

Plate II-6 Geologic column of the MJTA-8

Longitude: 68d 26m 25s Final depth: 250m
 Latitude: 48d 49m 08s Azimuth: -
 Coordination: 458929 E, 5407271N Inclination: vertical
 Elevation: 496m

Scale (m)	Column	Depth (m)	Description	Sulfidation	Silicifica.	Argilliza.	Chloritiza.	Epidotiza.	Examined Sample	Assay Interval	Assay results					
											Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)
			0.0-6.1m: brown to brownish gray colored surface soil, with a lot of gravels (φ 1-6cm)	-	-	-	-	-		0.0-3.0	10	<0.1	235.8	19.8	81.4	33.0
		6.1	6.1-10.0m: white, silicified rock with dense network of hematite, 0.5cm intervals, strongly silicified & argillized rock, fracture-rich, pebbly core, oxide zone	-	-	-	-	-		3.0-6.0	17	0.6	154.2	6.6	72.0	44.0
		10.0	10.0-13.30m: weathered rhyolite porphyry, brownish light gray colored, strongly argillized, crackly core, pebbly core, oxide zone	-	-	-	-	-		6.0-9.0	23	0.4	72.2	10.2	12.6	20.0
		13.3	13.30-19.80m: rhyolite porphyry, with hematite stringers (3-5cm intervals), weathered & Fe-oxide rich phenocryst: plagioclase >> quartz (φ 3-6mm) plagioclase changes to clay minerals, groundmass shows brown color by oxidation	-	-	-	-	-		9.0-12.0	10	0.2	161.6	6.2	117.6	12.0
		19.8	19.8-21.8m: white to light gray colored, strongly argillized rhyolite porphyry, rock texture is unclear because of strong alteration, oxide zone	-	-	-	-	-		12.0-15.0	33	<0.1	35.0	8.8	94.6	7.0
		21.8	21.8-27.5m: transition zone between oxide zone & sulfide zone, weakly weathered (Fe-oxide rich) rhyolite porphyry, brownish dark gray colored, strongly argillized, with weak dissemination of pyrite	-	-	-	-	-		15.0-18.0	13	0.8	43.4	18.8	132.8	17.0
		27.5	27.5-38.5m: reduced (sulfide) zone starts from the depth of 27.5m, fractured rock, crackly core, porphyry or rhyolite porphyry containing a large quantity of plagioclase phenocrysts (φ 3-6mm) phenocryst: plagioclase>>biotite, hornblend, quartz plagioclase: φ 3-6mm biotite, hornblend, quartz = φ 3mm ± Total amount of phenocryst: 40-50% plagioclase-phenocryst & groundmass are perfectly replaced by white clay minerals, mafic minerals change to chlorite	-	-	-	-	-		18.0-21.0	110	0.2	118.8	29.4	51.0	3.0
		38.5	quartz + pyrite stringers (interval of 3-4cm) & dense network of white clay (interval of 5-10mm) occur widely, white clay stringers cut the quartz + pyrite stringers, pyrite dissemination is very weak, 30.8m: chalcocopyrite dissemination	0	0	3	2	0		21.0-24.0	50	0.2	69.4	5.4	105.8	4.0
		38.5	38.5-41.6m: quartz + pyrite & pyrite network (1-1.5cm interval), slightly silicified, pyrite dissemination occur along these stringers, 38.5m: quartz + pyrite veinlets, w=7-10mm, ∠65deg.	0	0	3	2	0	8-37.5 TX	24.0-27.0	33	0.2	59.2	14.2	112.2	<2.0
		41.6	41.6-44.0m: strongly silicified rock with pyrite dissemination, dark gray colored, compact this zone shows brecciated structure	1	1	3	2	0		27.0-30.0	67	0.2	121.4	14.6	72.4	4.0
		44.0	44.0-46.3m: strongly argillized rock, greenish gray, dense network of quartz + chlorite + white clay	1	1	3	2	0		30.0-33.0	50	0.2	117.0	20.0	79.6	22.0
		46.3	46.3-50.7m: slightly silicified porphyry plagioclase phenocrysts change to white clay-minerals, with pyrite stringers (2-4cm intervals) 49.0m: quartz + pyrite veinlets, ∠65deg., w=7-8mm	3	4	2	0	0		33.0-36.0	80	0.2	145.2	25.8	78.6	33.0
		50.7	50.7-54.8m: porphyry, light gray colored, strongly argillized, slightly silicified, with dense network of quartz + pyrite pyrite stringers (0.5-1cm interval), with pyrite dissemination 53.4m, 54.4m: quartz + chlorite + pyrite veinlets, ∠70-85deg., w=7mm ±	0	0	3	2	0		36.0-38.5	40	<0.1	70.4	17.8	64.4	15.0
		54.8	54.8-58.7m: 54.8-57.7m & 56.8-57.5m: strongly argillized & strongly silicified zone, with pyrite (+ chalcocopyrite?) dissemination, with quartz + pyrite network, total amount of sulfide is 2-3% 58.4-58.7m: strongly silicified zone, plagioclase-phenocrysts change to epidote + clay, with ameba shaped quartz-pools	1	1	3	2	1	8-55.6 PT	38.5-41.6	57	0.2	103.8	8.0	70.0	11.0
		58.7	58.7-65.7m: porphyry, light brown colored, argillized rock with pyrite + quartz stringers (2-5cm interval), 59.0-62.0m: quartz + pyrite veinlets, ∠70-80deg., w=3-8mm	2	1	3	2	1		41.6-42.6	127	0.2	70.8	8.0	80.0	<2.0
		65.7	65.7-71.3m: slightly silicified porphyry, greenish-light gray colored with strong argillization & epidotization with quartz + pyrite stringers, pyrite stringers & chlorite stringers (0.5cm ± or 2-4cm interval) chalcocopyrite dissemination ??	1	1	3	2	0		42.6-44.0	77	0.4	108.0	7.4	39.8	44.0
		71.3	71.3-73.4m: alternation beds of strongly silicified rock & strongly argillized rock silicified rock: dark gray, strong dissemination of pyrite	1	1	3	2	1	8-70.8 T	44.0-46.3	77	<0.1	151.4	8.4	60.6	7.0
		73.4	argillized rock: light gray, weak dissemination of pyrite	0	0	2	1	0		46.3-49.0	37	<0.1	96.6	6.8	68.8	<2.0
		77.2	73.4-77.2m: weakly argillized porphyry with traces of pyrite stringers, brownish gray colored	0	0	2	1	0		49.0-51.0	37	1.6	62.4	7.0	51.8	12.0
		78.1	77.2-78.1m: weakly silicified porphyry, quartz + pyrite network with pyrite dissemination	1	1	3	2	1		51.0-53.0	40	<0.1	52.6	4.6	47.6	<2.0
		83.1	78.1-83.1m: porphyry, brownish gray phenocryst=plagioclase>>quartz, hornblend>biotite total amount of phenocrysts is 40%-50% traces of quartz + pyrite stringers locally occur 78.6m: quartz + pyrite vein, w=1.5cm, ∠45deg. 82.5m: pyrite + quartz veinlets, w=5mm, ∠90deg.	2	1	3	2	1		53.0-54.0	30	<0.1	49.0	4.8	49.0	<2.0
		89.3	83.1-89.3m: silicified porphyry with dense network of quartz + pyrite (interval of 5-6mm) with a lot of quartz + pyrite veinlets, light gray colored, 86.5-87.5m: strongly silicified zone with strong dissemination of pyrite, with quartz + pyrite vein (w= more than 5cm, ∠80deg.) 87.6-89.3m: slightly silicified zone with dense network of pyrite, with quartz + pyrite veinlets	1	1	3	2	1	8-84.0 PTX	54.0-55.0	50	0.6	64.2	5.6	50.2	<2.0
		89.3	89.3-94.5m: brownish gray colored porphyry plagioclase phenocrysts (φ 5-7mm) change to white clay, hornblend phenocrysts change to chlorite 89.6-90.0m, 90.4-90.6m, 92.6-93.4m: dense network of pyrite & dense network of quartz + pyrite	1	1	3	2	1	8-86.0 P	55.0-58.0	33	<0.1	48.2	16.2	64.0	<2.0
		94.5	94.5-98.3m: strongly argillized & weakly silicified zone with dense network of quartz + pyrite, with pyrite dissemination	2	3	2	1	2		58.0-59.0	27	<0.1	54.6	12.0	66.8	13.0
		98.3	98.3-102.9m: strongly silicified breccia, with pyrite dissemination, with a lot of quartz + pyrite veinlets, with dense network of quartz breccia consists of white breccia of porphyry (φ 2-5cm) & dark gray colored silicified matrix	1	0	2	2	0	8-102.0 P	62.0-65.0	27	<0.1	54.4	13.8	76.8	<2.0
		102.9	102.9-105.5m: argillized & slightly silicified porphyry, light gray colored, with dense network of quartz, quartz + pyrite, clay & chlorite, pyrite dissemination is weak	1	1	2	2	1		65.0-68.0	<10	<0.1	37.6	11.0	73.4	<2.0
		105.5	105.5-109.5m: weakly argillized porphyry, plagioclase phenocrysts change to white clay minerals, all mafic minerals change to chlorite, groundmass is mainly composed of K-feldspar & quartz	1	1	2	2	1	8-104.0 PTXI	68.0-71.0	17	<0.1	64.8	11.0	99.4	<2.0
		109.5	109.5-113.0m: pale gray or pale green colored, strongly argillized rock, with a lot of quartz veinlets (∠ 40-70deg., w=3-6mm, 3-4cm interval), with a lot of pyrite stringers	0	0	1	2	0		71.0-72.0	70	<0.1	49.2	12.4	93.8	55.0
		113.0	113.0-114.7m: plagioclase phenocrysts change to white clay & mafic minerals change to chlorite traces of quartz + pyrite veinlets (∠70deg., w=5mm ±) are found	2	2	2	2	2		72.0-73.0	27	<0.1	19.6	11.2	83.4	7.0
		114.7	114.7-130.7m: strongly silicified zone, pale gray to greenish gray colored, with pyrite veinlets (3-4cm interval), & with pyrite dissemination, with pyrite pools original rock texture is completely destroyed by strong silicification, porphyritic texture is rarely observed (plagioclase phenocrysts change to sericite 115-117m & 129.1-130.7m: transitional zone between silicified zone & argillized zone, a lot of quartz + pyrite veinlets & stringers are observed	1	0	2	1	0	8-121.0 PI	73.0-76.0	33	<0.1	30.6	13.8	81.6	<2.0
		130.7	130.7-138.8m: pale green to light gray colored, strongly argillized & slightly silicified porphyry, with a lot of quartz, quartz + pyrite, pyrite stringers (∠40-70deg., 2-5cm intervals), pyrite dissemination is weak, original rock texture is clear, plagioclase phenocrysts & groundmass change to white clay, mafic mineral phenocrysts change to chlorite	0	0	2	1	0		76.0-79.0	40	<0.1	29.6	26.6	73.0	11.0
		138.8	138.8-140.6m: light gray colored, argillized & chloritized porphyry, with quartz + pyrite veinlets (∠20-65deg., interval of 5-10cm), slightly silicified	0	0	2	1	0	8-84.0 PTX	79.0-81.0	37	<0.1	40.6	21.6	76.6	11.0
		140.6	140.6-142.5m: strongly silicified rock, with quartz + pyrite veinlets & stringers, with quartz + pyrite pools (φ 1-2cm), rock texture is destroyed by strong silicification	0	0	2	1	0	8-86.0 P	81.0-83.0	37	<0.1	37.0	16.4	91.8	6.0
		142.5	142.5-146.7m: strongly silicified rock, with quartz + pyrite network, with quartz network, with quartz + pyrite pools, rock texture is completely destroyed by strong alteration	2	2	3	1	0		83.0-84.0	67	<0.1	45.0	16.8	59.4	26.0
		146.7	146.7-148.0m: gray, argillized & slightly silicified porphyry with pyrite stringers	2	3	3	1	0	8-102.0 P	84.0-85.0	60	<0.1	45.6	12.0	38.6	20.0
		148.0	148.0-151.4m: light gray colored, strongly silicified rock with pyrite dissemination, with pyrite network, with quartz + pyrite network, original rock texture is destroyed by strong alteration shear zone	2	3	3	1	0	8-86.0 P	85.0-86.0	93	<0.1	99.8	16.0	57.8	19.0
		151.4	151.4-151.8m: pale green colored, strongly argillized rock with quartz + pyrite stringers (interval of 3cm), slightly silicified, total amount of sulfide is 3%	3	4	3	1	0	8-104.0 PTXI	86.0-87.0	103	<0.1	44.2	18.6	36.2	28.0
		151.8	151.8-154.3m: light gray colored, strongly silicified rock, with quartz + pyrite network, with quartz network with pyrite dissemination	1	1	3	2	1		87.0-89.0	130	<0.1	96.2	18.0	54.2	50.0
		154.3	154.3-158.7m: strongly silicified rock, with strong dissemination of pyrite (3-4%), with a lot of pyrite veinlets, with quartz + pyrite + quartz veinlets, (∠60deg. ±, w=5-10mm, 2-4cm interval), original rock texture is completely destroyed	0	0	2	1	0	8-102.0 P	89.0-92.0	97	0.2	147.6	18.4	68.0	8.0
		158.7	158.7-161.5m: strongly silicified rock, with pyrite dissemination & pyrite network, coarse grained quartz veinlets & quartz stringers occur (3-4cm interval), original rock texture (porphyritic texture) is slightly observed	0	0	2	1	0	8-104.0 PTXI	92.0-95.0	47	<0.1	61.6	21.8	60.8	8.0
		161.5	161.5-165.0m: strongly silicified rock, fine grained rock, original rock texture is destroyed by strong silicification strong dissemination of pyrite & dense network of pyrite are widely developed	1	1	4	3	0		95.0-98.3	113	<0.1	64.2	14.8	75.4	15.0
		165.0	165.0-172.4m: strongly argillized porphyry, slightly silicified, pyrite dissemination is very weak	4	4	3	1	1	8-102.0 P	98.3-100.0	80	<0.1	31.6	14.8	49.0	<2.0
		172.4	172.4-177.0m: greenish gray colored, strongly argillized & strongly chloritized porphyry, with quartz + pyrite veinlets (∠60deg., w=4-10mm, interval of 3-5cm), pyrite dissemination is weak	4	4	3	1	1		100.0-101.0	43	<0.1	45.0	17.8	55.2	<2.0
		177.0	177.0-185.8m: strongly silicified rock, fine grained rock, original rock texture is destroyed by strong silicification, total amount of disseminated pyrite is about 1%	4	4	3	1	1	8-102.0 P	101.0-102.0	30	<0.1	22.8	13.4	43.6	<2.0
		185.8	185.8-188.0m: strongly argillized & chloritized porphyry and strongly silicified porphyry, contact boundaries between argillized part and silicified part are irregular argillized & chloritized part: pyrite dissemination is very weak (<1%) silicified part: pyrite dissemination is strong (2% ±)	4	4	3	1	1	8-104.0 PTXI	102.0-103.0	30	0.2	50.0	16.6	54.2	23.0
		188.0	188.0-190.0m: green colored porphyry, argillized & chloritized, with quartz + pyrite veinlets (∠70deg., w=5-10mm), with quartz stringers (2-5cm interval)	2	2	4	1	0		103.0-105.5	97	<0.1	157.4	14.4	81.0	26.0
		190.0	190.0-192.0m: strongly silicified rock with pyrite dissemination, showing brecciated structure, (φ 2-4cm)	0	0	2	1	0	8-150.4 PX	105.5-109.5	93	0.2	117.6	23.0	101.2	34.0
		192.0	192.0-205.3m: chloritized porphyritic dacite (dyke?), with weak argillization, rock texture is clear, with quartz + pyrite stringers, with quartz stringers, with epidote + pyrite stringers (interval of 3-5cm) pyrite dissemination is weak fractured rock (crackly core)	0	0	2	1	0	8-151.0 T	109.5-113.0	73	0.2	102.0	22.0	72.0	49.0
		205.3	205.3-214.4m: chloritized porphyry, weakly argillized, pyrite stringers occur (interval of 2-5cm), fractured core (crackly core), original rock texture is clear	0	0	2	1	0	8-157.0 PT	113.0-114.7	57	<0.1	83.8	28.8	103.4	47.0
		214.4	214.4-219.0m: strongly silicified zone, pale greenish gray colored, original rock texture is not clear because of strong silicification, plagioclase phenocrysts show pale green color (epidotized?), all mafic minerals change to chlorite, small amount of pink colored anhedral minerals (K-feldspar?) occur locally, pyrite veinlets, chlorite + pyrite stringers & quartz + pyrite veinlets occur (interval of 2-3cm), pyrite dissemination is weak, traces of chalcocopyrite stringers occur locally	1	1	3	2	0	8-121.0 PI	114.7-118.0	113	0.2	129.0	50.2	56.4	58.0
		219.0	219.0-226.0m: strongly silicified rock, greenish dark gray colored dense network of quartz, quartz + pyrite, pyrite, chlorite + pyrite, quartz + calcite + pyrite weak dissemination of pyrite a lot of veins & veinlets of quartz & quartz + pyrite (interval of 5-15cm, ∠40-80deg., w=4-15mm)	2	4	1	2	0		118.0-119.0	110	0.2	46.4	54.0	46.0	<2.0
		226.0	226.0-237.5m: greenish dark gray colored, strongly silicified porphyry, with network of quartz + pyrite, pyrite (1-3cm interval), with veinlets of quartz + pyrite (5-10cm interval) rock texture is not clear because of the strong silicification, chloritization & epidotization, plagioclase phenocrysts change to pale green colored minerals (epidote?), groundmass is replaced by quartz & chlorite, pink colored anhedral minerals locally occur in the groundmass (K-feldspar?) 232m: quartz + pyrite vein, ∠60-70deg., w=1cm 235m: quartz + pyrite vein, ∠45deg., w=1cm 236.5m: quartz vein, ∠85deg., w=0.5-1.5cm	2	4	2	2	2	8-150.4 PX	119.0-120.0	77	0.4	52.6	101.8	30.8	28.0
		237.5	237.5-250.0m: light gray to greenish light gray colored, strongly silicified rock, chloritized & weakly epidotized, rock texture is completely destroyed by strong alteration with quartz stringers & quartz + pyrite stringers (∠ 40-75deg., intervals of 2-3cm) with quartz + pyrite veinlets (∠70-90deg.) rarely occur 247-250m: clay veins (w=2-10mm) rarely occur 240m, 245m: quartz + pyrite vein (∠50-55deg., w=15mm)	2	4	2	2	2	8-151.0 T	120.0-121.0	70	0.6	39.0	137.8	27.0	43.0
		250.0		1	1	3	2	0	8-231.0 TX	121.0-122.0	93	0.4	51.2	78.0	44.8	29.0
				3	5	0	0	0		122.0-123.0	40	<0.1	11.4	40.2	38.0	20.0