

2. 調査試錐コア記録

HOLE NAME NGJ5/43

Borehole No.	Rec. No.	From	To	Thickness	MajorID	Major	Detailed Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments
NGJ5/43	46	146.00	149.60	3.60	Ft	carbonaceous	m						brownish gray, soft - very soft, medium - high plastic, w/carbonateous at 148.35 - 148.45m
NGJ5/43	47	149.60	150.20	0.60	Cb		L						brownish black, cm in lower part
NGJ5/43	48	150.20	153.00	2.80	Ft		m						brownish gray, soft - very soft, medium plastic, w/carbonateous at 148.35 - 148.45m
NGJ5/43	49	153.00	154.20	1.20	Ft		m						greenish gray, soft - very soft, medium plastic
NGJ5/43	50	154.20	154.90	0.70	Ft		m						brownish gray, soft - very soft, medium plastic, cm
NGJ5/43	51	154.90	159.20	4.30	Ft		m						greenish gray, soft - stiff, medium plastic, clayey, w/cm at 156.60 - 157.20m
NGJ5/43	52	159.20	160.45	1.25	Ft		m						brownish gray, stiff, cm, coal fragment mixed in somepart
NGJ5/43	53	160.45	161.20	0.75	Cb	carbonaceous	m		L				brownish black, stiff, medium plastic
NGJ5/43	54	161.20	162.20	1.00	Ft	low quality coal	m		L				brownish gray, stiff, medium plastic, cm, coal fragment
NGJ5/43	55	162.20	162.57	0.37	Cl		i						black, earthy - dull, stiff
NGJ5/43	56	162.57	164.75	2.18	Ft	carbonaceous	m		L				brownish gray, soft - stiff, medium plastic
NGJ5/43	57	164.75	164.85	0.10	Cb		i					30	brownish black, stiff, cm
NGJ5/43	58	164.85	165.20	0.35	Cl	low quality coal	i		L				black, compact, hard, dull - semibright, seem to be Ch
NGJ5/43	59	165.20	165.40	0.20	Cb	carbonaceous	i		L				brownish gray, stiff, cm
NGJ5/43	60	165.40	166.95	1.55	Cl	low quality coal	i		L				brownish black, dull, brittle, incompact
NGJ5/43	61	166.95	167.25	0.30	Cb	carbonaceous	m		L				brownish black, soft - stiff, plastic, cm, coal fragment
NGJ5/43	62	167.25	168.30	1.05	Ft		m		L			15	brownish gray, soft, medium plastic, cm, w/Cb at 168.25 - 168.30m
NGJ5/43	63	168.30	168.50	0.20	Cl	low quality coal	i		L				brownish black, dull, compact, hard, rare Ch fragment, lense in somepart, weathered, moisture
NGJ5/43	64	168.50	168.80	0.30	Cb	carbonaceous	i		L				brownish black, soft, plastic, cm, coal fragment, moisture
NGJ5/43	65	168.80	169.10	0.30	Cl	low quality coal	i		L				brownish black, dull, compact, hard, rare Ch fragment, lense in somepart, weathered, moisture
NGJ5/43	66	169.10	169.27	0.17	Cb	carbonaceous	m		L				brownish black, soft, plastic, cm, coal fragment, moisture
NGJ5/43	67	169.27	170.80	1.53	Ft		m		m				brownish gray, soft - stiff, medium plastic, rare cm
NGJ5/43	68	170.80	178.00	7.20	Ft		m		m				greenish gray, stiff, medium plastic, compact, w/pyrite crystal filled in somepart
NGJ5/43	69	178.00	200.60	22.60	Ft		m		m				granule of quartz, calcareous banding, dense at 175.50 - 15.80m, shear 50 - 60 degree at 174.00 - 175.10m
													moderately reddish brown, mottled of dark yellowis orange/light greenish gray, soft - stiff, medium plastic, calcareous concretion at 181.00 - 182.00m

HOLE NAME		Rec No.		Major		MajorID		Major		Dated		Sphericity		Sorting		Bedding		Lamination		Basement		Dip		Comments																						
Borehole No.	NGJ5/43	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
From	To	Thickness	MajorID	Soil	Major	Dated	Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments																																	
0.00	2.85	2.85	S	Soil																																										
2.85	11.00	8.15	Fl																																											
11.00	18.00	7.00	Fl																																											
18.00	25.00	7.00	Fl																																											
25.00	40.00	15.00	Fl																																											
40.00	54.00	14.00	Fl																																											
54.00	60.00	6.00	Fl																																											
60.00	80.00	20.00	Fl																																											
80.00	93.20	13.20	St																																											
93.20	95.00	1.80	Ch	high quality coal																																										
95.00	95.40	0.40	Cl	low quality coal																																										
95.40	96.50	1.10	Cb	carbonaceous																																										
96.50	98.15	1.65	Fl																																											
98.15	98.35	0.20	Cb	carbonaceous																																										
98.35	98.80	0.45	Cl	low quality coal																																										
98.80	100.80	2.00	Cb	carbonaceous																																										
100.80	101.20	0.40	Ch	high quality coal																																										
101.20	102.40	1.20	Cb	carbonaceous																																										
102.40	104.18	1.78	Ch	high quality coal																																										
104.18	104.45	0.27	Ch	carbonaceous																																										
104.45	104.70	0.25	Cb																																											
104.70	105.35	0.65	Fl																																											
105.35	105.50	0.15	Cl	low quality coal																																										
105.50	105.70	0.20	Cb	carbonaceous																																										
105.70	106.00	0.30	Fl																																											
106.00	106.55	0.55	Cl	low quality coal																																										
106.55	106.75	0.20	Cb	carbonaceous																																										
106.75	107.15	0.40	Fl																																											
107.15	108.15	1.00	Fl																																											
108.15	109.00	0.85	Cb	carbonaceous																																										
109.00	109.85	0.85	Fl																																											
109.85	110.15	0.30	Cb	carbonaceous																																										
110.15	110.75	0.60	Fl																																											
110.75	110.90	0.15	Ch	high quality coal																																										
110.90	111.25	0.35	Cl	low quality coal																																										
111.25	111.35	0.10	Cb	carbonaceous																																										
111.35	111.75	0.40	Fl																																											
111.75	112.20	0.45	Cb	carbonaceous																																										
112.20	114.00	1.80	Fl																																											
114.00	115.00	1.00	Fl	Core Loss																																										
115.00	119.95	4.95	Fl																																											
119.95	141.00	21.05	Fl																																											
141.00	141.20	0.20	Fl																																											
141.20	142.80	1.60	Fl	Core Loss																																										
142.80	146.00	3.20	Fl																																											

HOLE NAME	Rec No.	From	To	Thickness	MajorID	Major	Detailed	Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments
NGJ4/43	1	0.00	0.55	0.55	E	Soil								brown gray,mudstone w/particles(ss,limestone), Limestone boulder at bottom 10cm
NGJ4/43	2	0.55	2.15	1.60	Fl		g							br gy - y gy,mottled color, soft weathered
NGJ4/43	3	2.15	3.40	1.25	Fl		g							Lt gy - Y gy,clayey
NGJ4/43	4	3.40	12.10	8.70	Fl		c							br gy,w/Limestone particles (max pebble)
NGJ4/43	5	12.10	37.30	25.20	Fl		g							br gy
NGJ4/43	6	37.30	42.60	5.30	Fl		c							br gy,w/Limestone cobble - boulder, many Limestone grains near bottom
NGJ4/43	7	42.60	47.15	4.55	Fl		g							br gy,w/Limestone grain - pebble
NGJ4/43	8	47.15	50.10	2.95	St		c	sa	m					br gy,w/Limestone grain - pebble
NGJ4/43	9	50.10	52.62	2.52	Fl		g							br gy,Limestone pebble at upper part, cobbles at lower part
NGJ4/43	10	52.62	53.40	0.78	Cg		c							br gy,w/Limestone grains rarely included
NGJ4/43	11	53.40	54.00	0.60	Fl		m							br gy,w/Limestone grains rarely included
NGJ4/43	12	54.00	54.27	0.27	St		c							br gy,w/Limestone grains rarely included
NGJ4/43	13	54.27	56.83	2.56	Fl		m							br gy,w/ mudstone layer (25cm)
NGJ4/43	14	56.83	62.75	5.92	Cg		p							br gy,w/Limestone pebble rarely included
NGJ4/43	15	62.75	79.20	16.45	Fl		g							br gy,w/Limestone grains included
NGJ4/43	16	79.20	79.67	0.47	Fl		m							br gy,w/Limestone grains rarely included
NGJ4/43	17	79.67	82.10	2.43	Fl		m							br gy,w/Limestone grains - pebbles
NGJ4/43	18	82.10	85.43	3.33	Fl		g							br gy,w/Limestone pebbles - boulders
NGJ4/43	19	85.43	87.20	1.77	Fl		g							br gy,w/Limestone grains rarely included
NGJ4/43	20	87.20	87.50	0.30	Fl		m							br gy,grain - boulder
NGJ4/43	21	87.50	90.00	2.50	Fl		g							br gy,w/Limestone grains rarely included
NGJ4/43	22	90.00	95.33	5.33	Fl		m							br gy,w/Limestone grains included
NGJ4/43	23	95.33	97.33	2.00	Fl		g							br gy,hard pebble-cobble-grained sandstone, w/reddish colored pebbles
NGJ4/43	24	97.33	99.55	2.22	St		c							moderate brown, slightly cement
NGJ4/43	25	99.55	122.00	22.45	Ftm		m			m				moderate brown, soft-stiff,medium plasticity, n(CaCO3)
NGJ4/43	26	122.00	128.80	6.80	Ftm		m							moderate reddish brown, stiff, slightly plasticity, n(CaCO3)
NGJ4/43	27	128.80	145.20	16.40	Ftg		g							a/a 107.70-122.00
NGJ4/43	28	145.20	147.00	1.80	Loss									
NGJ4/43	29	147.00	148.00	1.00	Ftm		m							moderate reddish brown, soft, slightly compact
NGJ4/43	30	148.00	150.25	2.25	Ftg		g							moderate yellowish brown, hard, moderately compact, include 1st pebble inpart
NGJ4/43	31	150.25	157.50	7.25	Ftg		g							moderate yellowish brown, slightly compact, stiff-soft
NGJ4/43	32	157.50	162.50	5.00	Ftg		g							dark yellowish orange, hard, compact, include 1st pebble inpart
NGJ4/43	33	162.50	168.00	5.50	Ftg		g							light yellowish orange, slightly compact,include 1st pebble inpart
NGJ4/43	34	168.00	196.70	28.70	Ftg		g							light yellowish orange, moderately-slightly compact, rare include 1st pebble inpart
NGJ4/43	35	196.70	198.80	2.10	Loss									
NGJ4/43	36	198.80	199.00	0.20	Ftg		g							a/a 157.50-162.50
NGJ4/43	37	199.00	200.00	1.00	Loss									
NGJ4/43	38	200.00	217.15	17.15	Ftg		g	sa a						dark yellowish orange, moderately-slightly compact, include 1st pebble inpart
NGJ4/43	39	217.15	220.00	2.85	Stm		f-vc							slightly cement, clayey, pebble mixed in lowerpart, pebble of qtz,ss,t,sh,most
NGJ4/43	40	220.00	223.80	3.80	Loss									a/a 217.15-220.00
NGJ4/43	41	223.80	224.00	0.20	Stm		f-vc	sa a						
NGJ4/43	42	224.00	226.80	2.80	Loss									
NGJ4/43	43	226.80	227.00	0.20	Stm		f-vc	sa a						a/a 217.15-220.00
NGJ4/43	44	227.00	228.00	1.00	Loss									
NGJ4/43	45	228.00	250.00	22.00	Ftg		g							dark yellowish orange, mottled of mod rd br,vlt gy, slightly-moderately compact,soft-stiff in upperpart with v-f sand mixed @228.20-229.50, w/l's grain include pebble&cobble @241.00-247.00

HOLE NAME NGJ3/43

Borehole No.	Rec No.	From	To	Thickness	Major	Detailed	Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments
NGJ3/43	100	183.60	185.70	2.10	Consolidated Silt+ Clay + Mud (Ft)	m			m		s		greenish grey, stiff, soft, medium plasticity w/CaO3
NGJ3/43	101	185.70	186.00	0.30	High Coal Quality	h			L		s		black, semibright, hard, brittle (compression)
NGJ3/43	102	186.00	186.50	0.50	Carbonaceous	h			L		s		brownish black, soft, plastic, cm, clayey
NGJ3/43	103	186.50	187.60	1.10	High Coal Quality	h			L			20	black, semibright-dull, hard, compact, subconcordal
NGJ3/43	104	187.60	187.80	0.20	Carbonaceous	m			L				brownish black, soft, plastic, cm, clayey
NGJ3/43	105	187.80	191.60	3.80	Consolidated Silt+ Clay + Mud (Ft)	m			m				brownish grey-greenish grey, soft-stiff, medium, plasticity, pyrite crystal
NGJ3/43	106	191.60	191.85	0.25	Low Coal Quality	l			L			35	188.65-188.80m (still continue)
NGJ3/43	107	191.85	192.25	0.40	Carbonaceous	l			L				brownish black, dull, moisture, Ch fragment mixed in some part
NGJ3/43	108	192.25	200.00	7.75	Consolidated Silt+ Clay + Mud (Ft)	m			m				brownish grey, soft-stiff, medium, plasticity
NGJ3/43	109	200.00	201.24	1.24	Consolidated Silt+ Clay + Mud (Ft)	m			L				greenish grey, soft-stiff, medium-high plasticity nodule CaCO3, shear 45 55 degree, w/brownish grey 197.95-198.65m clayey, Cm
NGJ3/43	110	201.24	201.37	0.13	Low Coal Quality	l			L			20	brownish grey, clayey, medium plastic, soft-stiff, Cm, w/Cb 200.20-200.45m
NGJ3/43	111	201.37	201.95	0.58	Carbonaceous	l			L				brownish black, dull, compact, hard
NGJ3/43	112	201.95	203.55	1.60	Consolidated Silt+ Clay + Mud (Ft)	m			L				brownish grey, soft, clayey, Cm
NGJ3/43	113	203.55	203.60	0.05	Carbonaceous	m			m				olive grey, soft-stiff, medium plastic
NGJ3/43	114	203.60	203.75	0.15	Low Coal Quality	l			L			20	brownish grey, soft, clayey, Cm
NGJ3/43	115	203.75	203.87	0.12	Carbonaceous	l			L				brownish grey, dull, stiff, compact
NGJ3/43	116	203.87	204.30	0.43	Low Coal Quality	l			L				brownish grey, soft, clayey, Cm
NGJ3/43	117	204.30	204.40	0.10	Carbonaceous	l			L				brownish grey, dull, stiff, compact
NGJ3/43	118	204.40	208.85	4.45	Consolidated Silt+ Clay + Mud (Ft)	m			L				brownish grey, Cm, soft-stiff, plastic, w/ light greenish grey 206.30 206.65m and Cb 207.20 207.55m, 208.89-208.85m, sheared 55 degree(ch fragment)
NGJ3/43	119	208.85	209.05	0.20	Low Coal Quality	l			L			20	brownish black, dull, hard
NGJ3/43	120	209.05	209.30	0.25	Carbonaceous	l			L				brownish black, soft-stiff, moisture
NGJ3/43	121	209.30	209.60	0.50	Consolidated Silt+ Clay + Mud (Ft)	m			L				brownish grey, soft-stiff, medium plasticity, shear 209.50m 60 degree, 209.70m 50 degree
NGJ3/43	122	209.60	210.15	0.35	Low Coal Quality	l			L				brownish black, dull, hard, compact
NGJ3/43	123	210.15	210.25	0.10	Carbonaceous	l			L				brownish black, soft-stiff, moisture
NGJ3/43	124	210.25	211.00	0.75	Consolidated Silt+ Clay + Mud (Ft)	m			L				brownish grey, soft-stiff, medium plastic
NGJ3/43	125	211.00	211.10	0.10	Carbonaceous	h			L				brownish black, soft, Cm
NGJ3/43	126	211.10	211.66	0.56	High Coal Quality	h			L			15 20	black, semibright, hard, compact, small broken gastropods (fossil) w/ Cl, dull 211.30-311.45m
NGJ3/43	127	211.66	212.00	0.34	Low Coal Quality	l			L				brownish black, dull, hard, compact
NGJ3/43	128	212.00	212.30	0.30	High Coal Quality	h			L				black, semibright, hard, compact, small broken gastropods (fossil) w/ Cl, dull 211.30-311.45m
NGJ3/43	129	212.30	212.60	0.30	Carbonaceous	h			L				brownish black, soft, Cm
NGJ3/43	130	212.60	213.15	0.55	High Coal Quality	h			L				black, semibright, hard, compact, small broken gastropods (fossil) w/ Cl, dull 211.30-311.45m
NGJ3/43	131	213.15	213.40	0.25	Carbonaceous	h			L				brownish black, soft, Cm
NGJ3/43	132	213.40	213.53	0.13	High Coal Quality	h			L			50	black, semibright, hard, compact, small broken gastropods (fossil) w/ Cl, dull 211.30-311.45m
NGJ3/43	133	213.53	213.97	0.44	Carbonaceous	l			L				brownish black, soft, Cm
NGJ3/43	134	213.97	214.17	0.20	Low Coal Quality	l			L				brownish black, dull, hard, compact
NGJ3/43	135	214.17	215.30	1.13	Consolidated Silt+ Clay + Mud (Ft)	m			L				brownish grey, soft-stiff, medium plastic, Cm
NGJ3/43	136	215.30	217.10	1.80	Consolidated Silt+ Clay + Mud (Ft)	m			L				light greenish grey, stiff, compact, pyrite crystal in lower part

HOLE NAME	NGJ3/43	Rec No.	From	To	Thickness	MajorID	Major	Detailed	Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments
NGJ3/43	49	151.05	151.52	0.47	Ch	High Coal Quality		h			L	I	g		black, hard, semibright, compact, brittle
NGJ3/43	50	151.52	151.60	0.08	Cl	Low Coal Quality		l			L	I	s		brownish black, dull, rare bright, hard, compact
NGJ3/43	51	151.60	153.65	2.05	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			m		s		olive gray, hard, compact, cm @152.35-152.45, 152.75-153.65, soft-stiff, medium plasticity in lower part
NGJ3/43	52	153.65	157.07	3.42	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			m	I	g		v. light gray, soft-stiff, medium plasticity
NGJ3/43	53	157.07	157.23	0.16	Cb	Carbonaceous					L	I	g	30	brownish gray, soft, clayey
NGJ3/43	54	157.23	157.55	0.32	Cl	Low Coal Quality		l			L	I	g		brownish black, dull, rare bright, hard, compact
NGJ3/43	55	157.55	157.58	0.03	Cb	Carbonaceous					L	I	g		brownish gray, soft, clayey
NGJ3/43	56	157.58	157.70	0.12	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			m	I	g	30	olive gray, soft, plasticity
NGJ3/43	57	157.70	157.80	0.10	Cb	Carbonaceous		m			L	I	g		brownish gray, soft, clayey
NGJ3/43	58	157.80	158.00	0.20	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			m	I	g		olive gray, soft, plasticity
NGJ3/43	59	158.00	158.50	0.50	Cb	Carbonaceous					L	I	g	20	brownish gray, soft, clayey
NGJ3/43	60	158.50	158.85	0.35	Cl	Low Coal Quality		l			L	I	g		brownish black, dull, rare bright, hard, compact
NGJ3/43	61	158.85	158.87	0.02	Cb	Carbonaceous					L	I	g		brownish gray, soft, clayey
NGJ3/43	62	158.87	159.10	0.23	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			m	I	g	20	light greenish gray, compact
NGJ3/43	63	159.10	159.68	0.58	Ch	High Coal Quality		h			L	I	g		black, dull semibright, hard, compact, brittle, subconoidal fracture
NGJ3/43	64	159.68	159.78	0.10	Cb	Carbonaceous					L	I	g	25	olive gray, hard, compact
NGJ3/43	65	159.78	160.23	0.45	Ch	High Coal Quality		h			L	I	g	25	black, semibright-dull, hard, compact, subconoidal fracture
NGJ3/43	66	160.23	160.65	0.42	Cl	Low Coal Quality		l			L	I	g		black, dull, moderate compact, moderate hard
NGJ3/43	67	160.65	160.90	0.25	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			L	I	s		yellowish gray, hard, compact, small broken gastropods(fossil)
NGJ3/43	68	160.90	161.00	0.10	Cl	Low Coal Quality		l			L	I	g	30	brownish black, dull, moderate compact, moderate hard
NGJ3/43	69	161.00	162.20	1.20	Ch	High Coal Quality		h			L	I	g		black, semibright, hard, compact, subconoidal fracture, w/heavy pyrite dens 161.80-161.85m
NGJ3/43	70	162.20	162.40	0.20	Cb	Carbonaceous					L	I			brownish black, soft, moisture, clayey
NGJ3/43	71	162.40	162.50	0.10	Ch	High Coal Quality		h			L	I			black, semibright, hard, compact, subconoidal fracture, w/heavy pyrite dens 161.80-161.85m
NGJ3/43	72	162.50	162.63	0.13	Cb	Carbonaceous					L	I			brownish black, soft, moisture, clayey
NGJ3/43	73	162.63	162.73	0.10	Ch	High Coal Quality		h			L	I			black, semibright, hard, compact, subconoidal fracture, w/heavy pyrite dens 161.80-161.85m
NGJ3/43	74	162.73	164.00	1.27	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			L	I	s		light olive gray, hard, compact
NGJ3/43	75	164.00	164.06	0.06	Cb	Carbonaceous					L	I	g		brownish black, hard, layer
NGJ3/43	76	164.06	164.67	0.61	Cl	Low Coal Quality		l			L	I	g		black, semibright, hard, compact, subconoidal fracture, w/heavy pyrite dens 161.80-161.85m
NGJ3/43	77	164.67	164.88	0.21	Cb	Carbonaceous					L	I	g		brownish black, soft, moisture, clayey
NGJ3/43	78	164.88	165.10	0.22	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			L	I	g		dark gray, soft, plastic, clayey
NGJ3/43	79	165.10	165.47	0.37	Cb	Carbonaceous					L	I	s		brownish black, soft, moisture, clayey
NGJ3/43	80	165.47	165.57	0.10	Ch	High Coal Quality		h			L	I	s		black, semibright-dull, compact, hard, pyrite layer 165.44-165.47m
NGJ3/43	81	165.57	165.73	0.16	Cb	Carbonaceous					L	I	s		brownish black, soft, moisture, clayey
NGJ3/43	82	165.73	165.90	0.17	Cl	Low Coal Quality		l			L	I	s		brownish black, soft,
NGJ3/43	83	165.90	166.07	0.17	Cb	Carbonaceous					L	I	s	30	brownish black, soft, moisture, clayey
NGJ3/43	84	166.07	167.55	1.48	Ch	High Coal Quality		h			L	I	s		black, semibright-dull, hard, compact, clay parting
NGJ3/43	85	167.55	168.60	1.05	Cb	Carbonaceous					L	I	s		brownish black, soft, moisture, slightly compact
NGJ3/43	86	168.60	170.40	1.80	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			L	I	g		olive gray, hard, compact, brittle in upper & lower part (compress brittle)
NGJ3/43	87	170.40	171.05	0.65	Cb	Carbonaceous					L	I	g		brownish black, soft,
NGJ3/43	88	171.05	171.40	0.35	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			L	I	s		brownish gray, soft, plastic
NGJ3/43	89	171.40	172.00	0.60	Cb	Carbonaceous					L	I	g		brownish black, compact, hard
NGJ3/43	90	172.00	172.70	0.70	Ch	High Coal Quality		h			L	I	g		black, semibright, compact, hard
NGJ3/43	91	172.70	173.32	0.62	Cb	Carbonaceous					L	I	g	20	brownish black, stiff, slightly compact
NGJ3/43	92	173.32	174.60	1.28	Ch	High Coal Quality		h			L	I	s		black, semibright-dull, compact, hard
NGJ3/43	93	174.60	174.86	0.26	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			L	I	g	10	yellowish gray, hard, compact
NGJ3/43	94	174.86	178.55	3.69	Ch	High Coal Quality		h			L	I	g		black, semibright, compact, hard, w/Ftm 177.54-177.65in & Cb 177.65-177.90m
NGJ3/43	95	178.55	180.80	2.25	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			m	I	g	15	olive gray, hard, compact, brittle
NGJ3/43	96	180.80	181.62	0.82	Ch	High Coal Quality		h			m	I	g		black, semibright, compact, hard, subconoidal fracture
NGJ3/43	97	181.62	182.30	0.68	Ftm	Consolidated Silt+ Clay +Mud (Ft)		m			m	I	g		olive gray, hard, compact
NGJ3/43	98	182.30	183.30	1.00	Ch	High Coal Quality		h			L	I	g	20	black, semibright, compact, hard, subconoidal fracture
NGJ3/43	99	183.30	183.60	0.30	Cb	Carbonaceous					L	I	g		brownish black, slightly compact, moisture

HOLE NAME NGJ3/43

Borehole No.	Rec No.	Thickness	Major	Detailed	Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments
		To	From	Major	Soil						
NGJ3/43	1	1.00	0.00	E							dark yellowish orange, soft-v soft, moisture, plasticity, clayey
NGJ3/43	2	3.20	1.00	Ftm	Consolidate Silt+ Clay +Mud (Ft)	m					dark yellowish orange, mottled of v.it gy, soft-stiff, pebble mixed
NGJ3/43	3	3.80	3.20	LOSS	CORE LOSS						a/a 1.00-3.20
NGJ3/43	4	4.00	3.80	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					moderate reddish brown, stiff, compact, pebble mixed, shear 6.00-10.15/35°
NGJ3/43	5	21.00	4.00	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m	m				60" mottled of mod rd br/v lt mv @19.00-21.00
NGJ3/43	6	29.85	21.00	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m	m				dark yellowish orange, mottled of mod rd br/v lt gy, slightly compact, pebble mixed, graded v. sand in lower part
NGJ3/43	7	29.85	29.85	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m	m				dark yellowish orange, moderately slightly cement,
NGJ3/43	8	31.00	29.85	Svf	Consolidated Sand(Si)	vf:m					loose, pebble of qtz, qzite, sst, sh
NGJ3/43	9	32.80	31.00	LOSS	CORE LOSS						moderate reddish brown, stiff, compact, with pebble of sst/silt/qlz/qzite size 0.5-1.0 cm, r-sr @43.80-44.50 and Rock Core Sample Test @42.00-42.30,
NGJ3/43	10	33.05	32.80	Gp	Unconsolidated Gravel	p					42.30-42.60, 43.05-43.25, 46.00-46.30, 46.50-46.80, 47.20-47.40
NGJ3/43	11	49.00	33.05	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					moderate reddish brown, stiff, compact, medium slightly plasticity,
NGJ3/43	12	50.70	49.00	LOSS	CORE LOSS						shear 48.90-49.00/35°, 51.80-52.00/45°, hard in lower part, n(CaCO ₃), v. sand mixed
NGJ3/43	13	69.60	50.70	Svf	Consolidated Sand(Si)	f-vc					brownish gray, dark yellowish orange, muddy, shear 68.90-69.80/35°
NGJ3/43	14	74.30	69.60	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m	p				brownish gray, stiff, compact
NGJ3/43	15	74.30	74.30	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					greenish gray, silt, compact, slightly calcareous
NGJ3/43	16	76.00	74.30	Ftg	Consolidated Mud with granule(Ft)	g					brownish gray, mottled of mod rd br/dk yl or, pebble of qtz, sh, sst, silt, mdst
NGJ3/43	17	77.50	76.00	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					brownish gray, stiff, compact, pebble mixed, n(CaCO ₃)
NGJ3/43	18	107.50	77.50	Cgp	Consolidated Gravel(Cg)	p					brownish gray, slightly cement, framework: sst/sh/mdst/qlz, matrix: silt/clay
NGJ3/43	19	107.50	107.50	Ftg	Consolidated Mud with granule(Ft)	g					brownish gray, moderate moderate brown, stiff, compact
NGJ3/43	20	112.00	107.50	Cgp	Consolidated Gravel(Cg)	p					a/a 107.00-107.50, gravel size 1-7 cm, in lower part
NGJ3/43	21	116.00	112.00	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					moderate brown, soft-stiff, medium plasticity, n(CaCO ₃)
NGJ3/43	22	116.00	116.00	Ftg	Consolidated Mud with granule(Ft)	g					moderate brown, mottled of dark yellowish orange
NGJ3/43	23	116.75	116.00	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					moderate brown, soft-stiff, medium plasticity, n(CaCO ₃)
NGJ3/43	24	120.60	116.75	Ftg	Consolidated Mud with granule(Ft)	g					moderate brown, slightly cement
NGJ3/43	25	121.00	120.60	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					moderate brown, soft-stiff, medium plasticity, n(CaCO ₃)
NGJ3/43	26	124.70	121.00	Sft	Consolidated Sand(Si)	f-vc					light greenish gray, slightly cement, clayey, pebble mixed
NGJ3/43	27	124.95	124.70	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					moderate brown, soft-stiff, medium plasticity, n(CaCO ₃), many shear 126.80-130.60/55-60
NGJ3/43	28	134.00	124.95	Svf	Consolidated Sand(Si)	vf:f					light greenish gray, slightly cement, clayey, pebble mixed
NGJ3/43	29	134.70	134.00	LOSS	CORE LOSS						pebble of qtz, sst, mdst, sh size 0.5-3 cm.
NGJ3/43	30	136.70	134.70	Gp	Unconsolidated Gravel(G)	p					
NGJ3/43	31	137.00	136.70	LOSS	CORE LOSS						
NGJ3/43	32	139.00	137.00	Svf	Consolidated Sand(Si)	vf-vc					light greenish gray, slightly cement, clayey, pebble mixed
NGJ3/43	33	140.00	139.00	LOSS	CORE LOSS						
NGJ3/43	34	140.50	140.00	Svf	Consolidated Sand(Si)	vf-vc					light greenish gray, slightly cement, clayey, pebble mixed
NGJ3/43	35	140.75	140.50	Gp	Unconsolidated Gravel(G)	p					pebble of qtz, sst, mdst, sh size 1-5 cm.
NGJ3/43	36	140.90	140.75	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					moderate brown, soft-stiff, medium plasticity, n(CaCO ₃)
NGJ3/43	37	144.30	140.90	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					greenish gray, soft stiff, medium plasticity, n(CaCO ₄)
NGJ3/43	38	145.80	144.30	Svf	Consolidated Sand(Si)	vf:m					light greenish gray, slightly cement, n(CaCO ₅), pebble mixed
NGJ3/43	39	147.00	145.80	LOSS	CORE LOSS						
NGJ3/43	40	148.10	147.00	Svf	Consolidated Sand(Si)	vf:m					light greenish gray, slightly cement, n(CaCO ₅), pebble mixed
NGJ3/43	41	148.45	148.10	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					olive gray, soft-stiff, medium plasticity, cm
NGJ3/43	42	149.75	148.45	Cl	Low Coal Quality	l	m			10	brownish black, dull, rare bright, hard, compact
NGJ3/43	43	150.00	149.75	Cb	Carbonaceous	l					brownish gray, soft, clayey
NGJ3/43	44	150.13	150.00	Cl	Low Coal Quality	l				10	brownish black, dull, rare bright, hard, compact
NGJ3/43	45	150.27	150.13	Cb	Carbonaceous	l					soft, clayey
NGJ3/43	46	150.29	150.27	Cl	Low Coal Quality	l				10	brownish black, dull, rare bright, hard, compact
NGJ3/43	47	150.47	150.29	Ftm	Consolidated Silt+ Clay +Mud (Ft)	m					light olive gray, soft-stiff, medium plasticity, compact, cm
NGJ3/43	48	150.95	150.47	Cb	Carbonaceous	l					brownish gray, soft, clayey

HOLE NAME		NGJ2/43		Major		Detailed		Bedding		Lamination		Basement		Dip		Comments	
Borehole No.	Rec No.	From	To	Thickness	MajorID	Soil	Detailed	Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments			
NGJ2/43	1	0.00	1.60	1.60	E	Soil	g	sr	p	L				brown green, semi consolidated w/some grain			
NGJ2/43	2	1.60	3.50	1.90	Cg	Core Loss	g	sr	p	L				dark blue, limestone fragment, granule size			
NGJ2/43	3	3.50	6.00	2.50	Cg	Core Loss	g	sr	p	L				Core Loss			
NGJ2/43	4	6.00	7.00	1.00	Cg	Core Loss	g	sr	p	L				dark blue, limestone fragment, granule size			
NGJ2/43	5	7.00	14.60	7.60	Fl	Core Loss	g	sr	p	L				blue gray, w/pebble(not much), shear 50 degree at 14.60m			
NGJ2/43	6	14.60	21.50	6.90	Fl	Core Loss	g	sr	p	L				blue gray-dark blue, w/pebble-granule, shear 45 degree at 17.60m			
NGJ2/43	7	21.50	39.00	17.50	Fl	Core Loss	g	sr,sa	p	L				blue gray, w/granule(not much), shear 65 degree at 28.60m			
NGJ2/43	8	39.00	40.50	1.50	Cg	Core Loss	g	sr	p	L				blue gray, limestone fragment, quartz, shale etc very much			
NGJ2/43	9	40.50	46.15	5.65	Fl	Core Loss	g	sr	p	L				blue gray, w/pebble(not much), shear 45 degree at 44.50m			
NGJ2/43	10	46.15	48.00	1.85	Fl	Core Loss	g	sr	p	L				blue gray, w/pebble-granule			
NGJ2/43	11	48.00	85.60	37.60	Fl	Core Loss	g	sr	p	L				blue gray, w/pebble-granule(not much), shear 65 degree at 57.10m, 70 degree at 75.25m, 76.30m, 76.50m, 76.90m, 60 degree at 78.50m, 79.20m, 79.35m, 80.75m			
NGJ2/43	12	85.60	86.40	0.80	Cg	Core Loss	p	sr	p	L				blue gray, limestone fragment, sandstone pebble very much			
NGJ2/43	13	86.40	93.40	7.00	Fl	Core Loss	g	sr	p	L				blue gray, w/granule(not much)			
NGJ2/43	14	93.40	95.00	1.60	Cg	Core Loss	p	sr	p	L				blue gray, limestone fragment, sandstone pebble very much			
NGJ2/43	15	95.00	100.15	5.15	Fl	Core Loss	g	sr	p	L				blue gray, w/granule(not much)			
NGJ2/43	16	100.15	100.50	0.35	Cg	Core Loss	p	sr	p	L				blue gray, limestone fragment, sandstone pebble very much			
NGJ2/43	17	100.50	120.10	19.60	Fl	Core Loss	g	sr	p	L				blue gray, w/granule, shear 40 degree at 109.60m, 110.00m, 60 degree at 114.70m			
NGJ2/43	18	120.10	120.22	0.12	Cg	Core Loss	p	sr	p	L				blue gray, limestone fragment, very coarse sandstone-siltstone			
NGJ2/43	19	120.22	128.65	8.43	Fl	Core Loss	g	sr	p	L				blue gray, w/more granule			
NGJ2/43	20	128.65	129.50	0.85	Cg	Core Loss	p	sr	p	L				blue gray, limestone fragment, sandstone-siltstone granule pebble, shear 45 degree at 131.70m			
NGJ2/43	21	129.50	134.50	5.00	Fl	Core Loss	g	sr	p	L				blue gray, limestone fragment, sandstone pebble very much			
NGJ2/43	22	134.50	139.80	5.30	Fl	Core Loss	m	sr	p	m				brownish gray, w/limestone fragment, shear 60 degree at 131.65m			
NGJ2/43	23	139.80	149.30	9.50	Fl	Core Loss	g	sr	p	L				dark yellowish orange, compact, shear 35 degree at 136.60m, 45 degree at 137.45m, limestone nodule			
NGJ2/43	24	149.30	149.80	0.50	Cg	Core Loss	p	sr	p	L				moderately reddish brown, fragment of limestone, shear 65 degree at 147.70m			
NGJ2/43	25	149.80	150.20	0.40	Fl	Core Loss	g	sr	p	L				moderately reddish brown, sandstone/siltstone/shale/rare limestone, matrix mudstone/silt			
NGJ2/43	26	150.20	154.45	4.25	Fl	Core Loss	m	sr	p	L				reddish brown, w/pebble at 150.00 - 150.20m, compact			
NGJ2/43	27	154.45	154.65	0.20	Cg	Core Loss	p	sr	p	L				dark yellowish orange, calcareous			
NGJ2/43	28	154.65	155.80	1.15	Fl	Core Loss	g	sr	p	L				reddish brown, sandstone/siltstone/shale/rare limestone, matrix mudstone/silt			
NGJ2/43	29	155.80	157.80	2.00	Fl	Core Loss	g	sr	p	L				reddish brown, compact			
NGJ2/43	30	157.80	161.30	3.50	Fl	Core Loss	m	sr	p	L				dark yellowish orange, soft - stiff, compact, shear 50 degree at 157.20m			
NGJ2/43	31	161.30	162.30	1.00	Fl	Core Loss	m	sr	p	L				moderately reddish brown, fragment of limestone pebble mixed in part			
NGJ2/43	32	162.30	171.40	9.10	Fl	Core Loss	g	sr	p	L				dark yellowish orange, soft - stiff, plastic			
NGJ2/43	33	171.40	173.45	2.05	Fl	Core Loss	m	sr	p	L				moderately reddish brown, fragment of limestone pebble, shear 45 degree at 164.75m			
NGJ2/43	34	173.45	174.20	0.75	Cg	Core Loss	p	sr	p	L				dark yellowish orange, soft - stiff, plastic, shear 45 degree at 172.45m, w/granule in lower part			
NGJ2/43	35	174.20	176.00	1.80	Fl	Core Loss	m	sr	p	L				dark yellowish orange, soft - stiff, fragment of limestone pebble, mixed in part			
NGJ2/43	36	176.00	178.70	2.70	Fl	Core Loss	m	sr	p	L				dark yellowish orange, soft - stiff, plastic			
NGJ2/43	37	178.70	183.50	4.80	Fl	Core Loss	m	sr	p	L				moderately reddish brown, fragment of limestone pebble mixed in part			
NGJ2/43	38	183.50	185.60	2.10	Cg	Core Loss	p	sr	p	L				dark yellowish orange, soft - stiff, plastic			
NGJ2/43	39	185.60	188.60	3.00	Fl	Core Loss	g	sr	p	L				moderately reddish brown, sandstone/siltstone/mudstone/shale/rare limestone, matrix clay/silt			
NGJ2/43	40	188.60	192.05	3.45	Fl	Core Loss	m	sr	p	L				moderately reddish brown, fragment of limestone pebble mixed in part			
NGJ2/43	41	192.05	194.00	1.95	Fl	Core Loss	g	sr	p	L				dark yellowish orange, soft - stiff, plastic			
NGJ2/43	42	194.00	200.00	6.00	Fl	Core Loss	m	sr	p	L				moderately reddish brown, fragment of limestone pebble mixed in part			
NGJ2/43	42	194.00	200.00	6.00	Fl	Core Loss	m	sr	p	L				dark yellowish orange, soft - stiff, plastic, shear 60 degree at 195.20m, 35 degree at 196.55m			

HOLE NAME NGJ1/43

Borehole No.	Rec No.	From	To	Thickness	MajorID	Major	Detailed Sphericity	Sorting	Bedding	Lamination	Basement	Dip	Comments
NGJ1/43	40	97.25	97.35	0.10	Cl	low quality coal			L	I			brownish black dull,moisture, friable
NGJ1/43	41	97.35	97.48	0.13	Cb	carbonaceous			L	I			brownish gray soft,plastic,cm
NGJ1/43	42	97.48	97.56	0.08	Cl	low quality coal	m		L	I		48	brownish black dull,moisture, friable
NGJ1/43	43	97.56	98.43	0.87	Ft	high quality coal			L	I			light olive gray soft - stiff,plastic
NGJ1/43	44	98.43	99.15	0.72	Ch	high quality coal			L	I			brownish black,dull - semibright,hard,subconcordal fracture
NGJ1/43	45	99.15	99.80	0.65	Ft	high quality coal			L	I			olive black,hard,compact,rare coal fragment
NGJ1/43	46	99.80	100.00	0.20	Ch	high quality coal			L	I		52	brownish black,dull - semibright,hard,subconcordal fracture
NGJ1/43	47	100.00	100.45	0.45	Ft	low quality coal			L	I		52	olive black,hard,compact,small molluscan fossil
NGJ1/43	48	100.45	100.65	0.20	Cl	low quality coal			L	I			brownish black,semibright,hard,brITTLE
NGJ1/43	49	100.65	100.85	0.20	Ch	high quality coal			L	I			brownish gray stiff,cm
NGJ1/43	50	100.85	100.90	0.05	Cb	carbonaceous	m		L	I			olive gray soft,plastic
NGJ1/43	51	100.90	101.10	0.20	Ft	carbonaceous			L	I			brownish gray,soft,cm
NGJ1/43	52	101.10	101.15	0.05	Cb	low quality coal			L	I			brownish gray,soft,cm
NGJ1/43	53	101.15	101.33	0.18	Cl	low quality coal	m		L	I			brownish black,dull - semibright,hard brittle
NGJ1/43	54	101.33	101.73	0.40	Ft	high quality coal			L	I			light olive gray,soft,plastic,cm
NGJ1/43	55	101.73	101.90	0.17	Ch	low quality coal			L	I			black,semibright,hard brittle,subconcordal fracture
NGJ1/43	56	101.90	102.00	0.10	Cl	low quality coal			L	I			brownish black,dull, friable
NGJ1/43	57	102.00	103.25	1.25	Ft	carbonaceous	m		L	I			light olive gray,soft,plastic
NGJ1/43	58	103.25	103.40	0.15	Cb	low quality coal			L	I			brownish black, stiff,cm
NGJ1/43	59	103.40	103.60	0.20	Cl	high quality coal			L	I			brownish black dull,soft,moisture, clayey
NGJ1/43	60	103.60	103.87	0.27	Ch	high quality coal			L	I			black,semibright,hard,subconcordal fracture
NGJ1/43	61	103.87	106.85	2.98	Ft	carbonaceous	m		L	I			light greenish gray,clayey,soft,medium plastic
NGJ1/43	62	106.85	107.35	0.50	Ft	carbonaceous	m		L	I			light greenish gray,very soft,high plastic,cm,coal fragment
NGJ1/43	63	107.35	107.50	0.15	Cb	carbonaceous			L	I			brownish gray,soft,plastic,clayey,w/Cb at 107.77 - 107.80m
NGJ1/43	64	107.50	111.55	4.05	Ft	carbonaceous			L	I			brownish black,soft,plastic,cm,coal fragment,w/Ftm at 112.02 - 112.27m, w/Cl at 112.55 - 112.65m, shear 43 degree at 112.15m
NGJ1/43	65	111.55	112.85	1.30	Cb	carbonaceous	m		L	I			brownish gray,soft,plastic
NGJ1/43	66	112.85	113.00	0.15	Ft	low quality coal			L	I			brownish black dull, friable,hard
NGJ1/43	67	113.00	113.10	0.10	Cl	low quality coal			L	I			light greenish gray,soft,medium plastic,pyrite crystal in upperpart,calcareous pebble at 116.30 - 116.50m, shear 40 - 50 degree at 114.00 - 123.75m,w/cm,coal fragment at 115.25 - 115.45m
NGJ1/43	68	113.10	124.35	11.25	Ft	low quality coal			L	I			dark yellowish orange - moderately reddish brown, soft - stiff, mediumplastic, slightly, rare limestone pebble in somepart, shear 40 -60 degree at 136.00 - 138.00m, 143.00 - 151.00m, and hard,calcareous siltstone, weathered limestone at 154.55 - 154.85m
NGJ1/43	69	124.35	175.40	51.05	Ft	Core Loss							
NGJ1/43	70	175.40	178.00	2.60		Core Loss							

HOLE NAME	NGJ1/43	Borehole No.	Rec No.	From	To	Thickness	MajorID	Major	Detailed	Sphericity	Sorting	Bedding, Lamination	Basement	Dip	Comments
NGJ1/43	1	0.00	0.50	0.50	E				m						dark yellowish orange, fine - medium sand mixed, soft, plastic
NGJ1/43	2	0.50	11.50	11.00	Ft				m						dark yellowish orange - moderately reddish brown, soft - stiff, medium plastic, slightly - moderately compact, w/limestone pebble, mottled of light greenish gray, moderately reddish brown, shear 50 - 60 degree at 6.00 - 8.50m
NGJ1/43	3	11.50	13.10	1.60	Ft				g						moderately reddish brown - dark yellowish orange, slightly compact, pebble of mudstone subrounded, quartz, shear 60 degree at 13.50m, w/Ftm at 13.35 - 13.70m
NGJ1/43	4	13.10	18.60	5.50	Ft				m						moderately reddish brown, compact, hard, pebble of limestone impact, w/soft 16.40 - 17.46m
NGJ1/43	5	18.60	19.00	0.40	Cg				p	sr - r	p				moderately reddish brown, siltstone, (mainly), mudstone, silt, matrix, clay, silt, calcareous cement
NGJ1/43	6	19.00	21.75	2.75	Ft				m						moderately reddish brown, stiff, compact
NGJ1/43	7	21.75	22.50	0.75	Ft				m						greenish gray, stiff, silt - very fine sand mixed, calcareous cement, moderately reddish brown, soft - stiff, medium plastic, slightly - moderately compact, w/limestone pebble, mottled of light greenish gray, moderately reddish brown, shear 50 - 60 degree at 6.00 - 8.50m
NGJ1/43	8	22.50	22.70	0.20	Ft				m						moderately reddish brown, siltstone, (mainly), mudstone, silt, matrix, clay, silt, calcareous cement
NGJ1/43	9	22.70	22.95	0.25	Cg				p	sr - r	p				moderately reddish brown, hard, fragment of limestone pebble, changed color to greenish gray at 24.00 - 24.80m, 27.15 - 28.15m, 28.45 - 28.60m
NGJ1/43	10	22.95	29.70	6.75	Ft				m						greenish gray, slightly compact, pebble of siltstone, size 1 - 3cm.
NGJ1/43	11	29.70	30.00	0.30	Cg		Core Loss		p	sr - r	p				Core Loss
NGJ1/43	12	30.00	35.40	5.40	Cg				m						greenish gray, hard, cement in lower part, framework, sandstone, silt, mudstone, matrix, silt, very fine sand, slightly calcareous
NGJ1/43	13	35.40	35.70	0.30	Cg				p	sr - r	p				moderately reddish brown, stiff, rare pebble in some part
NGJ1/43	14	35.70	39.10	3.40	Ft				m						dark yellowish orange, framework, mudstone, siltstone, silt, size 0.2 - 2cm, matrix clay, silt
NGJ1/43	15	39.10	41.30	2.20	Cg				p	sr - r	p				dark yellowish orange, stiff - hard, pebble mixed in part, shear 45 - 65 degree at 43.30 - 44.70m, pebble of limestone mixed in part, mottled of moderately reddish brown
NGJ1/43	16	41.30	47.85	6.55	Ft				m						moderately reddish brown, mottled color, stiff
NGJ1/43	17	47.85	48.63	0.78	Ft				m						Core Loss
NGJ1/43	18	48.63	50.00	1.37	Ft				m						moderately reddish brown, mottled color, stiff
NGJ1/43	19	50.00	51.80	1.80	Ft				m						moderately blue gray, sandstone, mudstone pebble
NGJ1/43	20	51.80	54.40	2.60	Ft				p	sr - r	p				moderately reddish brown, stiff, limestone pebble at some part
NGJ1/43	21	54.40	65.00	10.60	Ft				m						moderately blue gray, siltstone, mudstone, quartz, silt pebble
NGJ1/43	22	65.00	67.80	2.80	Ft				m						moderately reddish brown, stiff, some limestone pebbles
NGJ1/43	23	67.80	71.70	3.90	Ft				m						moderately blue gray, siltstone, mudstone, quartz, silt pebble
NGJ1/43	24	71.70	73.20	1.50	Ft				p	sr - r	p				moderately reddish brown, stiff, some limestone pebbles, shear 45 - 50 degree at 73.20 - 74.20m
NGJ1/43	25	73.20	75.00	1.80	Ft				m						moderately blue gray, siltstone, mudstone, silt, quartz, pebble, size 0.5 - 4cm
NGJ1/43	26	75.00	78.75	3.75	Ft				p	sr - r	p				moderately reddish brown, soft - stiff, medium plastic
NGJ1/43	27	78.75	79.75	1.00	Ft				m						moderately reddish brown, siltstone, mudstone, silt, quartz, pebble
NGJ1/43	28	79.75	81.25	1.50	Ft				p	sr - r	p				moderately reddish brown, soft - stiff, medium plastic, shear 60 degree at 83.60m
NGJ1/43	29	81.25	86.20	4.95	Ft				m						greenish gray, stiff, n(CaCO3)
NGJ1/43	30	86.20	88.20	2.00	Ft				m						Core Loss
NGJ1/43	31	88.20	88.70	0.50	Ft				m						brownish gray, stiff, medium plastic, cm in lower part
NGJ1/43	32	88.70	91.85	3.15	Ft				m						brownish black, dull, friable, moisture small, molluscan fossil
NGJ1/43	33	91.85	92.50	0.65	Cl			low quality coal	m						brownish gray, hard, molluscan fossil
NGJ1/43	34	92.50	92.70	0.20	Ft			carbonaceous	m						brownish black, soft, plastic, cm, coal fragment
NGJ1/43	35	92.70	93.00	0.30	Cb				m						light olive gray, soft - stiff, plastic, pyrite crystal
NGJ1/43	36	93.00	95.47	2.47	Ft				m						brownish black, soft, plastic, cm, coal fragment
NGJ1/43	37	95.47	95.75	0.28	Cb				m						light olive gray, soft - stiff, plastic, cm, w/Ch at 96.10 - 96.15m
NGJ1/43	38	95.75	96.80	1.05	Ft				m						brownish gray, soft, plastic, cm, w/Ftm at 97.00 - 97.25m
NGJ1/43	39	96.80	97.25	0.45	Cb				m						brownish gray, soft, plastic, cm, w/Ftm at 97.00 - 97.25m