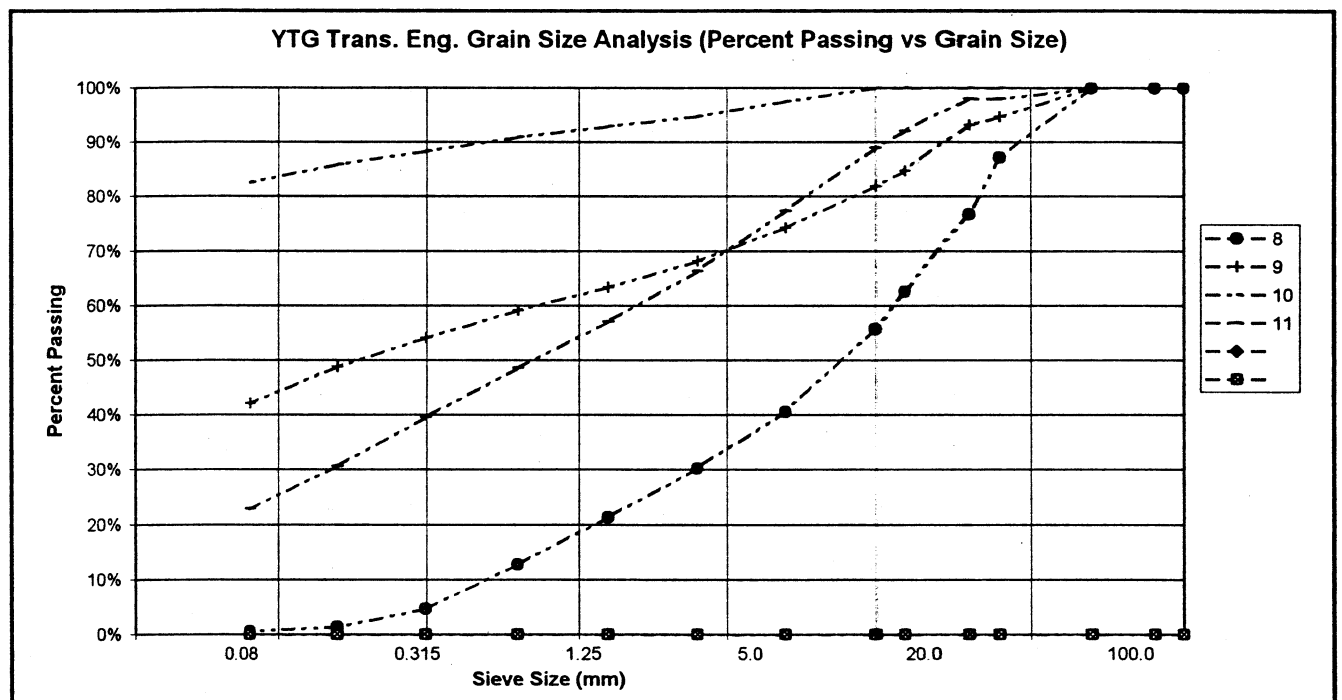


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-03

DATE COMP: 2002/02/02

FIELD NO:	8	9	10	11		
LAB NO:	8	9	10	11		
DEPTH:	0.4-1.0	2.0-2.3	3.0-3.5	4.0-4.3		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	87%	95%	100%	98%		
20.0	77%	93%	100%	98%		
12.5	63%	85%	100%	92%		
10.0	56%	82%	100%	89%		
5.0	41%	74%	98%	77%		
2.5	30%	68%	95%	66%		
1.25	21%	63%	93%	57%		
0.630	13%	59%	91%	49%		
0.315	5%	54%	88%	39%		
0.160	1%	49%	86%	31%		
0.080	1%	42%	83%	23%		
M.C.(%)	1%	20%	16%	9%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	59	26	2	23		
% SAND:	40	32	15	54		
% FINES:	1	42	83	23		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	SILT WITH SAND (ML)	SILTY SAND WITH GRAVEL (SM)		

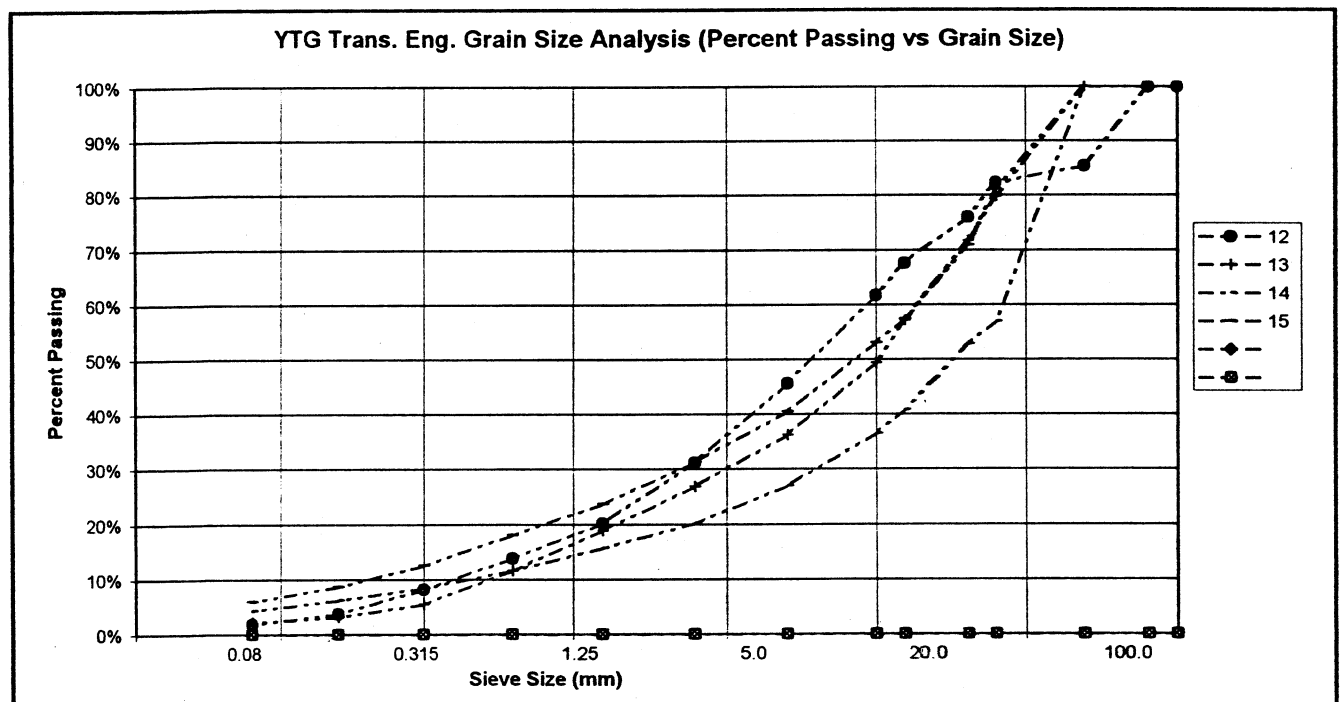


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 431-04

DATE COMP: 2002/02/02

FIELD NO:	12	13	14	15		
LAB NO:	12	13	14	15		
DEPTH:	1.2-1.5	2.1-2.4	3.0-3.4	3.6-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	85%	100%	100%	100%		
25.0	82%	80%	57%	81%		
20.0	76%	72%	53%	71%		
12.5	68%	57%	41%	57%		
10.0	62%	49%	37%	53%		
5.0	46%	36%	27%	40%		
2.5	31%	27%	20%	31%		
1.25	20%	19%	16%	24%		
0.630	14%	12%	12%	18%		
0.315	8%	6%	8%	13%		
0.160	4%	3%	6%	9%		
0.080	2%	2%	4%	6%		
M.C.(%)	2%	2%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	54	64	73	60		
% SAND:	44	34	23	35		
% FINES:	2	2	4	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

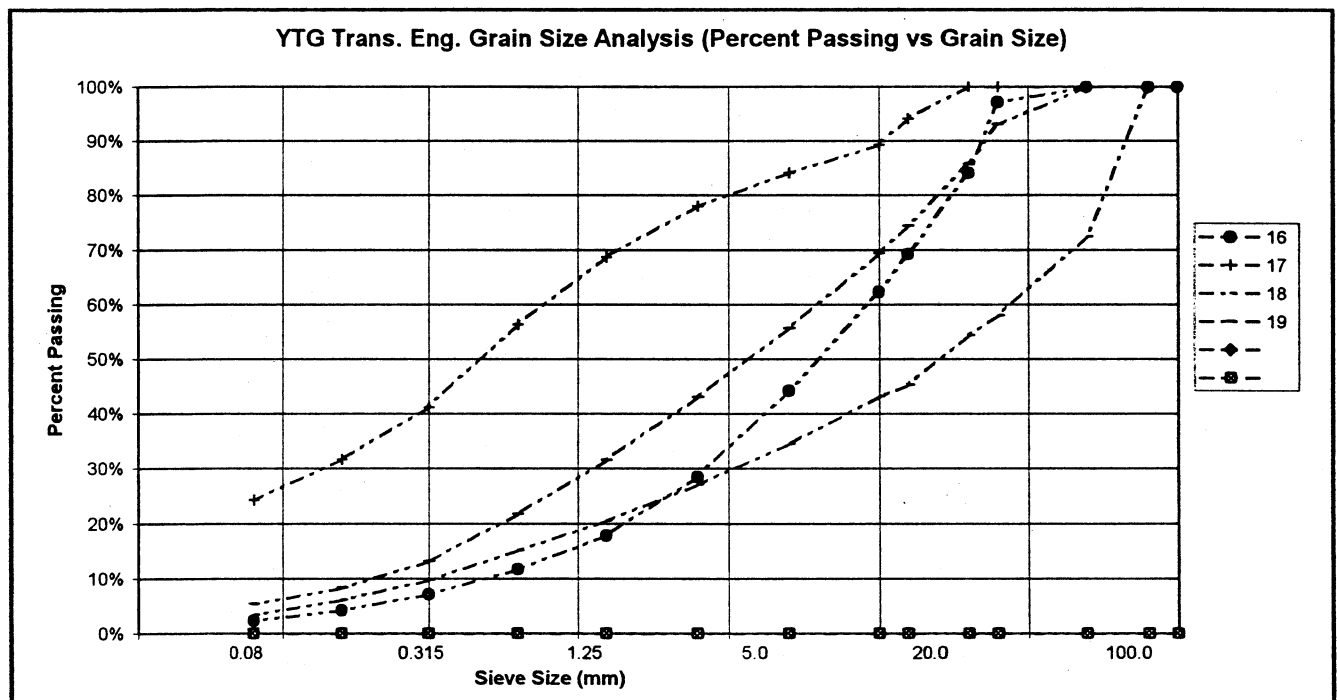


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-05

DATE COMP: 2002/02/02

FIELD NO:	16	17	18	19		
LAB NO:	16	17	18	19		
DEPTH:	1.2-1.5	2.1-2.4	3.0-3.4	4.0-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	72%	100%		
25.0	97%	100%	58%	93%		
20.0	84%	100%	54%	86%		
12.5	69%	94%	45%	74%		
10.0	62%	89%	43%	69%		
5.0	44%	84%	34%	56%		
2.5	28%	78%	27%	43%		
1.25	18%	69%	21%	32%		
0.630	12%	56%	15%	22%		
0.315	7%	41%	10%	13%		
0.160	4%	32%	6%	8%		
0.080	2%	24%	3%	5%		
M.C.(%)	2%	63%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	16	66	44		
% SAND:	42	60	31	50		
% FINES:	2	24	3	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		

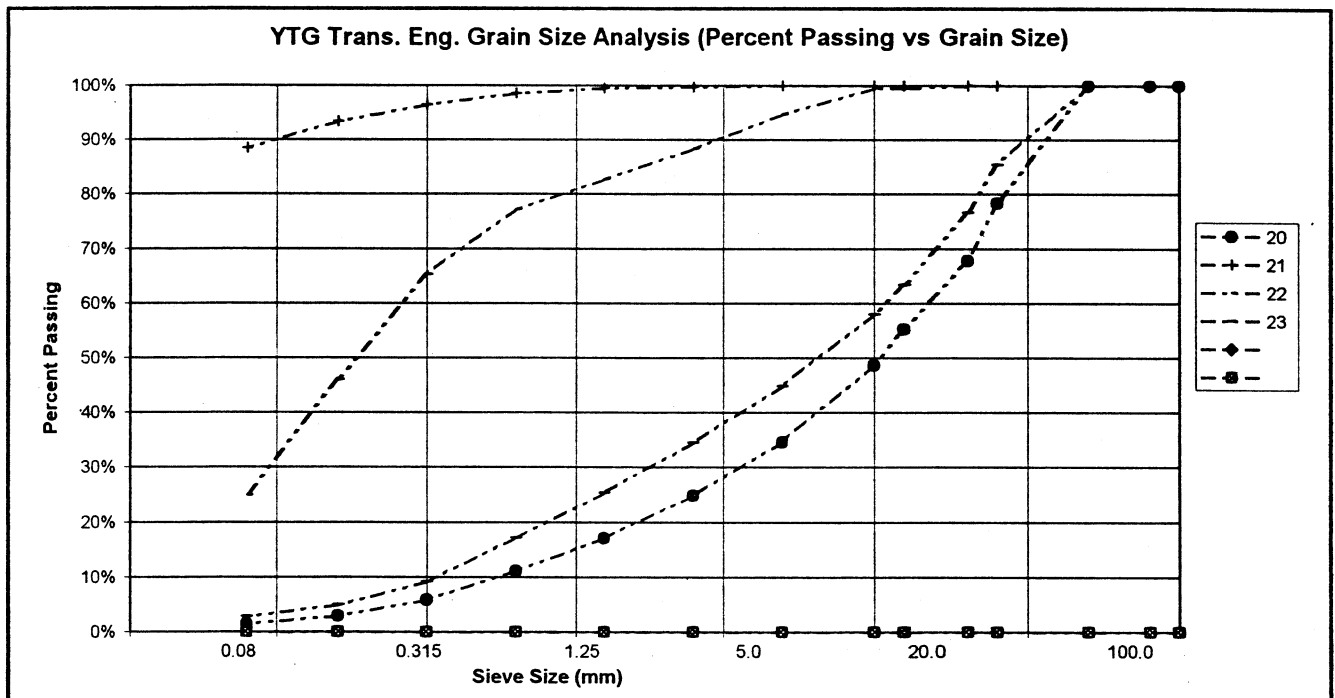


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-06

DATE COMP: 2002/02/02

FIELD NO:	20	21	22	23		
LAB NO:	20	21	22	23		
DEPTH:	1.2-1.5	2.1-2.5	2.5-3.5	4.0-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	78%	100%	100%	85%		
20.0	68%	100%	100%	77%		
12.5	55%	100%	100%	63%		
10.0	49%	100%	100%	58%		
5.0	35%	100%	95%	45%		
2.5	25%	100%	88%	34%		
1.25	17%	99%	83%	25%		
0.630	11%	99%	77%	17%		
0.315	6%	97%	65%	9%		
0.160	3%	93%	46%	5%		
0.080	1%	88%	25%	3%		
M.C.(%)	2%	42%	15%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	65	0	5	55		
% SAND:	33	12	70	42		
% FINES:	1	88	25	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILT (ML)	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SAND (GP)		

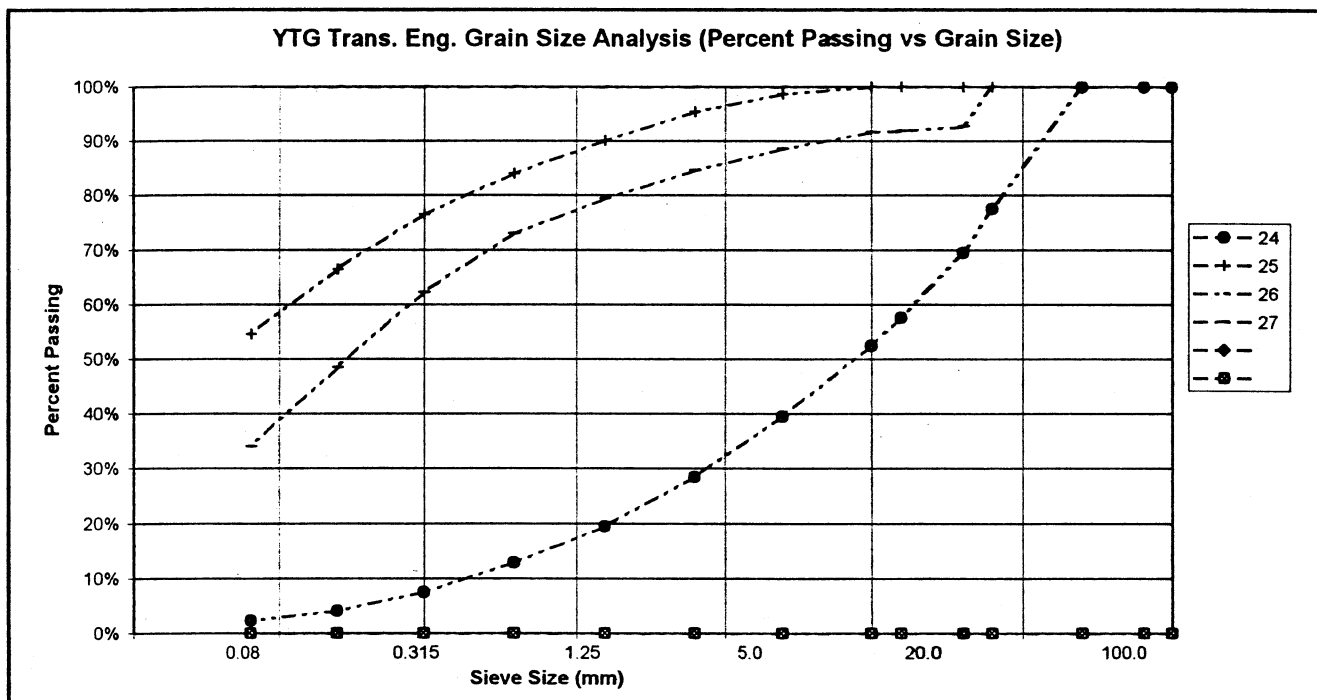


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 831-07

DATE COMP: 2002/02/02

FIELD NO:	24	25	26	27		
LAB NO:	24	25	Lost	27		
DEPTH:	0.4-0.8	2.5-2.8	3.4-3.8	4.2-4.6		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	78%	100%	100%	100%		
20.0	70%	100%	100%	93%		
12.5	58%	100%	100%	92%		
10.0	52%	100%	100%	92%		
5.0	40%	99%	100%	89%		
2.5	28%	95%	100%	85%		
1.25	19%	90%	100%	79%		
0.630	13%	84%	100%	73%		
0.315	7%	77%	100%	62%		
0.160	4%	66%	100%	48%		
0.080	2%	55%	100%	34%		
M.C.(%)	2%	24%	25%	15%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	60	1	0	11		
% SAND:	37	44	0	55		
% FINES:	2	55	100	34		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)	CLAY	SILTY SAND (SM)		

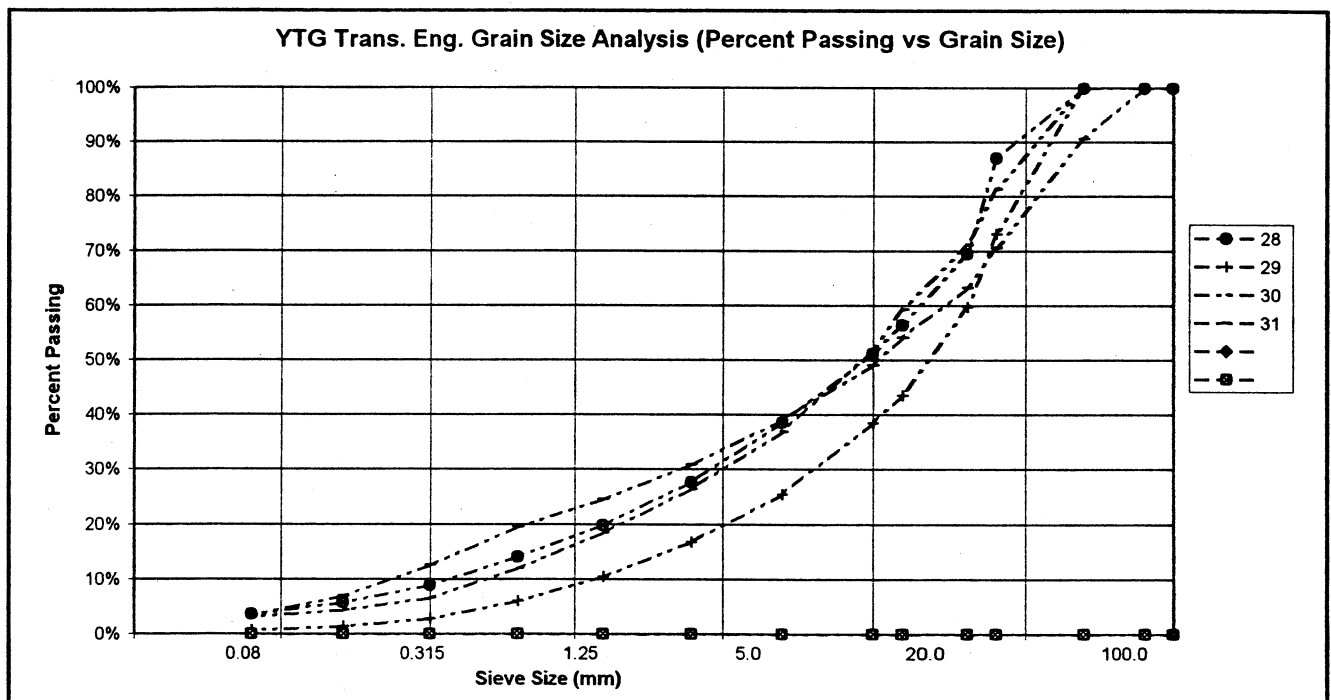


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-08

DATE COMP: 2002/02/02

FIELD NO:	28	29	30	31		
LAB NO:	28	29	30	31		
DEPTH:	0.8-1.2	1.8-2.1	2.8-3.1	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	91%		
25.0	87%	73%	81%	71%		
20.0	69%	60%	71%	63%		
12.5	57%	44%	59%	54%		
10.0	51%	39%	52%	49%		
5.0	39%	25%	37%	39%		
2.5	28%	17%	26%	31%		
1.25	20%	10%	18%	25%		
0.630	14%	6%	12%	19%		
0.315	9%	3%	7%	13%		
0.160	6%	1%	4%	7%		
0.080	4%	1%	3%	3%		
M.C.(%)	2%	1%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	75	63	61		
% SAND:	35	25	34	36		
% FINES:	4	1	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

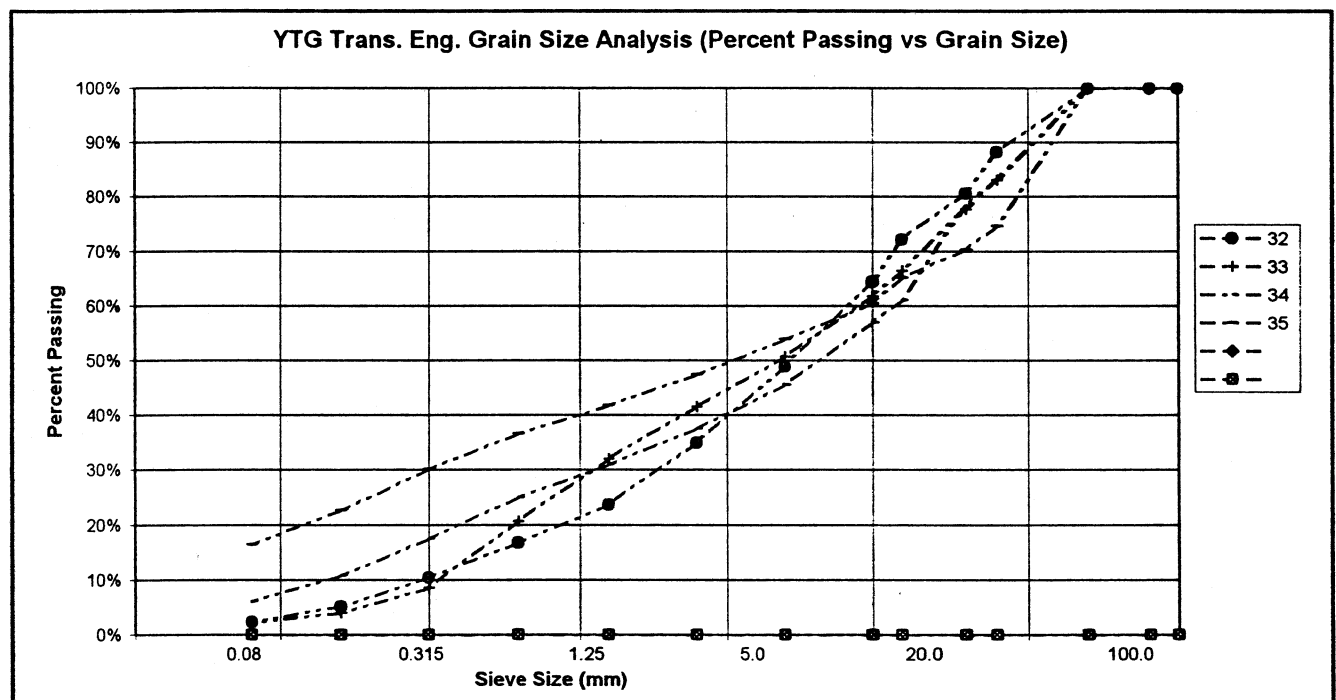


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-09

DATE COMP: 2002/02/02

FIELD NO:	32	33	34	35		
LAB NO:	32	33	34	35		
DEPTH:	0.6-1.0	1.8-2.1	2.9-3.2	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	88%	83%	83%	75%		
20.0	81%	78%	78%	70%		
12.5	72%	66%	61%	65%		
10.0	64%	62%	57%	60%		
5.0	49%	51%	46%	54%		
2.5	35%	42%	38%	47%		
1.25	24%	32%	31%	42%		
0.630	17%	21%	25%	37%		
0.315	10%	9%	18%	30%		
0.160	5%	4%	11%	23%		
0.080	2%	2%	6%	16%		
M.C.(%)	2%	2%	3%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	51	49	54	46		
% SAND:	47	48	39	37		
% FINES:	2	2	6	16		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY GRAVEL WITH SAND (GM)		

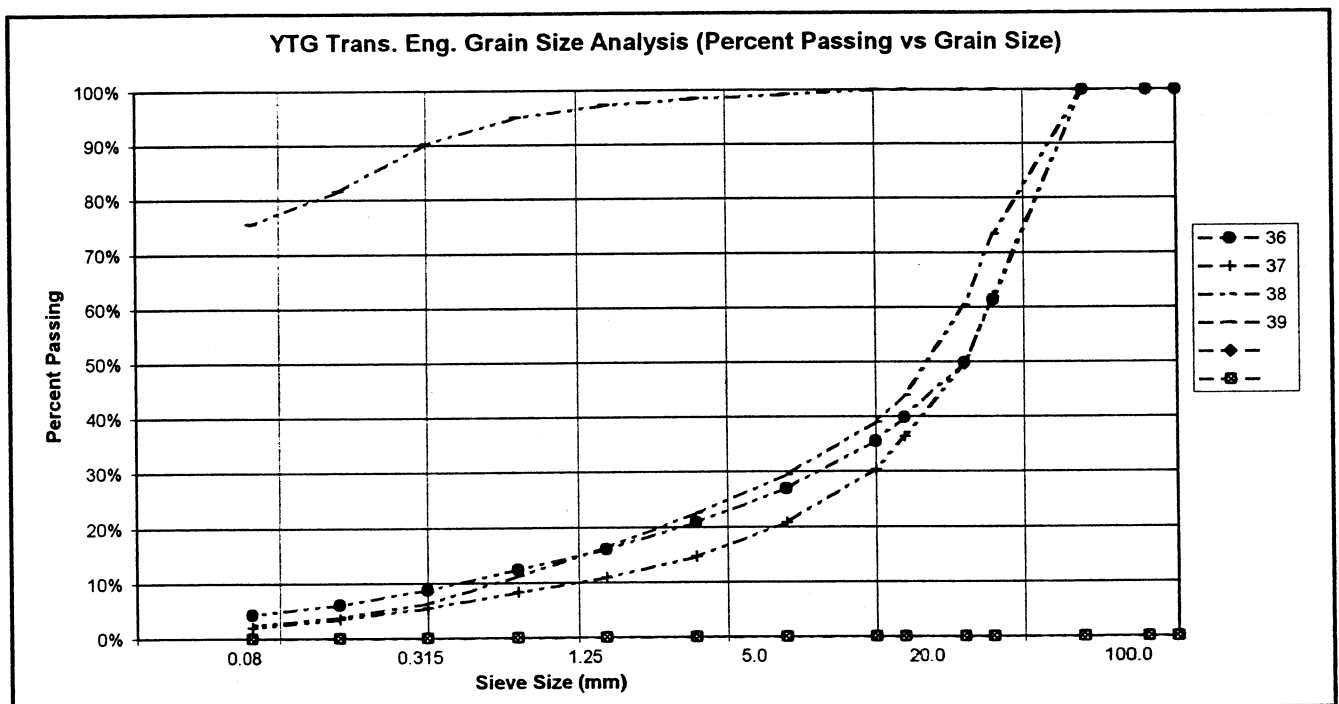


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-10

DATE COMP: 2002/02/02

FIELD NO:	36	37	38	39		
LAB NO:	36	37	38	39		
DEPTH:	1.2-1.5	2.0-2.4	3.0-3.4	4.0-4.2		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	61%	62%	73%	100%		
20.0	50%	50%	60%	100%		
12.5	40%	36%	44%	100%		
10.0	36%	30%	39%	100%		
5.0	27%	21%	29%	99%		
2.5	21%	15%	22%	99%		
1.25	16%	11%	16%	97%		
0.630	12%	8%	11%	95%		
0.315	9%	6%	6%	90%		
0.160	6%	4%	4%	82%		
0.080	4%	2%	2%	76%		
M.C.(%)	3%	2%	2%	58%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	73	79	71	1		
% SAND:	23	19	27	24		
% FINES:	4	2	2	76		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	SILT WITH SAND (ML)		

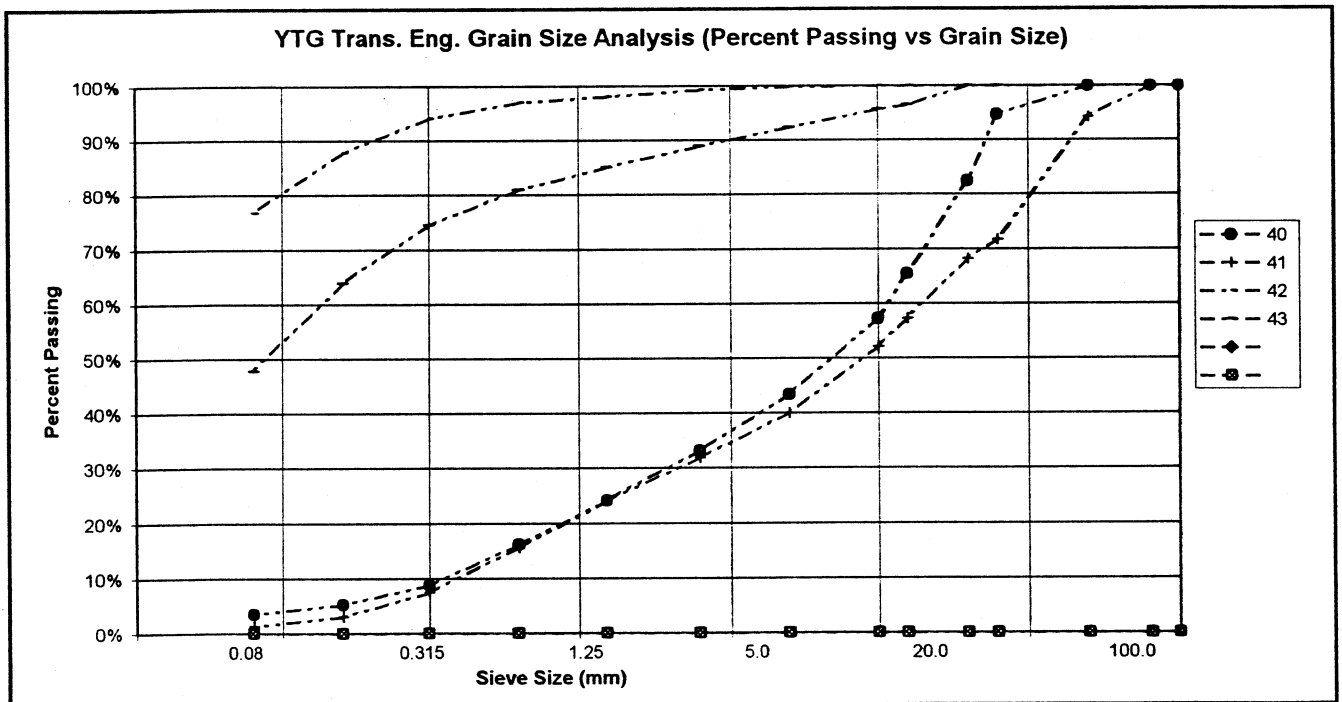


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-11

DATE COMP: 2002/02/02

FIELD NO:	40	41	42	43		
LAB NO:	40	41	42	43		
DEPTH:	1.2-1.5	2.3-2.6	3.0-3.3	4.0-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	94%	100%	100%		
25.0	95%	72%	100%	100%		
20.0	83%	68%	100%	100%		
12.5	65%	57%	100%	96%		
10.0	57%	52%	100%	96%		
5.0	43%	40%	100%	92%		
2.5	33%	32%	99%	89%		
1.25	24%	24%	98%	85%		
0.630	16%	16%	97%	81%		
0.315	9%	8%	94%	75%		
0.160	5%	3%	88%	64%		
0.080	3%	1%	77%	48%		
M.C.(%)	2%	2%	33%	21%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	60	0	8		
% SAND:	40	39	23	45		
% FINES:	3	1	77	48		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILT WITH SAND (ML)	SILTY SAND (SM)		

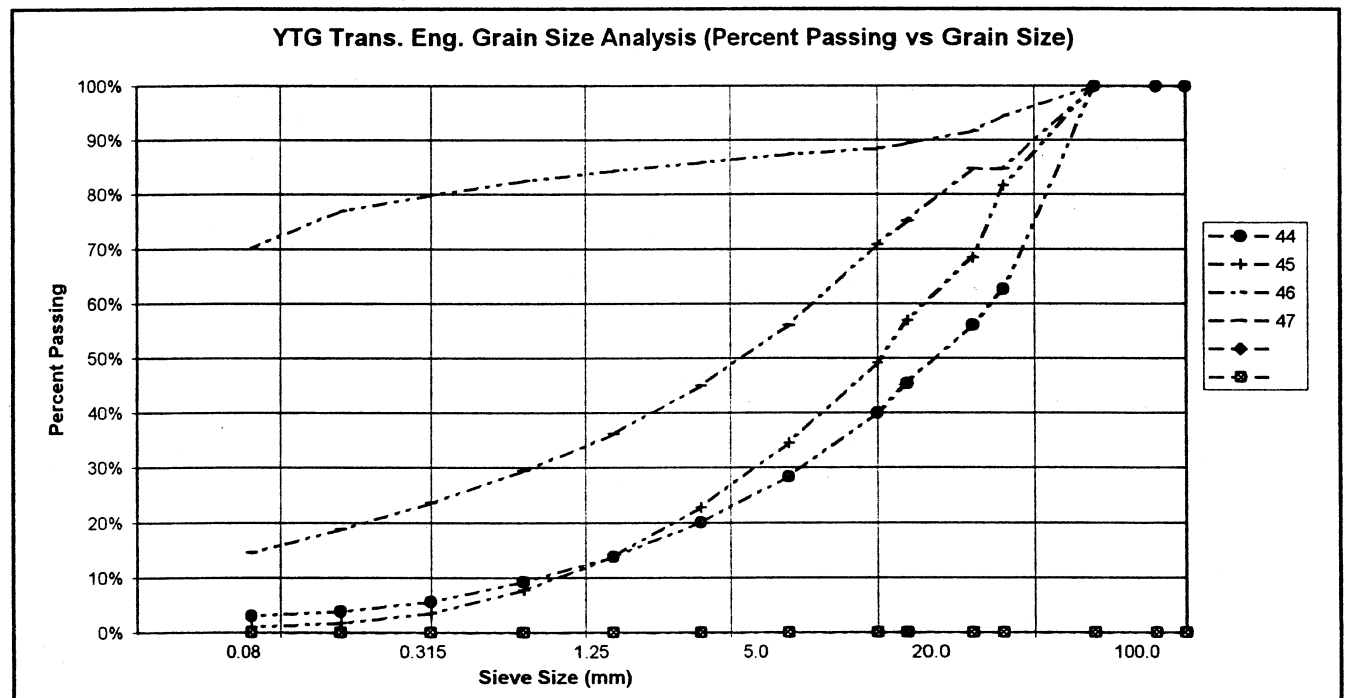


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 8625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-12

DATE COMP: 2002/02/02

FIELD NO:	44	45	46	47		
LAB NO:	44	45	46	47		
DEPTH:	1.0-1.4	2.0-2.3	2.4-2.7	4.0-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	63%	82%	94%	85%		
20.0	56%	68%	92%	85%		
12.5	45%	57%	89%	75%		
10.0	40%	49%	88%	71%		
5.0	28%	34%	87%	56%		
2.5	20%	23%	86%	45%		
1.25	14%	14%	84%	36%		
0.630	9%	8%	82%	29%		
0.315	6%	4%	80%	24%		
0.160	4%	2%	77%	19%		
0.080	3%	1%	70%	15%		
M.C.(%)	2%	2%	34%	8%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	72	66	13	44		
% SAND:	25	33	17	41		
% FINES:	3	1	70	15		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILT WITH SAND (ML)	SILTY GRAVEL WITH SAND (GM)		

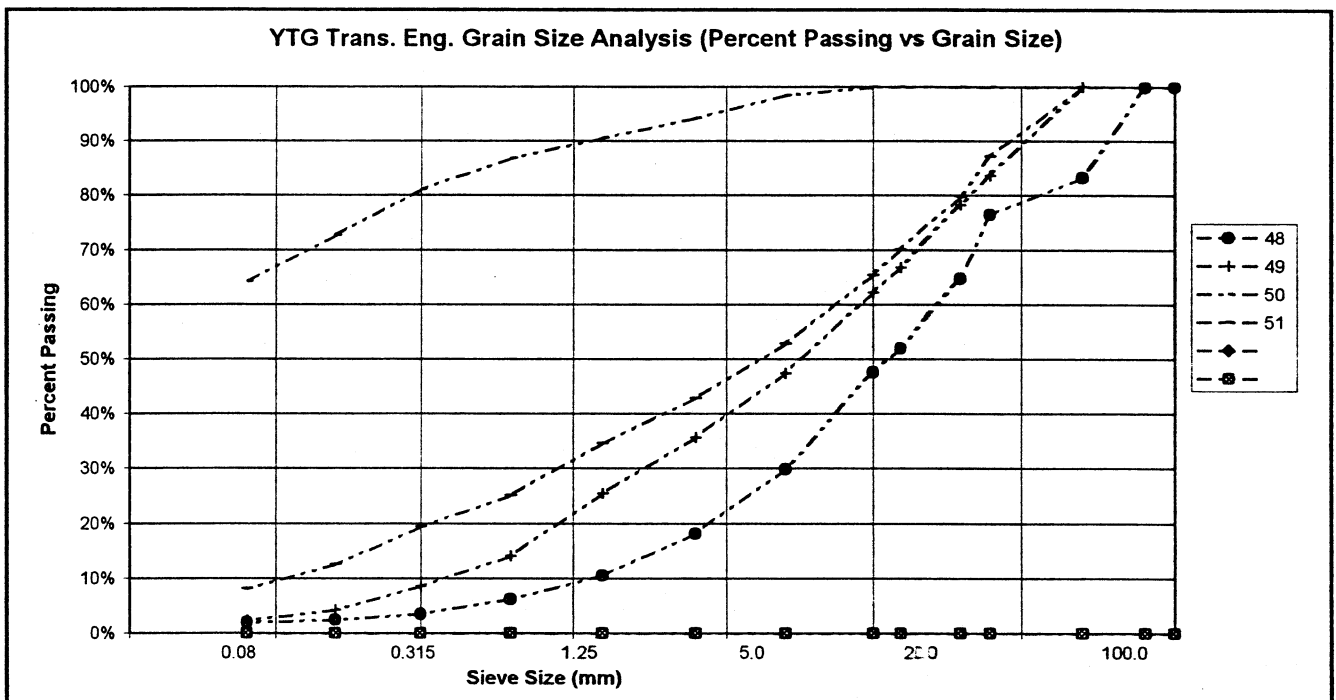


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-13

DATE COMP: 2002/02/02

FIELD NO:	48	49	50	51		
LAB NO:	48	49	50	51		
DEPTH:	1.1-1.4	2.1-2.4	3.0-3.2	4.2-4.6		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	83%	100%	100%	100%		
25.0	77%	84%	100%	87%		
20.0	65%	78%	100%	80%		
12.5	52%	67%	100%	70%		
10.0	48%	62%	100%	65%		
5.0	30%	47%	98%	53%		
2.5	18%	36%	94%	43%		
1.25	11%	25%	91%	35%		
0.630	6%	14%	87%	25%		
0.315	3%	9%	81%	19%		
0.160	2%	4%	73%	13%		
0.080	2%	2%	64%	8%		
M.C.(%)	1%	2%	50%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	53	2	47		
% SAND:	28	45	34	45		
% FINES:	2	2	64	8		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

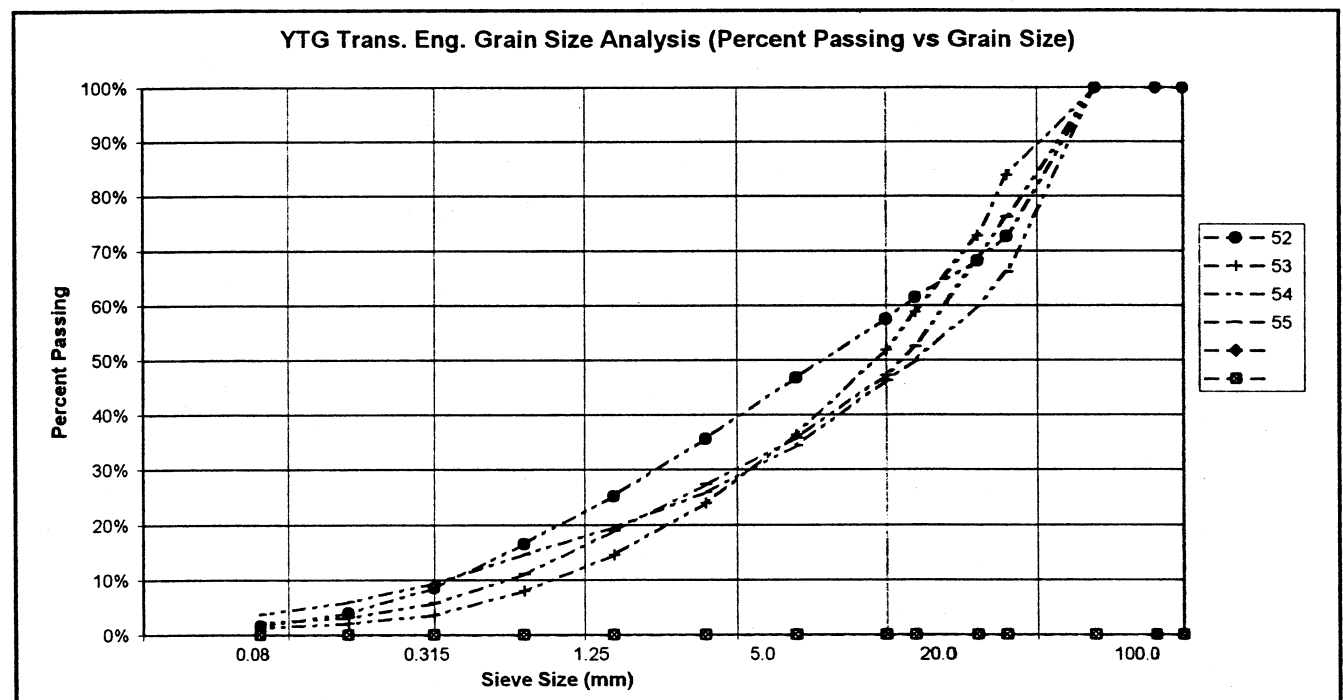


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-14

DATE COMP: 2002/02/02

FIELD NO:	52	53	54	55		
LAB NO:	52	53	54	55		
DEPTH:	1.0-1.3	1.9-2.2	2.9-3.2	3.8-4.2		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	73%	84%	66%	76%		
20.0	68%	73%	60%	69%		
12.5	62%	59%	50%	53%		
10.0	58%	52%	46%	47%		
5.0	47%	36%	34%	36%		
2.5	36%	24%	26%	27%		
1.25	25%	15%	20%	19%		
0.630	17%	8%	15%	11%		
0.315	9%	4%	9%	6%		
0.160	4%	2%	6%	3%		
0.080	2%	1%	4%	2%		
M.C.(%)	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	53	64	66	64		
% SAND:	45	35	31	34		
% FINES:	2	1	4	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

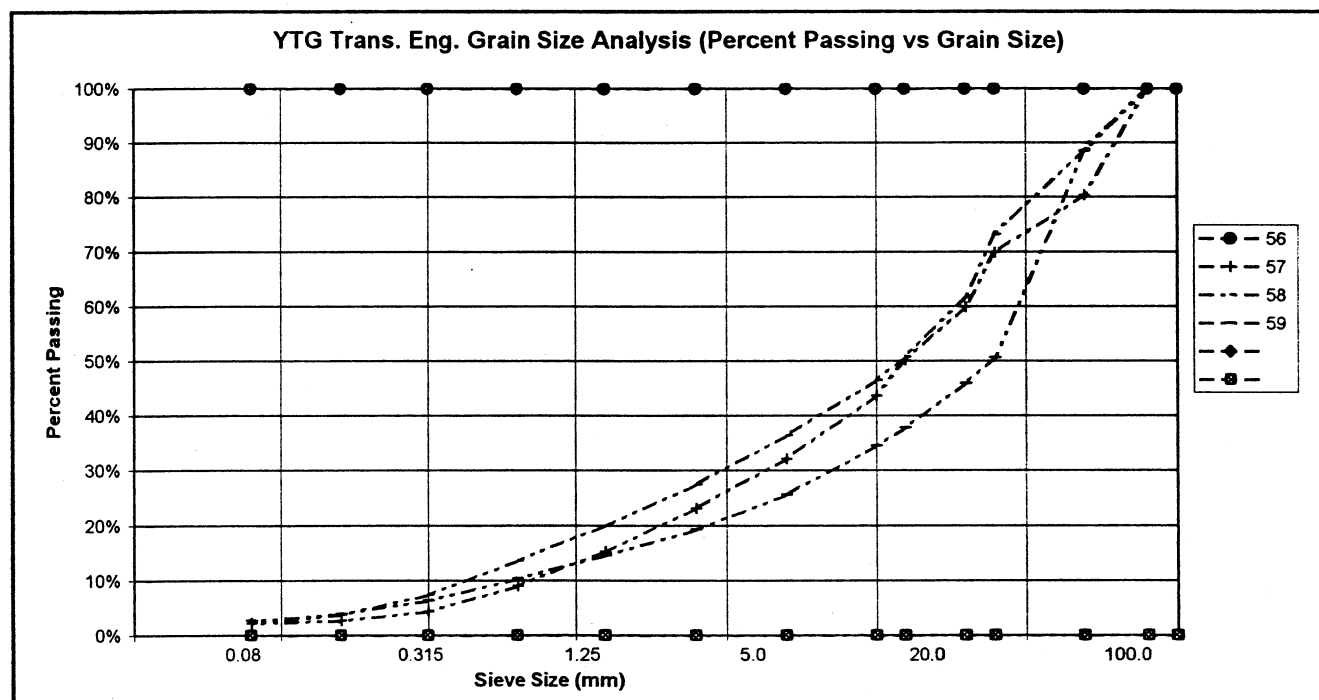


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-15

DATE COMP: 2002/02/02

FIELD NO:	56	57	58	59		
LAB NO:	Lost	57	58	59		
DEPTH:	1.2-1.5	2.2-2.5	3.2-3.5	4.1-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	80%	89%	89%		
25.0	100%	70%	73%	51%		
20.0	100%	60%	62%	46%		
12.5	100%	50%	51%	38%		
10.0	100%	44%	46%	35%		
5.0	100%	32%	36%	26%		
2.5	100%	23%	27%	19%		
1.25	100%	15%	20%	15%		
0.630	100%	9%	14%	10%		
0.315	100%	4%	7%	6%		
0.160	100%	3%	4%	4%		
0.080	100%	2%	2%	3%		
M.C.(%)	2%	2%	4%	1%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	68	64	74		
% SAND:	0	30	34	23		
% FINES:	0	2	2	3		
CLASSIFICATION		POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

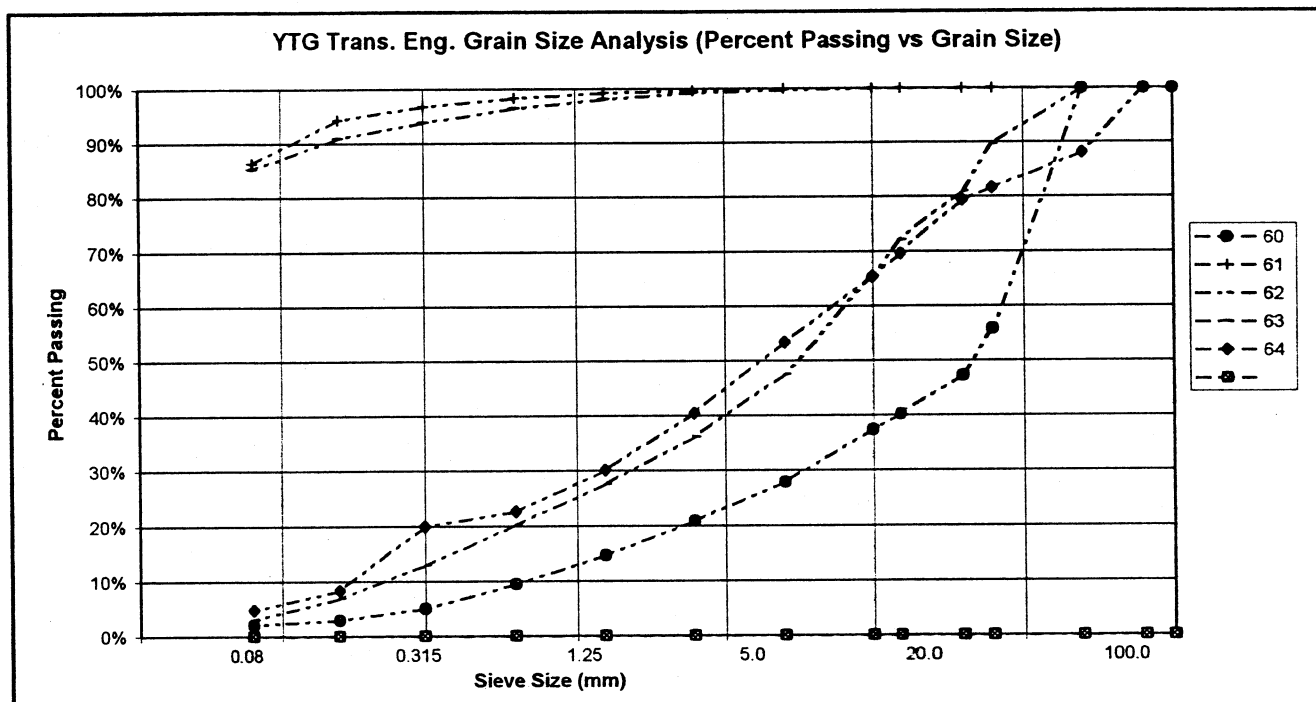


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-16

DATE COMP: 2002/02/02

FIELD NO:	60	61	62	63	64	
LAB NO:	60	61	62	63	64	
DEPTH:	1.0-1.3	1.9-2.2	2.2-2.5	3.2-3.5	4.2-4.6	
TYPE:	BULK	BULK	BULK	BULK	BULK	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	88%	
25.0	56%	100%	90%	100%	82%	
20.0	47%	100%	81%	100%	79%	
12.5	40%	100%	72%	100%	70%	
10.0	37%	100%	65%	100%	65%	
5.0	28%	100%	48%	100%	53%	
2.5	21%	100%	36%	99%	40%	
1.25	15%	99%	28%	98%	30%	
0.630	10%	98%	20%	96%	23%	
0.315	5%	97%	13%	94%	20%	
0.160	3%	94%	7%	91%	8%	
0.080	2%	86%	3%	85%	5%	
M.C.(%)	2%	40%	2%	36%	3%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	72	0	52	0	47	
% SAND:	26	14	45	14	49	
% FINES:	2	86	3	85	5	
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	SILT (ML)	WELL-GRADED SAND WITH GRAVEL (SW)	

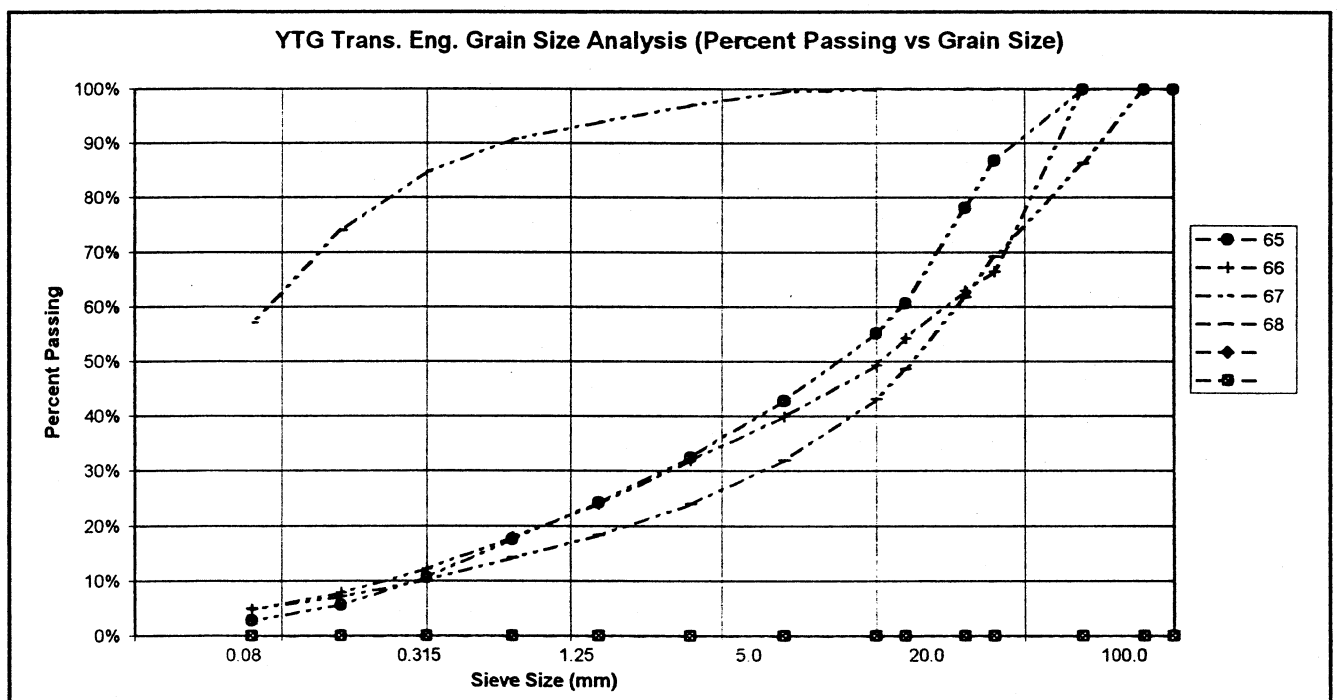


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-17

DATE COMP: 2002/02/02

FIELD NO:	65	66	67	68		
LAB NO:	65	66	67	68		
DEPTH:	1.1-1.4	1.8-2.1	2.8-3.2	4.0-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	86%		
25.0	87%	66%	100%	69%		
20.0	78%	63%	100%	62%		
12.5	61%	54%	100%	49%		
10.0	55%	49%	100%	43%		
5.0	43%	40%	100%	32%		
2.5	32%	32%	97%	24%		
1.25	24%	24%	94%	18%		
0.630	18%	18%	91%	14%		
0.315	11%	12%	85%	10%		
0.160	6%	8%	74%	7%		
0.080	3%	5%	57%	5%		
M.C.(%)	2%	3%	33%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	60	0	68		
% SAND:	40	35	43	27		
% FINES:	3	5	57	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)		

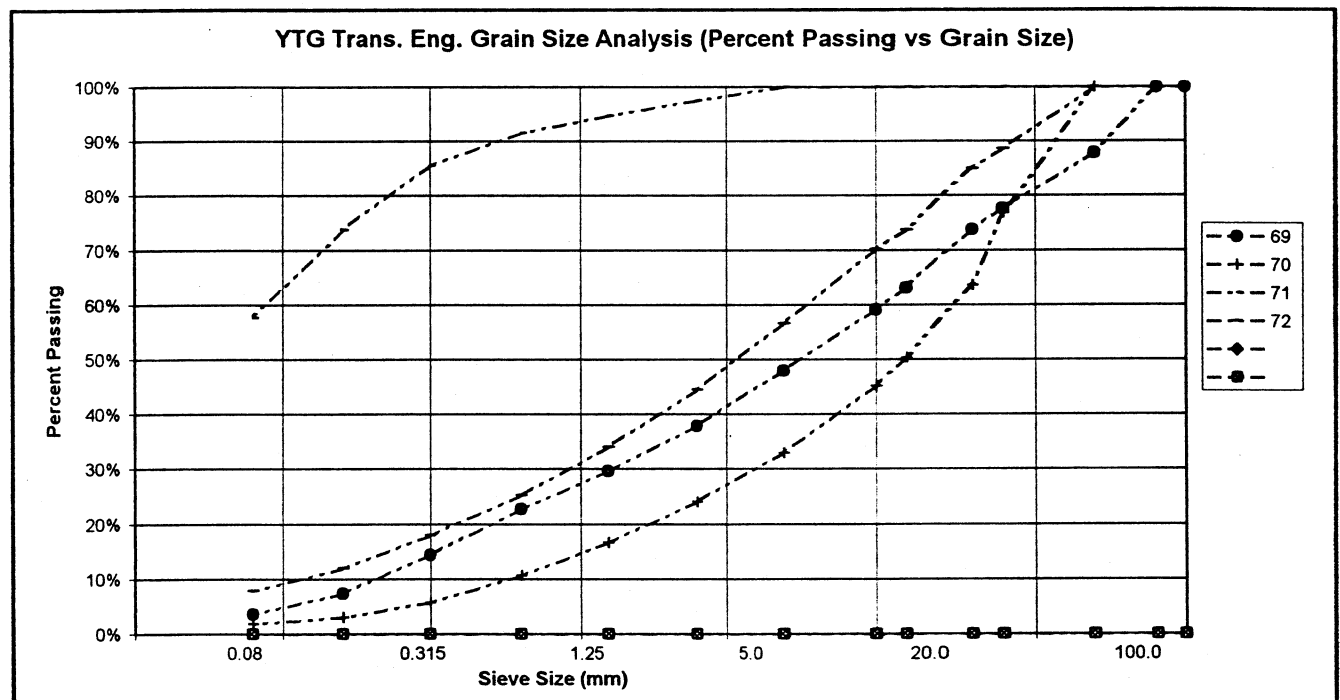


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-18

DATE COMP: 2002/02/02

FIELD NO:	69	70	71	72		
LAB NO:	69	70	71	72		
DEPTH:	1.2-1.5	2.4-2.7	3.6-3.8	4.2-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	88%	100%	100%	100%		
25.0	78%	77%	100%	89%		
20.0	74%	64%	100%	85%		
12.5	63%	50%	100%	74%		
10.0	59%	45%	100%	70%		
5.0	48%	33%	100%	57%		
2.5	38%	24%	97%	44%		
1.25	30%	17%	95%	34%		
0.630	23%	11%	92%	25%		
0.315	14%	6%	86%	18%		
0.160	7%	3%	74%	12%		
0.080	4%	2%	58%	8%		
M.C.(%)	3%	2%	43%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	52	67	0	43		
% SAND:	44	31	42	49		
% FINES:	4	2	58	8		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		

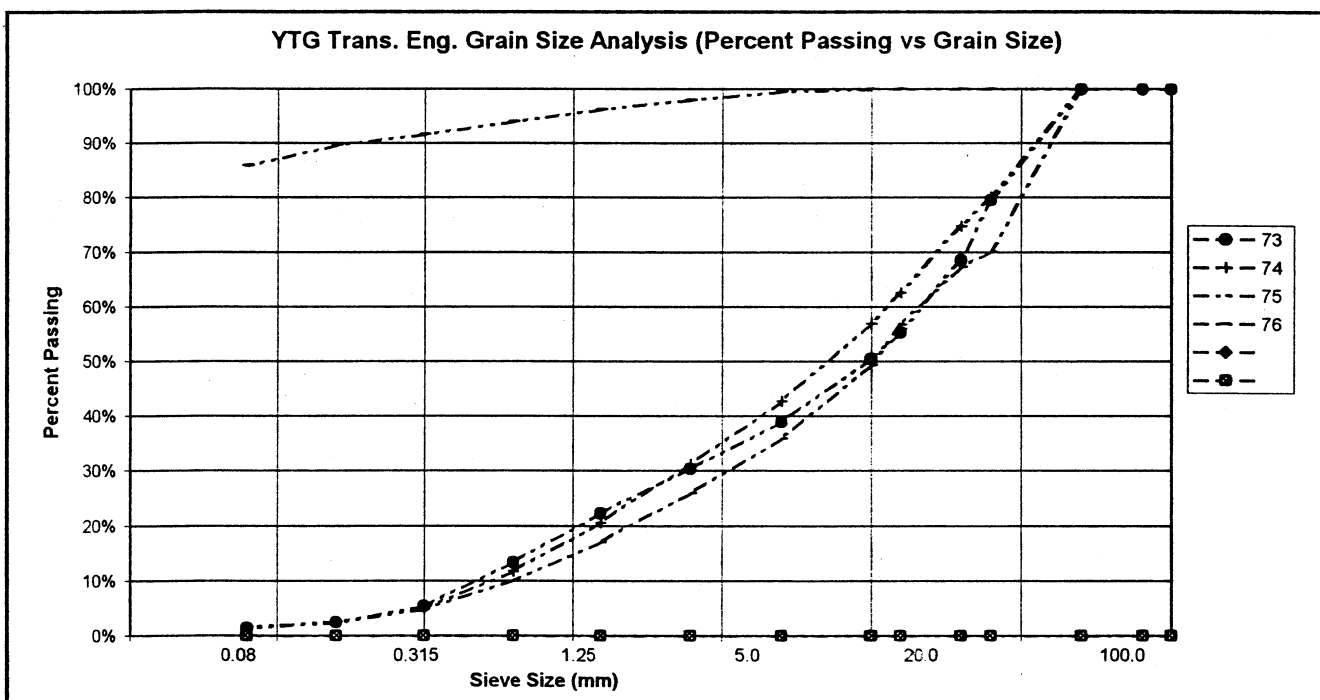


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-19

DATE COMP: 2002/02/02

FIELD NO:	73	74	75	76		
LAB NO:	73	74	75	76		
DEPTH:	1.0-1.3	2.0-2.3	2.5-3.2	4.0-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	80%	80%	70%	100%		
20.0	68%	75%	67%	100%		
12.5	55%	63%	57%	100%		
10.0	51%	57%	49%	100%		
5.0	39%	43%	36%	99%		
2.5	30%	31%	26%	98%		
1.25	22%	21%	17%	96%		
0.630	13%	12%	10%	94%		
0.315	5%	5%	5%	92%		
0.160	3%	2%	3%	90%		
0.080	1%	1%	2%	86%		
M.C.(%)	2%	2%	2%	43%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	57	64	1		
% SAND:	38	41	34	14		
% FINES:	1	1	2	86		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILT (ML)		

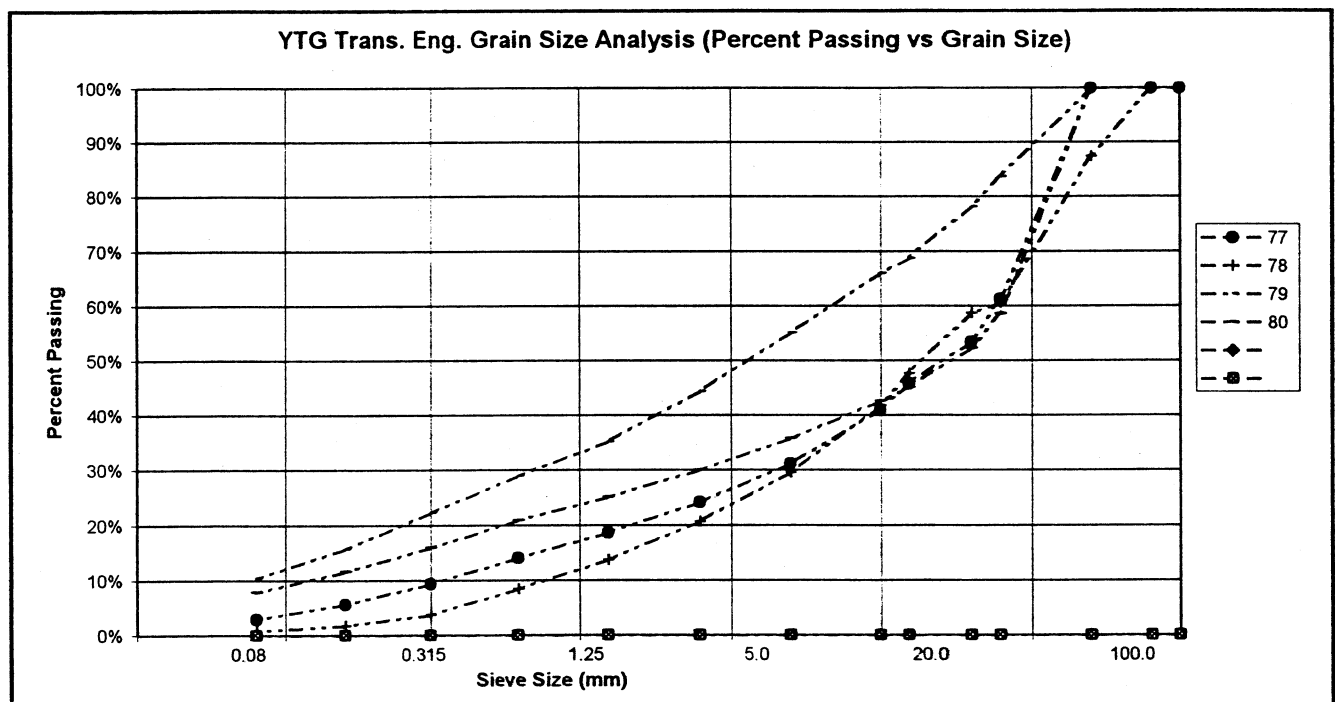


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-20

DATE COMP: 2002/02/02

FIELD NO:	77	78	79	80		
LAB NO:	77	78	79	80		
DEPTH:	1.1-1.4	2.1-2.4	3.2-3.6	4.2-4.6		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	87%	100%	100%		
25.0	61%	61%	84%	59%		
20.0	53%	59%	78%	52%		
12.5	46%	48%	69%	45%		
10.0	41%	42%	66%	43%		
5.0	31%	30%	55%	36%		
2.5	24%	21%	44%	30%		
1.25	19%	14%	35%	25%		
0.630	14%	8%	29%	21%		
0.315	9%	4%	22%	16%		
0.160	6%	2%	16%	12%		
0.080	3%	1%	10%	8%		
M.C.(%)	2%	2%	6%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	69	70	45	64		
% SAND:	28	29	45	28		
% FINES:	3	1	10	8		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

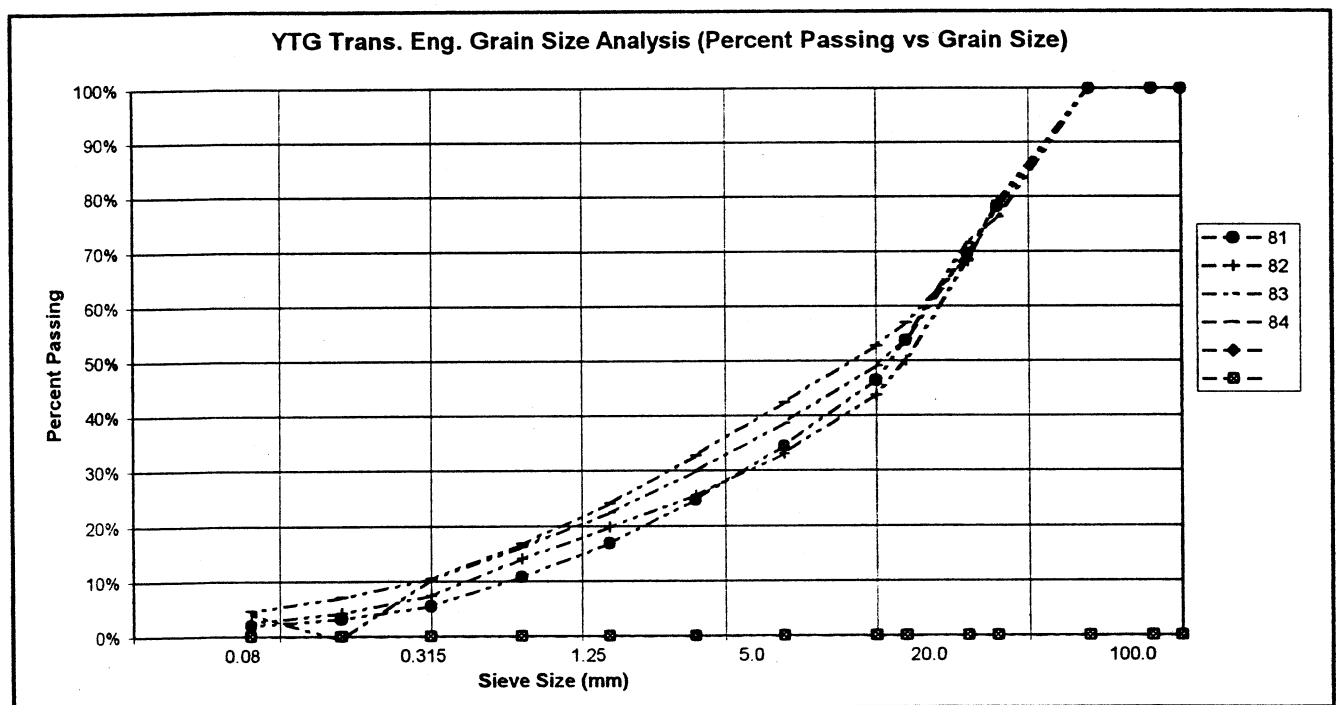


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-21

DATE COMP: 2002/02/02

FIELD NO:	81	82	83	84		
LAB NO:	81	82	83	84		
DEPTH:	1.0-1.3	1.8-2.1	3.3-3.6	4.0-4.2		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	78%	79%	76%	78%		
20.0	70%	68%	72%	68%		
12.5	54%	50%	54%	57%		
10.0	47%	44%	49%	53%		
5.0	34%	33%	39%	42%		
2.5	25%	26%	30%	33%		
1.25	17%	20%	22%	24%		
0.630	11%	14%	16%	17%		
0.315	5%	7%	10%	10%		
0.160	3%	4%	1%	7%		
0.080	2%	3%	4%	5%		
M.C.(%)	2%	2%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	67	61	58		
% SAND:	32	30	34	38		
% FINES:	2	3	4	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

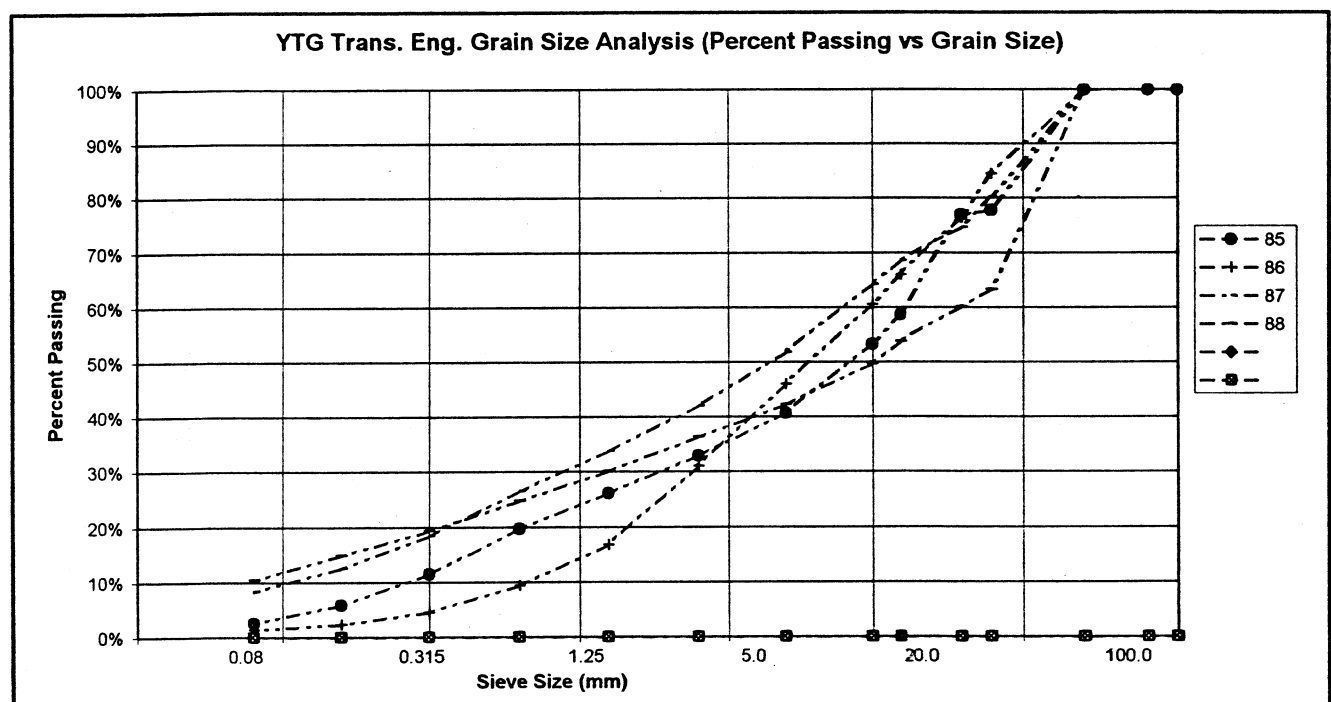


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-22

DATE COMP: 2002/02/02

FIELD NO:	85	86	87	88		
LAB NO:	85	86	87	88		
DEPTH:	1.2-1.5	2.2-2.5	3.5-3.8	4.2-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	78%	84%	80%	63%		
20.0	77%	76%	75%	60%		
12.5	59%	66%	69%	54%		
10.0	53%	61%	64%	50%		
5.0	41%	46%	52%	42%		
2.5	33%	31%	42%	36%		
1.25	26%	17%	34%	30%		
0.630	20%	9%	27%	25%		
0.315	12%	5%	18%	19%		
0.160	6%	2%	13%	15%		
0.080	3%	1%	8%	10%		
M.C.(%)	2%	2%	6%	8%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	59	54	48	58		
% SAND:	38	45	43	32		
% FINES:	3	1	8	10		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

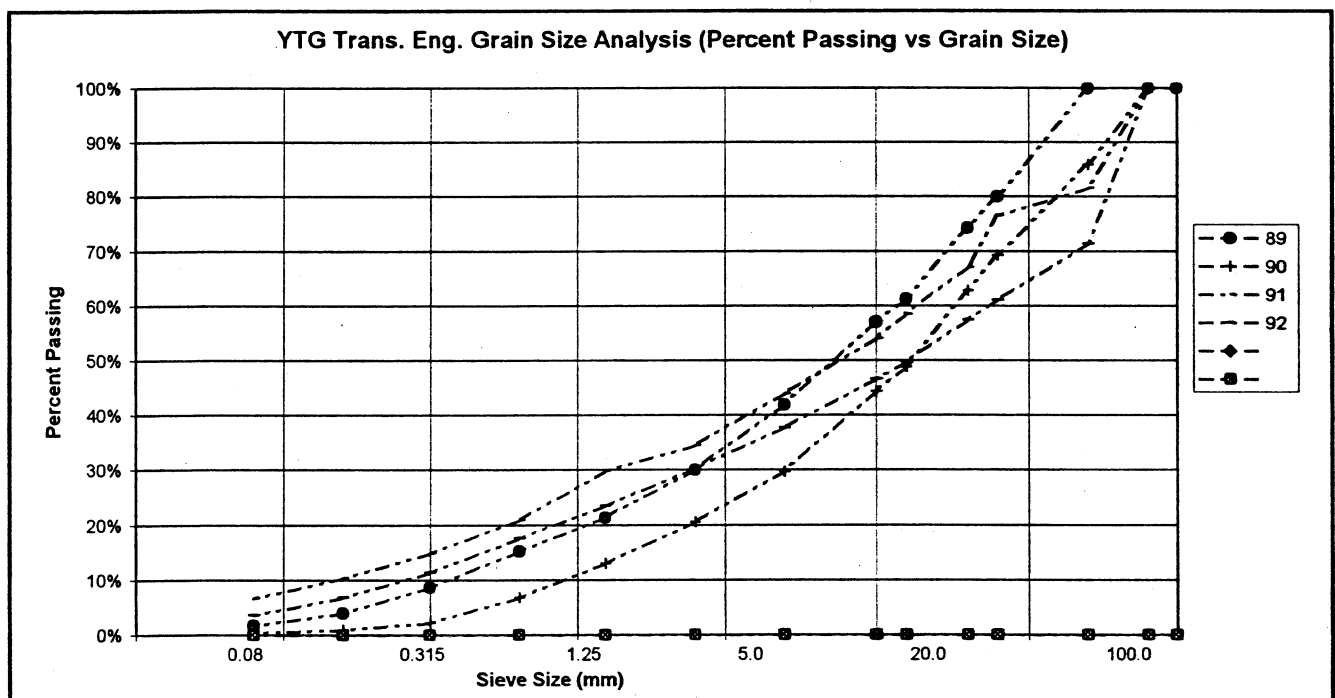


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-23

DATE COMP: 2002/02/02

FIELD NO:	89	90	91	92		
LAB NO:	89	90	91	92		
DEPTH:	1.2-1.5	2.1-2.4	3.5-3.7	4.2-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	86%	82%	71%		
25.0	80%	69%	77%	61%		
20.0	74%	63%	67%	57%		
12.5	61%	49%	58%	50%		
10.0	57%	44%	54%	47%		
5.0	42%	30%	44%	38%		
2.5	30%	21%	34%	30%		
1.25	21%	13%	30%	24%		
0.630	15%	7%	21%	18%		
0.315	9%	2%	15%	11%		
0.160	4%	1%	10%	7%		
0.080	2%	0%	7%	4%		
M.C.(%)	2%	1%	4%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	58	70	56	62		
% SAND:	40	29	37	34		
% FINES:	2	0	7	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

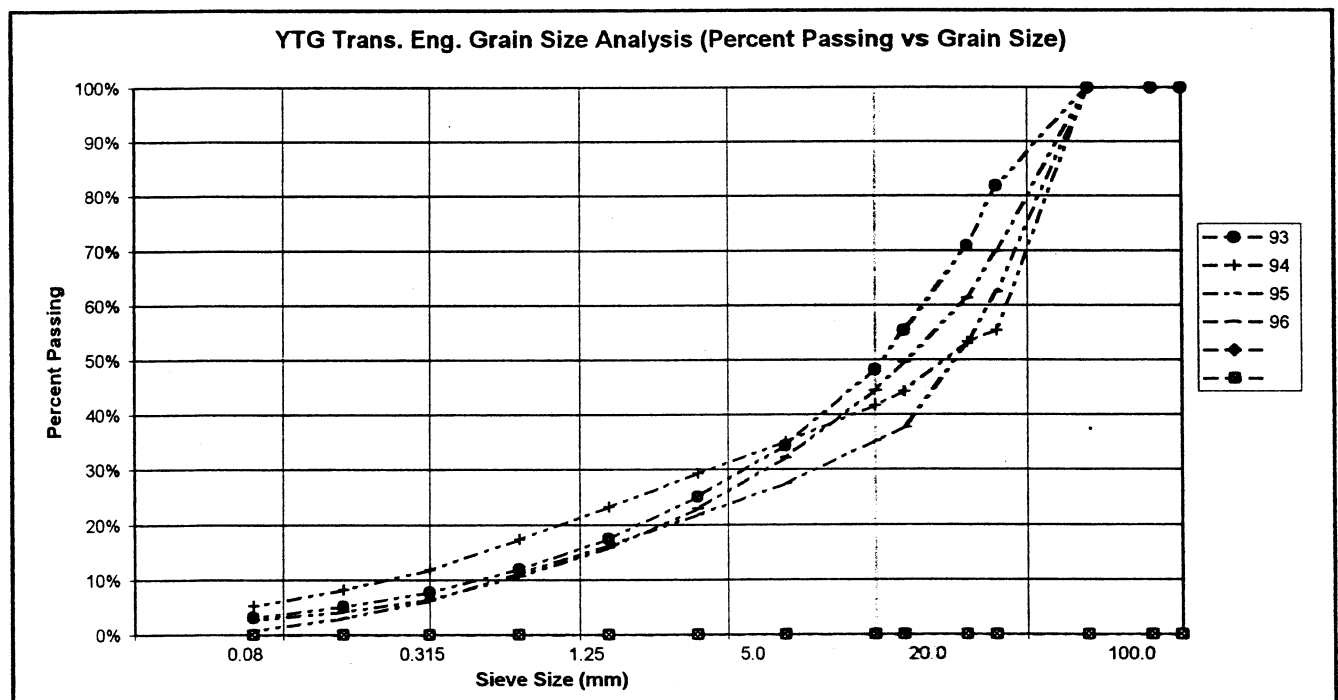


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-24

DATE COMP: 2002/02/02

FIELD NO:	93	94	95	96		
LAB NO:	93	94	95	96		
DEPTH:	1.5-1.8	2.2-2.5	3.5-3.7	4.3-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	82%	55%	62%	70%		
20.0	71%	53%	53%	61%		
12.5	55%	44%	38%	50%		
10.0	48%	42%	35%	44%		
5.0	34%	35%	27%	32%		
2.5	25%	29%	22%	23%		
1.25	18%	23%	16%	16%		
0.630	12%	17%	11%	11%		
0.315	8%	12%	6%	7%		
0.160	5%	8%	3%	4%		
0.080	3%	5%	1%	3%		
M.C.(%)	4%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	65	73	68		
% SAND:	31	30	27	29		
% FINES:	3	5	1	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: Granular Investigation Lewis Creek
 PROJECT LOCATION: Km 1747.5 RHS A/H
 DRILL UNIT: Koehring 6625 BackHoe
 HOLE LOCATION: See Plan
 LOGGED BY: JR Paine (R.W.)

HOLE No.: 631-25

DATE COMP: 2002/02/02

FIELD NO:	97	98	99	100		
LAB NO:	97	98	99	100		
DEPTH:	1.2-1.5	2.0-3.1	3.5-3.8	4.2-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	77%	100%	100%	70%		
25.0	70%	69%	63%	27%		
20.0	61%	59%	53%	24%		
12.5	48%	49%	44%	23%		
10.0	44%	43%	41%	22%		
5.0	32%	35%	33%	21%		
2.5	24%	28%	27%	20%		
1.25	16%	22%	21%	18%		
0.630	10%	15%	16%	14%		
0.315	5%	9%	10%	11%		
0.160	4%	5%	6%	10%		
0.080	3%	3%	4%	7%		
M.C.(%)	2%	2%	2%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	65	67	79		
% SAND:	29	32	30	14		
% FINES:	3	3	4	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT (GP-GM)		

