

添付資料 8 ボーリング柱状図

DRILL LOG

HOLE NO. BDI- SHEET NO. 1 OF 17

HOLE NO. ()

PROJECT		The Basic Design Study on the Project for Rehabilitation of Rural Roads				CLIENT	JICA	
LOCATION		Devure Bridge (Route 344)		COORDINATE		DEPTH OF HOLE	11.4m	
ELEVATIONS		2998.24		DATE		CHECKD	Mutowembwa	
SCALE		2997.04		FROM 11 June TO 16 June 1993		DRILLED		
DATE		2998.24		DIA. OF HOLE		Changachire		
		0.2		75.3 ~ 59.6		Mole		
		0.2		E.				
		0.2		N.				
		0.2		FROM 11 June TO 16 June 1993				
		0.2		DATE				
		0.2		MATERIAL				
		0.2		U.S.C.*				
		0.2		REL. DENS.				
		0.2		CONSIST. CT.				
		0.2		COLOR				
		0.2		SECTION				
		0.2		THICKNESS				
		0.2		DEPTH				
		0.2		ELEVATIONS				
		0.2		DATE				
2997.04	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2997.04	1.2	1.0	0.2	0.2	0.2	0.2	0.2	0.2
2998.24	6.0	4.8	0.2	0.2	0.2	0.2	0.2	0.2
2998.84	6.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2
2998.84	11.4	5.0	0.2	0.2	0.2	0.2	0.2	0.2

DEPTH	NO.	TEST	DESCRIPTION	GROUND W.L.	AND CASING	DEPTH	TEST VALUES
cm				m			
1.0							
1.3	7/30		subangular well graded with a little finer material				
2.0							
2.3	12/30		with some subangular cobbles of quartz, feldspar, granite and dolerite	3.00			
3.0							
3.3	16/30						
4.0							
4.3	8/30						
5.0							
5.3	11/30						
6.0			slightly cemented				
6.3	40/30		slightly weathered medium grained very strong with very closely spaced joints and fissures				
7.0							
7.3	50/70						

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BDI-2 SHEET NO. 2 OF 17

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA		
LOCATION Devure Bridge (Route 344)										DEPTH OF HOLE 7.0m		
ELEVATION 2993.39										CHECKD Mutowembwa		
Diameter of Hole 75.3 ~ 59.6 mm										DRILL RIG Mole		
COORDINATE N: E:										DRILLED Changachirere		
DATE FROM 16 June TO 17 June 1993										TEST VALUES		
DESCRIPTION										STANDARD PENETRATION TEST		
FORMATION										Blows every 10cm		
MATERIAL										DEPTH		
U.S.C.										Blow/cm		
REL. DENS. OR CONSIST. CY										N VALUE		
COLOR										10 20 30 40 50		
SECTION										SCALE		
THICKNESS												
DEPTH												
ELEVATIONS												
SCALE												
DATE												
2992.39	1.0	1.0	pinkish brown	loose	Sand	homogeneous coarse with angular quartz and feldspar grains						
2991.39	2.0	1.0	yellowish brown		Granite	coarse grained, moderately weathered with weak and massive isolated crystals						
2986.39	7.0	5.0	pinkish grey		Granite	coarse grained slightly weathered very strong with closely spaced joints and fissures						

HOLE NO. ()

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. BDI-3 SHEET NO. 3 OF 17

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA		
LOCATION Devure Bridge (Route 344)										DEPTH OF HOLE 13.0m		
ELEVATION 3001.24m										CHECKD Mutowembwa		
DIAMETER OF HOLE 75.3 ~ 59.6 mm										DRILLED Changachirere		
COORDINATE N: E:										TEST VALUES		
DATE FROM 17 June TO 21 June 1993										STANDARD PENETRATION TEST		
SAMPLING IN SITU TEST										Blows every 10cm		
GROUND WATER AND CASING										DEPTH		
DESCRIPTION										N VALUE		
FORMATION										SCALE		
MATERIAL												
U.S.C. * REL. DENS. OR CONSISTENCY												
COLOR												
SECTION												
THICKNESS												
DEPTH												
ELEVATIONS												
SCALE												
DATE												
2998.24	3.0	3.0	greyish brown	compact	Silty sand	heterogeneous with pockets of yellowish grey silty clay and occasional quartz, feldspar, granitic and doleritic cobbles	intact	320			1.0	
2998.24	3.0	3.0				with occasional quartz, feldspar and granite cobbles					1.3 36/30	
2998.24	7.5	4.5	light yellowish grey	very stiff	Sandy clay						2.0 24/30	
2998.24	11.0	3.5			Granite	coarse grained moderately weathered massive with occasional large isolated crystals of feldspar					3.0 10/30	
2998.24	13.0	2.0			Granite	coarse grained slightly weathered very strong with very widely spaced joints and fissures					4.0 22/30	
											5.0 36/30	
											6.0 21/30	
											7.0 50/30	
											8.0 50/0	

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BS-1 SHEET NO. 4 OF 17

HOLE NO. ()

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA									
LOCATION Sote Bridge		COORDINATE N:		DATE		DEPTH OF HOLE		DRILL RIG											
ELEVATION	DEPTH	THICKNESS	SECTION	COLOR	CONSIST. OR REL. DENS.	U.S.C.	MATERIAL	FORMATION	DESCRIPTION	GROUND W.T. AND CASING	DEPTH	SAMPLING INST. TEST NO.	DEPTH	CHECKD	Mutowembwa	10.0 m	DRILLED	Mole	
SCALE	DATE	1111.43 m	1111.43 m	75.3	~59.6	FROM 11 June 1993	TO 14 June 1993	1993	INSITU TEST	STANDARD PENETRATION TEST	Blow cm every 10cm	Blows every 10cm	N VALUE	50	40	30	20	10	0
110.83	0.6	0.6	+++	brown			Granite		coarse grained completely weathered very weak	200m				1.0					
			+++											1.3	50/125				
			+++											2.0	50/72				
			+++	light yellow-ish brown			Gneissic Granite		coarse grained moderately weathered strong and banded with closely spaced joints					3.0	50/5				
			+++											3.3	50/5				
			+++											4.0					
			+++											4.3	50/5				
			++											5.0					
			++											5.3	50/0				
			++											6.0					
			++											6.3	50/0				
			++	light brown-ish grey			Gneissic Granite		coarse grained slightly weathered very strong with medium spaced joints and fissures					7.0					
			++											7.3	50/0				
			++																
1101.43	10.0	5.2																	

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

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DRILL LOG

HOLE NO. BS-2 SHEET NO. 5 OF 17

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA		
LOCATION Sote Bridge										DEPTH OF HOLE 6.0m		
COORDINATE N: FROM 17 June 2018 June 1993										CHECKD Mutowembwa		
DATE 75.3 ~ 59.6										DRILLED Marimirofa		
DIA. OF HOLE 75.3 ~ 59.6										TEST VALUES		
ELEVATIONS	DEPTH	THICKNESS	SECTION	COLOR	CONSISTENCY OR REL. DENS.	U.S.C.	MATERIAL	FORMATION	DESCRIPTION	GROUND W.L. AND CASING	DEPTH	STANDARD PENETRATION TEST
SCALE	DATE	SCALE	DATE	SCALE	DATE	SCALE	DATE	SCALE	DATE	SCALE	DATE	SCALE
1106.77	0.83	0.83	+++	light pinkish grey			Granite		coarse grained, slightly weathered, massive, very strong with widely spaced joints	0.80	1.0	
1106.20	1.4	0.57	+++	brownish grey			Granite		coarse grained, highly weathered, weak		1.3	50/11.5
1105.50	2.1	0.7	+++	brownish grey			Granite		coarse grained, highly weathered, strong and massive with closely spaced joints		2.0	50/0
1104.60	3.0	0.9	+++	light brownish grey			Granite		coarse grained, highly weathered		3.0	48/30
1103.00	4.6	1.6	+++	yellowish brown			Gneissic Granite		moderately weathered, moderately strong and banded with very closely spaced joints			
1101.60	6.0	1.4	+++	light grey			Gneissic Granite		coarse grained, fresh very strong with widely spaced joints			

HOLE NO. ()

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NIPPON KOEI CO., LTD.
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DRILL LOG

HOLE NO. BS-3 SHEET NO. 6 OF 17

HOLE NO. ()

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA								
LOCATION Sote Bridge		COORDINATE N:		E:		DEPTH OF HOLE		DRILL RIG										
ELEVATION	DEPTH	THICKNESS	SECTION	COLOR	CONSIST. CV. OR REL. DENS.	U.S.C.	MATERIAL	FORMATION	DESCRIPTION	GROUND W. I. AND CASING	SAMPLING DEPTH	INSITU TEST NO.	CHECKD	Mutowembwa	6.8m	DRILLED	Marimirofa	
SCALE	DATE	DIAMETER OF HOLE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
1109.48	1.8	1.8	X X X X X X X X X	dark brown compact			Silty sand		subangular, well graded with occasional quartz gravel	1.50m								
1106.68	4.6	2.8	++	light grey			Gneissic Granite		coarse grained, fresh very strong with widely spaced joints									
1105.28	5.0	0.4	++	yellowish brown			Gneissic Granite		moderately weathered, moderately strong									
1104.48	6.8	1.8	++	light grey			Gneissic Granite		coarse grained, fresh very strong with widely spaced joints									

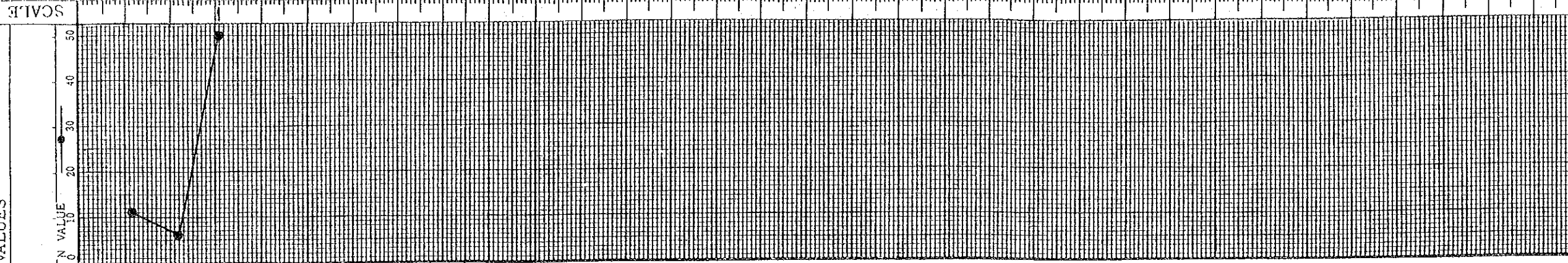
* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

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DRILL LOG

HOLE NO. BP-1 SHEET NO. 7 OF 17

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA		
LOCATION Pembezi River										DEPTH OF HOLE 8.5m		
ELEVATION 2996.17m										DRILL RIG Mole		
DIA. OF HOLE 75.3 ~ 59.6 mm										MUTOWIMBA DRILLED Marimirofa		
DATE 2996.17m										CHECKD		
COORDINATE N: FROM 24 June 1993										INSITU TEST		
E: TO 26 June 1993										SAMPLING		
DATE										DEPTH		
DESCRIPTION										NO.		
FORMATION										AND CASING		
MATERIAL										GROUND W.L.		
U.S.C.										3.0m		
REL. DENS. OR CONSIST. CY.										GROUND W.L.		
COLOR										DESCRIPTION		
SECTION										DESCRIPTION		
THICKNESS										DESCRIPTION		
DEPTH										DESCRIPTION		
ELEVATIONS										DESCRIPTION		
SCALE										DESCRIPTION		
DATE										DESCRIPTION		
299537	0.8	0.8	X X X X X X	dark grey	compact	Silty sand	subangular, well graded					
299537	2.8	2.0	0	dark brown	loose	Sand	homogeneous subangular coarse with some fine material and quartz and feldspar cobbles					
299297	3.2	0.4	X X X	light grey	very stiff	Silty clay	fissured, with occasional fragments					
298767	8.5	5.3	+++ +++ +++ + +++ +++ +++ +++ +++	pinkish grey		Granite	coarse grained slightly weathered very strong and massive with closely spaced joints and fissures					



HOLE NO. ()

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BP-2 SHEET NO. 8 OF 17

PROJECT: The Basic Design Study on the Project for Rehabilitation of Rural Roads			CLIENT: JICA	DRILL RIG: Mole				
LOCATION: Pembezi River			DEPTH OF HOLE: 11.4 m	DRILLED: Marimirofa				
ELEVATION: 2994.77 m		COORDINATE N: E:	CHECKD: Mutembwa	TEST VALUES				
DIAMETER OF HOLE: 75.3 ~ 59.6 mm		DATE: FROM 30 June TO 2 July 1993	STANDARD PENETRATION TEST					
CONSISTENCY OR REL. DENS. U.S.C. MATERIAL FORMATION		DESCRIPTION	GROUND W.L. AND CASING	NO.	DEPTH			
COLOR						DEPTH (cm)	Blows every 10cm	N VALUE
THICKNESS		SECTION	ELEVATIONS	DEPTH (m)	N VALUE			
DEPTH						SCALE	DATE	
ELEVATIONS		<p>homogeneous subangular, coarse with some quartz, feldspar, granitic and doleritic cobbles</p> <p>coarse grained, highly weathered very weak, very closely spaced joints and fissures with greenish-grey clay between fractures</p> <p>coarse grained slightly weathered very strong with extremely closely spaced joints</p>	2991.77	3.0	3.0	1.0		
THICKNESS			<p>pinkish brown loose</p>			1.3	4/30	
DEPTH						2.0	2.3	9/30
ELEVATIONS			<p>pinkish grey</p>			3.0		
THICKNESS				<p>+++</p>			3.3	50/0
DEPTH							4.0	4.3
ELEVATIONS				<p>++</p>			5.0	
THICKNESS							5.3	50/0
DEPTH						6.0	6.3	50/0
ELEVATIONS			<p>++</p>			7.0		
THICKNESS				<p>+++</p>			7.3	50/0
DEPTH							8.0	8.3
ELEVATIONS				<p>++</p>			9.0	
THICKNESS					9.3	50/2		
DEPTH					10.0	10.3	50/0	
ELEVATIONS		2993.37	11.4	5.8				

HOLE NO. ()

* CONSISTENCY OR RELATIVE DENSITY
 * UNIFIED SOIL CLASSIFICATION

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DRILL LOG

HOLE NO. BP-3 SHEET NO. 9 OF 17

PROJECT		The Basic Design Study on the Project for Rehabilitation of Rural Roads			CLIENT		JICA				
LOCATION		Pembezi River			DEPTH OF HOLE		10.0m				
ELEVATION		2996.28m			CHECKD		Mutowembwa				
DATE		299578			SAMPLING		TEST VALUES				
SCALE		2996.28			IN SITU TEST		STANDARD PENETRATION TEST				
ELEVATIONS		2996.28			DEPTH		Blow every 10cm				
DEPTH		0.5			NO		Blow every 10cm				
THICKNESS		0.5			AND CASING		Blow every 10cm				
SECTION		X-X			GROUND W.L.		Blow every 10cm				
COLOR		light grey			3.50		Blow every 10cm				
CONSISTENCY OR REL. DENS.		compact			m		Blow every 10cm				
U.S.C.					3.50		Blow every 10cm				
MATERIAL		Silty sand			3.50		Blow every 10cm				
FORMATION					3.50		Blow every 10cm				
DESCRIPTION		subangular, well graded with occasional pebbles			3.50		Blow every 10cm				
		coarse grained, highly weathered, very weak with very closely spaced joints			3.50		Blow every 10cm				
		coarse grained, slightly weathered, very strong with very closely spaced joints and fissures			3.50		Blow every 10cm				
299578	0.5	++	light grey	compact	Silty sand		subangular, well graded with occasional pebbles	1.0			
		++					coarse grained, highly weathered, very weak with very closely spaced joints	1.3	38/30		
		++	pinkish		Granite			2.0			
		++	brown					2.3	50/0		
		++						3.0			
		++						3.3	50/20		
		++						4.0			
		++	dark		Granite		coarse grained, slightly weathered, very strong with very closely spaced joints and fissures	4.3	50/0		
		++	pinkish					5.0			
		++	grey					5.3	50/0		
		++									
2996.28	10.0	5.0									

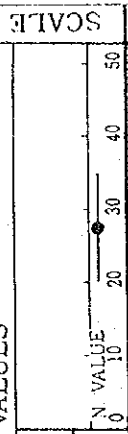
HOLE NO. ()

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BP-4 SHEET NO. 10 OF 17

PROJECT		The Basic Design Study on the Project for Rehabilitation of Rural Roads				CLIENT	JICA										
LOCATION		Pembezi River				DEPTH OF HOLE	8.5m										
ELEVATION	2994.90m	DIAMETER OF HOLE	75.3	DATE	FROM 3 July	CHECKD	Mufowembwa	DRILL RIG	Mole								
SCALE		COORDINATE N:		DATE	TO 4 July 1993	INSITU TEST		DRILLED	Marimirofa								
ELEVATIONS		THICKNESS		SECTION	COLOR	CONSISTENCY OR REL. DENS.	U.S.C.	MATERIAL	FORMATION	DESCRIPTION	GROUND W.L. AND CASING	DEPTH	SAMPLING NO.	INSITU TEST	STANDARD PENETRATION TEST	TEST VALUES	
2991.40		3.5 3.5		+	pinkish brown	loose		Sand		homogeneous subangular, coarse, with some quartz, feldspar, granite and dolerite pebbles and cobbles	2.10	1.0					
2996.4		8.5 5.0		++				Granite		coarse grained, slightly weathered, very strong extremely closely spaced joints with a very stiff greenish grey clay between joints		1.3	7/30				
				++								2.0	11/30				
				++								3.0	2/730				
				++								4.0	50/0				



HOLE NO. ()

* CONSISTENCY OR RELATIVE DENSITY
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NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

DRILL LOG

HOLE NO. BDI-1 SHEET NO. 11 OF 17

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA	
LOCATION Devure Bridge (Route 359)										DEPTH OF HOLE 10.4m	
COORDINATE N: E:										DRILL RIG Mole	
DATE FROM 30 June TO 1 July 1993										CHECKD Mutowemba	
DIA. OF HOLE 75.3 ~ 59.6 mm										DRILLED Changachirere	
ELEVATION 811.73m										TEST VALUES	
SECTION THICKNESS DEPTH ELEVATIONS										STANDARD PENETRATION TEST	
MATERIAL U.S.C. REL. DENS. OR CONSIST. CY. COLOR										Blow Blows	
FORMATION										DEPTH cm	
DESCRIPTION										every 10cm	
GROUND W.L. AND CASING										N VALUE	
DEPTH										0 10 20 30 40 50	
NO.										SCALE	
810.75	1.0	1.0	light brown	compact	Sandy gravel					1.0	9/30
			pinkish brown		Sand					2.0	12/30
807.73	4.0	3.0	pinkish brown	compact						3.0	18/30
806.33	5.4	1.4	pinkish brown		Granite					4.0	27/30
			dark pinkish grey		Granite					4.3	27/30
801.33	10.4	5.0								5.0	50/10

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* UNIFIED SOIL CLASSIFICATION

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

HOLE NO. ()

DRILL LOG

HOLE NO. BDI-2 SHEET NO. 12 OF 17

PROJECT	The Basic Design Study on the Project for Rehabilitation of Rural Roads				CLIENT	JICA														
LOCATION	Devure Bridge (Route 359)				DEPTH OF HOLE	5.0m														
ELEVATION	806.36m	DIAMETER OF HOLE	75.3 ~ 59.6 mm	DATE	FROM 28 June TO 30 June 1993	CHECKD	Mutowembwa DRILLED Changochirere													
SCALE	ELEVATIONS	DEPTH	THICKNESS	SECTION	COLOR	CONSIST'Y OR REL. DENS.	U.S.C.	MATERIAL	FORMATION	DESCRIPTION	GROUND W.L. AND CASING	SAMPLING IN SITU TEST	NO.	DEPTH	TEST VALUES	STANDARD PENETRATION TEST	N VALUE	DRILL RIG	Mole	
																				Blow every 10cm
	801.36	5.0	5.0							coarse grained, fresh very strong and massive with very widely spaced joints and fissures	3.50									

HOLE NO. ()

NIPPON KOEI CO., LTD.
CONSULTING ENGINEERS, TOKYO.

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BDI-3 SHEET NO. 13 OF 17

HOLE NO. ()

PROJECT		The Basic Design Study on the Project for Rehabilitation of Rural Roads					CLIENT		JICA	
LOCATION		Devure Bridge (Route 359)					DEPTH OF HOLE		15.0m	
ELEVATION		808.65m		COORDINATE N:		DATE		FROM 24 June TO 26 June 1993		
SCALE		805.45		DIA. OF HOLE		75.3 ~ 59.6m		CHECKED		
DATE				CONSISTENCY OR REL. DENS.		U.S.C.		MATERIAL		
				COLOR				FORMATION		
				SECTION				DESCRIPTION		
				THICKNESS				AND CASING		
				DEPTH				SAMPLING		
				ELEVATIONS				NO.		
								DEPTH		
								INST.		
								TEST		
								NO.		
								TEST		
								TEST VALUES		
								STANDARD PENET-		
								RATION TEST		
								Blow Blows		
								every 10cm		
								DEPTH		
								cm		
								N VALUE		
								0 10 20 30 40 50		
808.65	3.2	3.2	XX XX XX XX	yellowish grey	medium dense	Silty sand	homogeneous with occasional quartz pebbles	Nil	1.0 1.3 44/30 2.0 2.3 21/30 3.0 3.3 27/30 4.0 4.3 45/30 5.0 5.3 90/23 6.0 6.3 50/0 7.0 7.3 50/0	
799.25	9.4	6.2	+++ ++ ++ ++ ++ ++ ++ ++ ++	brownish green		Dolerite	medium grained, moderately weathered, moderately weak and massive with medium spaced joints	NIL		
793.65	15.0	5.6	+++ ++ ++ ++ ++ ++ ++ ++	dark grey		Dolerite	medium grained, fresh, very strong and massive with very widely spaced joints			

* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BDI-4 SHEET NO. 14 OF 17

HOLE NO. ()

PROJECT		The Basic Design Study on the Project for Rehabilitation of Rural Roads				CLIENT	JICA	
LOCATION	Devure Bridge (Route 359)		COORDINATE	N:	DEPTH OF HOLE	16.0m		
ELEVATION	810.79m	DIA. OF HOLE	75.3 ~ 59.6 m	DATE	FROM	MUTOWEMBA	DRILLED	
SCALE	DATE	THICKNESS	DEPTH	ELEVATIONS	810.79	4.0	806.79	
SECTION	COLOR	CONSIST. OR REL. DENS.	U.S.C.	MATERIAL	FORMATION	DESCRIPTION	GROUND W.T. AND CASING	
DEPTH	THICKNESS	DEPTH	SAMPLING	INSITU TEST	NO.	DEPTH	STANDARD PENETRATION TEST	
810.79	4.0	4.0	1.0	1.3	24/30	2.0	2.3	
804.48	6.3	2.3	3.0	3.3	46/30	4.0	4.3	
799.98	10.8	4.5	5.0	5.3	100/25	6.0	6.3	
794.79	16.0	5.2	7.0	7.3	50/20	8.0	8.3	
			8.0	8.3	60/20	9.0	9.3	
			9.0	9.3	50/20	10.0	10.3	
			10.0	10.3	50/20			

* CONSISTENCY OR RELATIVE DENSITY
 * UNIFIED SOIL CLASSIFICATION

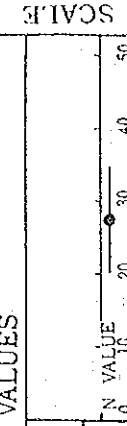
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DRILL LOG

HOLE NO. BN-1 SHEET NO. 15 OF 17

PROJECT The Basic Design Study on the Project for Rehabilitation of Rural Roads										CLIENT JICA	
LOCATION Nata Bridge										DEPTH OF HOLE 1.06m	
ELEVATION 2996.91m										DRILL RIG Mole	
DIAMETER OF HOLE ~59.6 mm										DRILLED Chiangwa	
DATE FROM 9 June TO 10 June 1993										TEST VALUES	
COORDINATE N: E:										STANDARD PENETRATION TEST	
GROUND W.L. AND CASING										Blows every 10cm	
DESCRIPTION										DEPTH cm	
MATERIAL										Blow cm	
U.S.C.										Blows every 10cm	
REL. DENS. OR CONSIST. CY										Blows every 10cm	
COLOR										Blows every 10cm	
SECTION										Blows every 10cm	
THICKNESS										Blows every 10cm	
DEPTH										Blows every 10cm	
ELEVATIONS										Blows every 10cm	
SCALE										Blows every 10cm	
DATE										Blows every 10cm	
2996.28	0.65	0.65	grey	loose	Sand					1.0	
			greenish grey	firm	Sandy clay					1.3 26/30	
2994.41	2.5	1.85								2.0	
2993.51	3.4	0.9	greenish white	dense	Sand					2.3 22/30	
			greenish white		Granite					3.0	
2991.21	5.7	2.3								3.3 38/20	
			reddish pink		Granite					4.0	
2989.46	7.45	1.75								4.3 54/10	
			whitish pink		Granite					5.0	
2988.85	11.06	3.61								5.3 50/5	
										6.0	
										6.3 50/0	

HOLE NO. ()



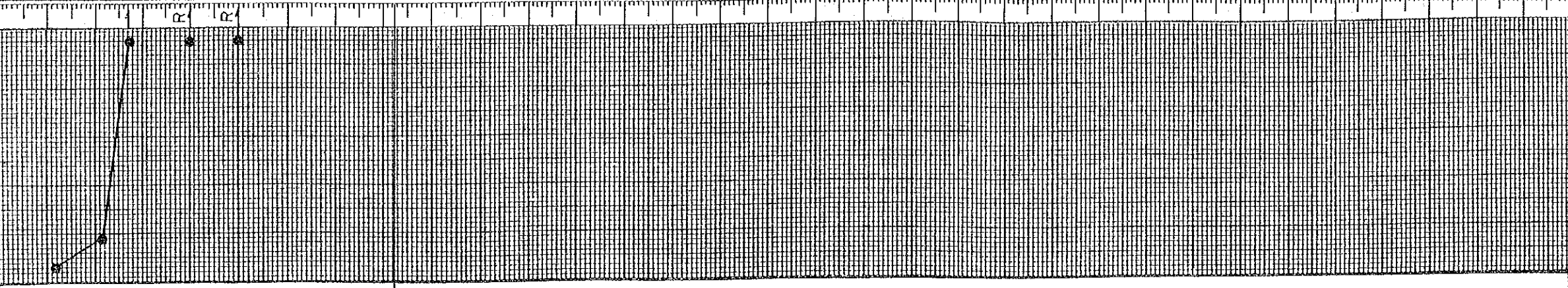
* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BN-2 SHEET NO. 16 OF 17

PROJECT		The Basic Design Study on the Project for Rehabilitation of Rural Roads				CLIENT		JICA						
LOCATION		COORDINATE N:		E:		DEPTH OF HOLE		DRILL RIG						
ELEVATION		DATE		FROM		CHECKD		DRILLED						
2994.83 m		~59.6 N		15 June TO 15 June 1993		Madziwa		Chiangwa						
DATE	SCALE	DIAMETER OF HOLE	SECTION	THICKNESS	COLOR	CONSISTENCY OR REL. DENS. U.S.C.*	MATERIAL	FORMATION	DESCRIPTION	GROUND W.L. AND CASING	SAMPLING DEPTH	INSITU TEST	STANDARD PENETRATION TEST	TEST VALUES
		2994.83 m												
2992.83		2.0	+	2.0	brown loose		Sand		coarse grained, river sand	0.10				
2992.13		2.7	+	0.7	greenish white		Sandy clay		cemented, coarse grained					
2991.73		3.1	+	0.4	greenish grey		Granite		highly weathered					
2990.89		3.94	+	0.84	greenish grey		Granite		moderately weathered					
			++						slightly to faintly weathered with depth,					
			++						coarse grained, fractured					
			++						fractures are infilled with greenish white material and tight					
			++											
			++											
			++											
			++											
2986.57		8.26	+	4.32										

SCALE



* CONSISTENCY OR RELATIVE DENSITY
* UNIFIED SOIL CLASSIFICATION

DRILL LOG

HOLE NO. BN - 3 SHEET NO. 17 OF 17

HOLE NO. ()

PROJECT		The Basic Design Study on the Project for Rehabilitation of Rural Roads				CLIENT		JICA						
LOCATION	Nata Bridge		COORDINATE N:		DEPTH OF HOLE	7.5m		DRILL RIG	Mole					
ELEVATION	2996.55 m	DIAMETER OF HOLE	~59.6 m	DATE	FROM 11 June TO 15 June 1993	CHECKD	Madziwa	DRILLED	Chiangwa					
SCALE	DATE	SECTION	THICKNESS	DEPTH	ELEVATIONS	TEST VALUES								
		CONSISTENCY OR REL. DENS.	U.S.C.*	MATERIAL	FORMATION	DESCRIPTION	GROUND W.L. AND CASING	DEPTH	NO.	SAMPLING	INSITU TEST	STANDARD PENETRATION TEST	Blows every 10cm	N VALUE
		COLOR						DEPTH				DEPTH		0 10 20 30 40 50
2996.15	0.4	grey loose		Sand		medium grained		1.3				1.3		
2995.55	1.0	pink		Boulder		moderately weathered		1.6				1.6		
2995.25	1.3	greenish grey		Granite		completely weathered		2.0				2.0		
						slightly weathered to fresh,		2.3				2.3		
						coarse grained,		3.0				3.0		
						extremely strong	NIL	3.3				3.3		
								4.0				4.0		
								4.3				4.3		
								5.0				5.0		
								5.3				5.3		
2989.05	7.5	6.2												

* CONSISTENCY OR RELATIVE DENSITY
 * UNIFIED SOIL CLASSIFICATION

NIPPON KOEI CO., LTD.
 CONSULTING ENGINEERS, TOKYO.

JICA