



**Allegiance Metals Drill Log**

Project	BHID	From	To	Stratigraph	Rock Type	Alteration	Visual S%	L.Cont.	Struct	BCA	Description	From	To	Ni%	S%
Pontiac	P001	0	1.1	Ccc	GWAC	Ph	0.00	Sp	Bd	88	Brown, Ph alt greywacke. Down hole facing.				
Pontiac	P001	1.1	8.6	Cbc	VBLM	AcCh	0.00	Sp		30	Ch-Ac altered, brecciated basaltic sst? Graded, facing down hole.				
Pontiac	P001	8.6	12.8	Cbg	IBPC	Ac	0.00	Sp		30	Coarse, Ac after Pyrox, feld phyric gabbro dyke.				
Pontiac	P001	12.8	17.8	Cbc	VBLM	AcCb	0.01	Gr			Dark green/cream brecciated, Ac-Carb alt mafic lithic sst and cherty sst. Carb-mag veining.				
Pontiac	P001	17.8	26.4	Cbc	VBLM	AcMt	0.01	Gr		80	Dark green brecciated sst and Vc sst. Ch-Ac-Mt alteration as breccia veins				
Pontiac	P001	26.4	44.7	Ccc	GWAC	PhAc	0.10	Sp	Bd	85	Graded, greywacke-chert sst. Ph alt. Minor Po and and Py with ac veining. Brecciated.				
Pontiac	P001	44.7	46.8	Cba	IBA	MtAc	0.10	Sp		85	Mafic intrusive?? Bleached and flow banded contacts? Mag veining minor py.				
Pontiac	P001	46.8	73.2	Ccc	GWAC	PhAc	0.01	Gr	Bd	85	Graded, greywacke sst. Ph alt. Ac vns.				
Pontiac	P001	73.2	81.3	Ccc	GWAC	PhAc	0.10	Sp			Graded, greywacke sst. Ph alt. Ac vns, 0.1% Po spots and veinlets.				
Pontiac	P001	81.3	82.5	Ccc	SSLT	PhSi	0.10	Ft			Bleached and Ac veined sst. Ph alt. Minor Po.				
Pontiac	P001	82.5	83.2		FALT	ChPh					Brittle/ductile fault.				
Pontiac	P001	83.2	93.5	Ccc	GWAC	PhAc	0.01	Gr			Med grained Gwac. Ph alt Ac veins.				
Pontiac	P001	93.5	94.7	Ccc	SSLT	PhSi	0.10	Ft			Bleached and Ac veined sst. Ph alt. Minor Po. Hornfelsed contact?				
Pontiac	P001	94.7	101.7	Cba	LBA	AcSi	0.50	IR	Bd	50	Basaltic lava/hyaloclastite. 0.5% Po veins and blebs Pervasive Ac alt. Patchy silicification.				
Pontiac	P001	107.1	131.3	Ccc	GWAC	PhAc	0.01	Gr			Med grained Gwac. Ph alt Ac veins.				
Pontiac	P001	131.3	150.9	Cba	LBA	AcSi	0.50	IR	Bd	50	Basaltic lava/hyaloclastite. 0.5% Po veins and blebs Pervasive Ac alt. Patchy silicification.				
Pontiac	P001	150.9	155.4		FALT	SpCh	0.01	Ft	Fo	30	Major Brittle/ductile fault. Foliated, core loss. Brxx with Chl-Ph-To veins. Low Core angle				
Pontiac	P001	155.4	161.2	Csu	SERP	SpMt	0.10	Ft		90	Massive, blk serp. 5% Eu mag xtals, <0.1% Pe-Po.				
Pontiac	P001	161.2	164	Cum	IUOM	SpAc	0.01	Ft	Ft	60	Fault bounded dunite/opx. Foliated, weak serp alt.				

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Project	BHID	From	To	Stratigraphy	Rock Type	Alteration	Visual S%	L.Cont.	Struct	BCA	Description	From	To	Ni%	S%	
Pontiac	P001	164	193.3	Csu	SERP	SpMt	0.10	Ft		90	Massive, blk serp. 5% Eu mag xtals, <0.1% Pe-Po.					
Pontiac	P001	193.3	195.5		FALT	Sp		Ft	Ft	20	Slickensided fault brxx. Chrysotile.					
Pontiac	P001	195.5	241.5	Csu	SERP	SpMt	0.50				Massive, blk serp. 5% Eu mag xtals, 0.5% Pe-Po veins and bands. Minor Calc.					
Pontiac	P001	241.5	242		FALT	Sp		Ft	Ft	20	Low angle puggy Fault					
Pontiac	P001	242	250.5	Csu	SERP	SpMt	0.50				Massive, blk serp. 5% Eu mag xtals, 0.5% Pe-Po veins and bands. Minor calc.					

## Stratigraphy

Q	Quaternary alluvial, colluvial and dune deposits
Df	Devonian fine grained qtz sst and sslt (Florence Quartzite). Fossiliferous
Dsk	Devonian Skarn
Dg	Devonian Granite
Sc	Silurian sandstone and siltstone
Scs	Silurian pebble-cobble conglomerate.
Su	Silurian sediments
Og	Limestone (Gordon Limestone)
Oc	Peble conglomerate, PC derivation (Owen Gp).
Os	Siliceous sst and conglomerate.
Ccf	Crimson Creek Fm
Ccc	Crimson Creek Fm mafic conglomerate.
Cch	Crimson Creek Fm chert
Ccarb	Crimson Creek Fm carbonate and calcareous sediments.
Cb	Cambrian Basalt (Mclvor Hill Complex)
Cbg	Cambrian gabbro
Cbc	Cambrian basaltic volcanoclastics
Cum	Cambrian ultramafic
Cud	Cambrian ultramafic dunite
Cup	Cambrian ultramafic orthopyroxenite

## Rock Types

Volcanic Rocktypes have a four letter code. The first letter is the style (intrusive, volcanoclastic etc)

The second is the chemical composition (basaltic, rhyolitic), the third is the major component (qtz phyric, lithic rich etc)

the last is the texture (fine grained, breccia etc). For example IUPC is an intrusive, ultramafic, pyroxene phyric and coarse grained.

### Style codes

I	Intrusive
L	Lava
V	Volcanoclastic
E	Epiclastic

### Composition codes

U	Ultramafic
B	Basaltic (mafic)
A	Andesitic
D	Dacitic
R	Rhyolitic

#### **Composition Codes**

Q	Qtz phyric (qtz xtal rich)
F	feldspar phyric
H	Hornblende phyric
P	Pyroxene phyric
L	Lithic rich
X	crystal rich
V	Vitric

#### **Texture codes**

F	fine
M	medium
C	coarse
B	breccia

#### **Other Rock codes**

CHRT	Chert
CARB	Carbonate
GWAC	Greywacke
SSLT	Siltstone
SAND	Sandstone
SERP	Serpentinite
CONG	Conglomerate
GRAN	Granite
GRAD	Granodiorite
SKRN	Skarn
LOSS	No Core recovery
CLAY	Clay
MMAG	Massive magnetite
SKSP	Serpentinite Skarn
SHAL	Shale
HEVC	Heamatitic Volcaniclastic

#### **Alteration**

Ac	Actinolite
Ch	Chlorite
Se	Sericite
Cb	Carbonate
Di	Diopside
Ax	Axinite
Sc	Serpentine-chrysotilic
Sp	Serpentine
So	Schorl
Ph	Phlogopite
Sx	Sulphidic
Py	Pyritic
Po	Pyrrhotitic
Ht	Haematitic
Mg	Magnetite
To	Tourmaline
Si	Silica
Qz	Quartz

### Geotech

Intact Rock Strength Code		UCS
Extremely weak	EW	0.5 Mpa
Very Weak	VW	
Weak	W	2.5 Mpa
Moderately strong	MS	37.5 Mpa
Strong	S	75 Mpa
Very strong	VS	100 Mpa
Extremely strong	ES	150 Mpa

Roughness type	Code	Jr
Stepped Smooth	SS	3.5
Discontinuous	DC	4
Planar Smooth	PS	1
Stepped Rough	SR	3
Planar rough	PR	1.5
Undulating Smooth	US	2
Undulating Rough	UR	3

<b>No of Defect Sets</b>	<b>Code</b>	<b>Jn</b>	
Default		0	1
One Set		1	2
One Set + random		1.5	3
Two Sets		2	4
Two Sets + random		2.5	6
Three Sets		3	9
Three Sets + random		3.5	12
Four Sets		4	15

<b>Joint Alteration</b>	<b>Code</b>	<b>Ja</b>	
Default		0	1
Carb	CB		2
Serpentine	SP		5
Clay	CY		5
Quartz	QZ		1
Sericite	SE		3
Chlorite	CH		3
Clean	X		1
Iron	FE	1.5	
Haematite	H		2

### Geotech Sheet

Project	BHID	From	To	Recovery	Lithology	Weathering	Alteration	Strength	length>10cm	RQD%	No. defects	Defect sets	Defect type	Alpha	Beta	Roughness	Fill	Fill width	Comments
Pontiac	P001	0	0.6	0.5		Mo	Ph	VS	0	0	100	2.5	Jt			PR	Cy		Broken Core
Pontiac	P001	0.6	1.2	0.6		Sl	Ac	ES	0.1	18	15	2	Jt	40		PR	Li		
Pontiac	P001	1.2	2.7	1		Fr	Ac	ES	0.3	26	8	2	Jt	40		PR	Li		
Pontiac	P001	2.7	6	3.3		Fr	Ac	ES	2.4	73	8	2	Jt	70	30	UR	Ch		
Pontiac	P001	6	9	3		Fr	Ac	ES	2.3	77	6	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	9	12	3		Fr	Ac	ES	2	67	9	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	12	15	3		Fr	Ac	ES	1.8	60	11	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	15	17.5	2.5		Fr	Ac	ES	1.7	68	9	2	Jt	70	30	UR	Ch		
Pontiac	P001	17.5	19.5	1.9		Fr	Ac	ES	1.2	63	9	2	Jt	75	20	UR	Ch		
Pontiac	P001	19.5	22.5	3		Fr	Ch	ES	2.5	83	10	2.5	Jt	75	25	UR	Ch		
Pontiac	P001	22.5	25.5	3		Fr	Ch	ES	2.4	80	8	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	25.5	28.5	3		Fr	Ch	ES	1.4	47	40	3	Jt	70	30	UR	Ch		Broken core zones.
Pontiac	P001	28.5	31.4	3		Fr	Ph	ES	0.9	30	31	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	31.4	34.5	3		Fr	Ph	ES	1.3	43	35	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	34.5	37	2.5		Fr	Ph	ES	0.6	24	18	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	37	39	2		Fr	Ph	ES	0.9	45	12	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	39	40.3	1.4		Fr	Ph	ES	0.6	39	23	2.5	Jt	70	30	UR	Ch		Mislatch
Pontiac	P001	40.3	42.3	2		Fr	Ph	ES	1.2	60	8	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	42.3	43.5	1.2		Fr	Ph	ES	0.7	58	10	2.5	Jt	70	30	UR	Ch		
Pontiac	P001	43.5	46.5	2		Fr	Ph	ES	2	100	9	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	46.5	49.5	3		Fr	Ph	ES	2.1	70	10	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	49.5	52.5	3		Fr	Ph	ES	1.9	63	22	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	52.5	55.1	2.6		Fr	Ph	ES	1.5	58	13	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	55.1	57.5	2.4		Fr	Ph	ES	1.5	63	10	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	57.5	58.2	0.7		Fr	Ph	ES	0.5	71	4	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	58.2	60.8	2.6		Fr	Ph	ES	1.8	69	10	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	60.8	64	3.2		Fr	Ph	ES	2.4	75	23	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	64	66	2		Fr	Ph	ES	0.5	25	7	2.5	Jt	70	60	UR	Ch		
Pontiac	P001	66	72	5.9		Fr	Ph	ES	2.8	47	56	2.5	Jt	70	60	UR	Ch		



**Assay Sheet**

Project	BHID	Spl_id	From m	To m	Ni %	Cu ppm	Pb ppm	Zn ppm	As ppm	Co ppm	S%	Au ppm	Strat	Rock
Pontiac	P001		8.6	10	0.00	-25	-25	60	-50	96	0.03		Cbg	IBPC
Pontiac	P001		10	11	0.00	-25	-25	98	-50	82	-0.02		Cbg	IBPC
Pontiac	P001		15	16	0.01	-25	26	74	-50	56	-0.02		Cbc	VBLM
Pontiac	P001		16	17	0.00	-25	-25	46	-50	41	-0.02		Cbc	VBLM
Pontiac	P001		17	18	0.01	-25	42	190	-50	60	0.04		Cbc	VBLM
Pontiac	P001		18	19	0.01	625	-25	200	-50	86	0.11		Cbc	VBLM
Pontiac	P001		19	20	0.01	-25	-25	130	-50	80	-0.02		Cbc	VBLM
Pontiac	P001		20	21	0.01	48	-25	96	-50	72	-0.02		Cbc	VBLM
Pontiac	P001		21	22	0.01	-25	-25	76	-50	68	-0.02		Cbc	VBLM
Pontiac	P001		22	23	0.01	80	-25	58	-50	65	0.04		Cbc	VBLM
Pontiac	P001		23	24	0.01	475	-25	48	-50	140	0.92		Cbc	VBLM
Pontiac	P001		24	25	0.01	44	-25	52	-50	51	0.03		Cbc	VBLM
Pontiac	P001		25	26	0.01	-25	-25	140	-50	67	-0.02		Cbc	VBLM
Pontiac	P001		26	27	0.01	220	-25	110	-50	60	-0.02		Ccc	GWAC
Pontiac	P001		30	31	0.02	205	-25	-25	-50	71	2.8		Ccc	GWAC
Pontiac	P001		34	35	0.01	160	-25	-25	-50	66	1.43		Ccc	GWAC
Pontiac	P001		44.7	45.7	0.01	155	-25	62	-50	57	0.82		Cba	IBA
Pontiac	P001		45.7	46.8	0.01	235	-25	70	-50	87	1.34		Cba	IBA
Pontiac	P001		94.7	96	0.01	280	-25	54	-50	59	1.31		Cba	LBA
Pontiac	P001		96	97	0.01	320	-25	38	-50	62	1.68		Cba	LBA
Pontiac	P001		97	98	0.01	165	-25	38	-50	56	0.96		Cba	LBA
Pontiac	P001		98	99	0.01	210	-25	94	-50	60	1.08		Cba	LBA
Pontiac	P001		99	100	0.01	84	-25	74	-50	59	0.41		Cba	LBA
Pontiac	P001		100	101	0.01	-25	-25	56	155	96	0.07		Cba	LBA
Pontiac	P001		155	156	0.20	-25	-25	115	-50	98	0.86		Csu	SERP
Pontiac	P001		156	157	0.22	-25	-25	50	-50	78	0.27		Csu	SERP
Pontiac	P001		157	158	0.28	-25	-25	115	-50	88	0.31		Csu	SERP
Pontiac	P001		158	159	0.24	-25	-25	110	-50	80	0.21		Csu	SERP
Pontiac	P001		159	160	0.31	-25	-25	100	-50	110	0.24		Csu	SERP
Pontiac	P001		160	161	0.26	-25	-25	145	-50	110	0.25		Csu	SERP
Pontiac	P001		161	162	0.24	-25	-25	64	-50	100	0.33		Csu	SERP
Pontiac	P001		162	163	0.22	-25	-25	64	-50	87	0.32		Csu	SERP
Pontiac	P001		163	164	0.14	-25	-25	-25	-50	105	0.14		Csu	SERP

Project	BHID	Spl_id	From m	To m	Ni %	Cu ppm	Pb ppm	Zn ppm	As ppm	Co ppm	S%	Au ppm	Strat	Rock
Pontiac	P001		164	165	0.18	-25	-25	46	-50	240	0.24		Csu	SERP
Pontiac	P001		165	166	0.28	-25	-25	28	-50	320	0.38		Csu	SERP
Pontiac	P001		166	167	0.25	-25	-25	-25	-50	255	0.28		Csu	SERP
Pontiac	P001		167	168	0.26	-25	-25	-25	-50	195	0.36		Csu	SERP
Pontiac	P001		168	169	0.25	-25	-25	-25	-50	125	0.31		Csu	SERP
Pontiac	P001		169	170	0.25	-25	-25	30	-50	100	0.27		Csu	SERP
Pontiac	P001		170	171	0.30	-25	-25	35	-50	98	0.38		Csu	SERP
Pontiac	P001		171	172	0.25	-25	-25	-25	-50	74	0.35		Csu	SERP
Pontiac	P001		172	173	0.28	-25	-25	28	-50	80	0.24		Csu	SERP
Pontiac	P001		173	174	0.23	-25	-25	-25	-50	63	0.2		Csu	SERP
Pontiac	P001		174	175	0.23	-25	-25	28	-50	66	0.2		Csu	SERP
Pontiac	P001		175	176	0.25	-25	-25	50	-50	76	0.22		Csu	SERP
Pontiac	P001		176	177	0.23	-25	-25	32	-50	75	0.2		Csu	SERP
Pontiac	P001		177	178	0.20	-25	-25	28	-50	71	0.26		Csu	SERP
Pontiac	P001		178	179	0.22	-25	-25	88	-50	84	0.25		Csu	SERP
Pontiac	P001		179	180	0.20	-25	-25	48	-50	81	0.17		Csu	SERP
Pontiac	P001		180	181	0.18	-25	-25	56	-50	69	0.16		Csu	SERP
Pontiac	P001		181	182	0.27	-25	-25	145	-50	97	0.25		Csu	SERP
Pontiac	P001		182	183	0.22	-25	-25	58	-50	78	0.2		Csu	SERP
Pontiac	P001		183	184	0.23	-25	-25	56	-50	76	0.27		Csu	SERP
Pontiac	P001		184	185	0.25	-25	-25	38	-50	80	0.32		Csu	SERP
Pontiac	P001		185	186	0.25	-25	-25	32	-50	80	0.28		Csu	SERP
Pontiac	P001		186	187	0.24	-25	-25	50	-50	82	0.29		Csu	SERP
Pontiac	P001		187	188	0.19	-25	-25	58	-50	75	0.24		Csu	SERP
Pontiac	P001		188	189	0.20	-25	-25	48	-50	77	0.26		Csu	SERP
Pontiac	P001		189	190	0.24	-25	-25	86	-50	87	0.29		Csu	SERP
Pontiac	P001		190	191	0.22	-25	-25	115	-50	79	0.24		Csu	SERP
Pontiac	P001		191	192	0.23	-25	-25	86	-50	80	0.27		Csu	SERP
Pontiac	P001		192	193	0.18	-25	-25	110	-50	66	0.24		Csu	SERP
Pontiac	P001		193	194	0.17	-25	28	200	-50	61	0.35		Csu	SERP
Pontiac	P001		194	195	0.24	-25	-25	88	-50	83	0.33		Csu	SERP
Pontiac	P001		195	196	0.45	-25	-25	105	-50	110	0.63		Csu	SERP
Pontiac	P001		196	197	0.33	-25	-25	125	-50	95	0.49		Csu	SERP

Project	BHID	Spl_id	From m	To m	Ni ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Co ppm	S%	Au ppm	Strat	Rock
Pontiac	P001		197	198	0.41	-25	-25	110	-50	110	0.7		Csu	SERP
Pontiac	P001		198	199	0.45	32	-25	110	-50	105	1.07		Csu	SERP
Pontiac	P001		199	200	0.33	-25	-25	100	-50	87	0.51		Csu	SERP
Pontiac	P001		200	201	0.26	-25	-25	74	-50	74	0.33		Csu	SERP
Pontiac	P001		201	202	0.27	-25	-25	78	-50	74	0.37		Csu	SERP
Pontiac	P001		202	203	0.25	-25	-25	66	-50	74	0.32		Csu	SERP
Pontiac	P001		203	204	0.26	-25	-25	86	-50	81	0.31		Csu	SERP
Pontiac	P001		204	205	0.26	-25	-25	70	-50	77	0.3		Csu	SERP
Pontiac	P001		205	206	0.25	-25	-25	98	-50	74	0.31		Csu	SERP
Pontiac	P001		206	207	0.27	-25	-25	92	-50	75	0.33		Csu	SERP
Pontiac	P001		207	208	0.25	-25	-25	88	-50	74	0.35		Csu	SERP
Pontiac	P001		208	209	0.25	-25	-25	70	-50	67	0.35		Csu	SERP
Pontiac	P001		209	210	0.28	-25	-25	110	-50	75	0.45		Csu	SERP
Pontiac	P001		210	211	0.24	-25	-25	92	-50	68	0.51		Csu	SERP
Pontiac	P001		211	212	0.25	30	-25	110	-50	81	0.52		Csu	SERP
Pontiac	P001		212	213	0.21	26	34	163	-50	78	0.66		Csu	SERP
Pontiac	P001		213	214	0.27	38	38	240	-50	100	0.85		Csu	SERP
Pontiac	P001		214	215	0.25	-25	-25	100	-50	84	0.5		Csu	SERP
Pontiac	P001		215	216	0.24	-25	-25	78	-50	80	0.43		Csu	SERP
Pontiac	P001		216	217	0.27	-25	-25	120	-50	94	0.52		Csu	SERP
Pontiac	P001		217	218	0.25	-25	-25	92	-50	88	0.5		Csu	SERP
Pontiac	P001		218	219	0.26	-25	-25	100	-50	91	0.62		Csu	SERP
Pontiac	P001		219	220	0.24	-25	-25	76	-50	83	0.34		Csu	SERP
Pontiac	P001		220	221	0.26	-25	-25	94	-50	83	0.32		Csu	SERP
Pontiac	P001		221	222	0.25	-25	-25	76	-50	71	0.28		Csu	SERP
Pontiac	P001		222	223	0.25	-25	-25	130	-50	78	0.28		Csu	SERP
Pontiac	P001		223	224	0.24	-25	-25	62	-50	73	0.23		Csu	SERP
Pontiac	P001		224	225	0.26	-25	-25	105	-50	80	0.23		Csu	SERP
Pontiac	P001		225	226	0.21	-25	-25	52	-50	61	0.18		Csu	SERP
Pontiac	P001		226	227	0.25	-25	-25	80	-50	77	0.21		Csu	SERP
Pontiac	P001		227	228	0.31	-25	-25	150	-50	110	0.3		Csu	SERP
Pontiac	P001		228	229	0.26	-25	-25	60	-50	81	0.21		Csu	SERP
Pontiac	P001		229	230	0.27	-25	-25	135	-50	88	0.24		Csu	SERP

