

**A**

**Soil Types**

**Table A-1 Soil Type Descriptions**

Interpreted Soil Type	Description	Simplified Soil Type
B	Bedrock of the Kuskokwim group.	WB/B
WB	Weathered Kuskokwim group bedrock that is weathered in situ.	WB/B
N	Native unconsolidated soils not otherwise specified that are undisturbed by anthropogenic activity.	N/DN
N (loess)	Glacially derived windblown silt and very fine sand that is undisturbed by anthropogenic activity.	N/DN
N (KG)	Native soil that is derived from Kuskokwim group bedrock and contains clasts of the same.	N/DN
RDCA	Red Devil Creek alluvium that is undisturbed by anthropogenic activity.	RDCA
KRA	Kuskokwim River alluvium that is undisturbed by anthropogenic activity.	KRA
KRA and/or RDCA	Red Devil Creek alluvium and/or Kuskokwim River alluvium	KRA and/or RDCA
DN	Native unconsolidated soils not otherwise that have been disturbed by anthropogenic activity.	N/DN
DN (loess)	Glacially derived windblown silt and very fine sand that has been disturbed by anthropogenic activity.	N/DN
DN (KG)	Disturbed native soil that is derived from Kuskokwim Group bedrock and contains clasts of the same.	N/DN
DN (KG, MZ)	Disturbed native soil that is derived from Kuskokwim group bedrock within the mineralized zone.	N/DN

**Table A-1 Soil Type Descriptions**

Interpreted Soil Type	Description	Simplified Soil Type
DN (KG and loess)	Disturbed native soil that comprises a mixture of soil derived from Kuskokwim group bedrock and glacially-derived windblown silt and very fine sand.	N/DN
DN (cut & fill)	Disturbed native soil interpreted to comprise spoils from cut and fill earth modification.	N/DN
DN with local F	Predominantly disturbed native soil that locally contains non-native debris.	DN with F
Mixed RDCA, Soil, and T/WR	Mixed Red Devil Creek alluvium and possibly other soil, and tailings and/or waste rock encountered in Red Devil Creek channel downstream of the Main Processing Area and delta.	RDCA, DN, and T/WR
N or DN	Native soil not otherwise specified that may or may not have been disturbed.	N/DN
N or DN (loess)	Glacially derived windblown silt and very fine sand where anthropogenic effect cannot be determined.	N/DN
N, DN, or F	Soil of uncertain type that may comprise native or disturbed native soil or fill.	N/DN or F
DN or F	Soil of uncertain type that may comprise disturbed native soil or fill.	N/DN or F
SO	Sluiced overburden deposits.	SO
SO or DN or N	Either sluiced overburden, or disturbed native soil, or undisturbed native soil.	SO or N/DN
T/WR	Mine waste that includes tailings (thermally processed or) and/or waste rock. May also contain vitreous material and furnace dusts.	T/WR
WR	Waste rock that occurs in discrete zones and is apparently not mixed with tailings.	WR
FT	Flotation tailings.	FT

**Table A-1 Soil Type Descriptions**

Interpreted Soil Type	Description	Simplified Soil Type
Tailings	Tailings (thermally processed ore) that is apparently not mixed with waste rock.	Tailings
T/WR & FT	A mixture of tailings and/or waste rock and flotation tailings.	T/WR & FT
F	Extensively reworked native soils that contain wood, debris, or other non-native materials.	F
T/WR (road base)	Tailings and/or waste rock that is observed to be a road surfacing material.	T/WR
Stockpiled Ore	A mound of rock exclusively composed of ore intended for the flotation process.	Stockpiled Ore

**Table A-2 Surface and Subsurface Soil Types, Upland Background Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
Upland Background Area	10UP01SS	SS	N (KG)									
	10UP02SS	SS	N (KG)									
	10UP03SS	SS	N (KG)									
	10UP04SS	SS	N (KG)									
	10UP05SS	SS	N (KG)									
	10UP06SS	SS	N (KG)									
	10UP07SS	SS	N (KG)									
	10UP08SS	SS	N (KG)									
	10UP09SS	SS	N (KG)									
	10UP10SS	SS	N (KG)									
	11UP11SB02	2	N (KG)									
	11UP11SB04	4	N (KG)									
	11UP11SB06	6	N (KG)									
	11UP11SB08	8	N (KG)									
	11UP11SB10	10	N (KG)   B									
	11UP11--12 NS	12	B									
	11UP11--14 NS	14	B									
	11UP11--16 NS	16	B									
	11UP11--18 NS	18	B									
	11UP11--20 NS	20	B									
	11UP11--22 NS	22	B									
	11UP11--24 NS	24	B									
	11UP11--26 NS	26	B									
	11UP11--28 NS	28	B									
	11UP11--30 NS	30	B									
	11UP11--32 NS	32	B									
	11UP11--34 NS	34	B									

## A Soil Types

**Table A-2 Surface and Subsurface Soil Types, Upland Background Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11UP11--36 NS	36	B									
	11UP11--38 NS	38	B									
	11UP11--40 NS	40	B									
	11UP11--42 NS	42	B									
	11UP11--44 NS	44	B									
	11UP11--46 NS	46	B									
See Table A-1 for soil type descriptions												
Key: bgs = below ground surface NS = not sampled												

**Table A-3 Surface and Subsurface Soil Types, Red Devil Creek Upstream Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
<b>Red Devil Creek Upstream Area</b>	10RD08SS	SS	DN (KG)									
	10RD09SS	SS	DN (KG)									
	10RD10SS	SS	RDCA									
	10RD11SS	SS	RDCA									
	10RD12SS	SS	RDCA									
	10RD13SS	SS	RDCA									
	11RD13SB02	2	RDCA									
	11RD13SB04	4	RDCA									
	11RD13SB06	6	RDCA									
	11RD13SB08	8	RDCA									
	11RD13SB10	10	RDCA									
	11RD13SB12	12	RDCA									
	11RD13SB14	14	RDCA									
	11RD13SB16	16	RDCA									
	10RD14SS	SS	RDCA									
	10RD15SS	SS	RDCA									
	10RD16SS	SS	RDCA									
10RD17SS	SS	RDCA										

## A Soil Types

**Table A-3 Surface and Subsurface Soil Types, Red Devil Creek Upstream Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	10RD18SS	SS	RDCA									
	10RD19SS	SS	RDCA									
See Table A-1 for soil type descriptions Key: bgs = below ground surface												

**Table A-4 Surface and Subsurface Soil Types, Surface Mined Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
<b>Surface Mined Area</b>	10MP41SS	SS	DN									
	11MP41SB02	2	DN									
	11MP41SB04	4	WB									
	11MP41SB06	6	WB									
	11MP41SB08	8	WB									
	11MP41--10 NS	10	WB									
	11MP41--12 NS	12	B									
	11MP41--14 NS	14	B									
	11MP41--16 NS	16	B									
	11MP41--18 NS	18	B									
	11MP41--20 NS	20	B									
	11MP41--22 NS	22	B									
	11MP41--24 NS	24	B									
	11MP41--26 NS	26	B									
	11MP41--28 NS	28	B									
	11MP41--30 NS	30	B									
	11MP41--32 NS	32	B									
	11MP41--34 NS	34	B									
	11MP41--36 NS	36	B									
	11MP41--38 NS	38	B									
11MP41--40 NS	40	B										
11MP41--42 NS	42	B										
11MP41--44 NS	44	B										
11MP41--46 NS	46	B										

**Table A-4 Surface and Subsurface Soil Types, Surface Mined Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP41--48 NS	48	B									
	11MP41--50 NS	50	B									
	11MP41--52 NS	52	B									
	11MP41--54 NS	54	B									
	11MP41--56 NS	56	B									
	11MP41--58 NS	58	B									
	11MP41--60 NS	60	B									
	11MP41--62 NS	62	B									
	11MP41--64 NS	64	B									
	11MP41--66 NS	66	B									
	11MP41--68 NS	68	B									
	11MP41--69 NS	69	B									
	10SM01SS	SS	DN (KG, MZ)									
	10SM02SS	SS	DN (KG, MZ)									
	10SM03SS	SS	DN (KG, MZ)									
	10SM04SS	SS	DN (KG, MZ)									
	10SM05SS	SS	DN (KG, MZ)									
	10SM06SS	SS	DN (KG, MZ)									
	10SM07SS	SS	DN (KG, MZ)									
	10SM08SS	SS	DN (KG, MZ)									
	10SM09SS	SS	DN (KG, MZ)									
	10SM10SS	SS	DN (lo-ess)									
	11SM10SB02	2	DN (KG and lo-ess)									
	11SM10SB04	4	DN (KG and lo-ess)									
	11SM10SB06	6	N (loess)									
	11SM10SB08	8	N (loess)   WB									
	11SM10SB10	10	WB									
	11SM10SB12	12	WB									

**Table A-4 Surface and Subsurface Soil Types, Surface Mined Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11SM10SB14	14	B									
	10SM11SS	SS	N or DN (loess)									
	11SM11SB02	2	N or DN (loess)									
	11SM11SB04	4	N or DN (loess)									
	11SM11SB06	6	N or DN (loess)									
	11SM11SB08	8	N or DN (loess)									
	11SM11SB10	10	N or DN (loess)									
	11SM11SB12	12	N or DN (loess)									
	11SM11SB14	14	WB									
	11SM11SB16	16	WB									
	11SM11SB18	18	WB									
	10SM12SS	SS	DN (KG and lo-ess)									
	10SM13SS	SS	DN (KG)									
	10SM14SS	SS	DN (lo-ess)									
	10SM15SS	SS	DN (KG)									
	10SM16SS	SS	DN (KG)									
	10SM17SS	SS	DN (KG)									
	10SM18SS	SS	DN (KG)									
	10SM19SS	SS	DN (KG)									
	10SM20SS	SS	DN (lo-ess)									
	10SM21SS	SS	DN (KG)									
	10SM22SS	SS	DN (KG)									
	10SM23SS	SS	DN (KG)									
	10SM24SS	SS	DN (KG)									
	10SM25SS	SS	DN (KG)									

**Table A-4 Surface and Subsurface Soil Types, Surface Mined Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	10SM26SS	SS	DN (KG)									
	10SM27SS	SS	DN (KG)									
	10SM28SS	SS	DN (KG and lo-ess)									
	10SM29SS	SS	DN (lo-ess)									
	10SM30SS	SS	DN (lo-ess)									
	11SM31SB02	2	WB									
	11SM31SB04	4	WB									
	11SM31SB06	6	WB									
	11SM31SB08	8	WB									
	11SM31--10 NS	10	B									
	11SM31--12 NS	12	B									
	11SM31--14 NS	14	B									
	11SM31--16 NS	16	B									
	11SM31--18 NS	18	B									
	11SM31--20 NS	20	B									
	11SM31--22 NS	22	B									
	11SM31--24 NS	24	B									
	11SM31--26 NS	26	B									
	11SM31--28 NS	28	B									
	11SM31--30 NS	30	B									
	11SM31--32 NS	32	B									
	11SM31--34 NS	34	B									
	11SM31--36 NS	36	B									
	11SM31--38 NS	38	B									
	11SM31--40 NS	40	B									
	11SM31--42 NS	42	B									
	11SM31--44 NS	44	B									
	11SM31--46 NS	46	B									
	11SM31--48 NS	48	B									
	11SM31--50 NS	50	B									
	11SM31--52 NS	52	B									

See Table A-1 for soil type descriptions

Key:

bgs = below ground surface

## A Soil Types

**Table A-4 Surface and Subsurface Soil Types, Surface Mined Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
NS = Not Sampled												

**Table A-5 Surface and Subsurface Soil Types, Dolly Sluice and Delta**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
<b>Dolly Sluice and Delta</b>	10DS01SS	SS	SO									
	11DS01SB02	2	SO									
	11DS01SB04	4	SO									
	11DS01SB06	6	SO									
	11DS01SB08	8	SO									
	11DS01SB10	10	SO									
	11DS01SB12	12	SO									
	11DS01SB14	14	KRA									
	11DS01SB16	16	KRA									
	10DS02SS	SS	SO									
	11DS02SB02	2	SO									
	11DS02SB04	4	SO									
	11DS02SB06	6	SO									
	11DS02SB08	8	SO									
	11DS02SB10	10	SO									
	11DS02SB12	12	KRA									
	11DS02SB14	14	KRA									
	10DS03SS	SS	DN									

See Table A-1 for soil type descriptions  
 Key:  
 bgs = below ground surface



**A Soil Types**

**Table A-6 Surface and Subsurface Soil Types, Rice Sluice and Delta**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind	
<b>Rice Sluice and Delta</b>	10RS01SS	SS	SO										
	11RS01SB0 2	2	SO										
	11RS01SB0 4	4	SO										
	11RS01SB0 6	6	SO										
	11RS01SB0 8	8	SO										
	11RS01SB1 0	10	SO										
	11RS01SB1 2	12	SO										
	11RS01SB1 4	14	KRA										
	10RS02SS	SS	SO										
	11RS02SB0 2	2	SO										
	11RS02SB0 4	4	SO										
	11RS02SB0 6	6	SO										
	11RS02SB0 8	8	SO										
	11RS02SB1 0	10	SO										
	11RS02SB1 2	12	SO										
	11RS02SB1 4	14	KRA										
	11RS02SB1 6	16	KRA										
	10RS03SS	SS	SO or DN or N										

See Table A-1 for soil type descriptions  
 Key:  
 bgs = below ground surface

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
<b>Pre-1955 Main Processing Area</b>	10MP424344SS	SS	T/WR	X		X		X			X	
	10MP5051525354SS	SS	T/WR	X		X		X	X	X	X	
	10MP55565758SS	SS	T/WR	X							X	
	10MP42SS	SS	T/WR	X		X		X			X	
	10MP43SS	SS	T/WR								X	
	10MP44SS	SS	T/WR									
	10MP45SS	SS	T/WR			X		X			X	
	11MP45SB02	2	T/WR	X		X		X	X	X		
	11MP45SB04	4	T/WR	X				X	X	X	X	
	11MP45SB06	6	T/WR and F									
	11MP45SB08	8	T/WR	X				X	X	X		
	11MP45SB10	10	T/WR   N	X				X				
	11MP45SB12	12	N									
	10MP46SS	SS	T/WR	X				X				
	11MP46SB02	2	T/WR	X							X	X
	11MP46SB04	4	T/WR	X							X	X
	11MP46SB06	6	T/WR	X		X		X	X	X	X	X
	11MP46SB08	8	T/WR	X							X	X
	11MP46SB10	10	T/WR	X		X			X			X
	11MP46SB12	12	WR				X					
	11MP46SB14	14	WR				X					
	11MP46SB16	16	WR				X				X	
	11MP46SB18	18	WR   N				X				X	
	11MP46SB20	20	N									
	10MP47SS	SS	T/WR	X								
	11MP47SB02	2	WR	X					X	X		X
	11MP47SB04	4	WR						X	X		
	11MP47SB06	6	WR						X	X		
	11MP47SB08	8	WR						X	X		
	11MP47SB10	10	WR						X	X		
	11MP47SB12	12	WR						X	X		
	11MP47SB14	14	WR				X		X	X		X
	11MP47SB16	16	WR						X	X		X

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP47SB18	18	WR					X				
	11MP47SB20	20	WR					X			X	
	11MP47SB22	22	WR			X		X			X	
	11MP47SB24	24	WR   N						X		X	
	11MP47SB26	26	N									
	10MP48SS	SS	T/WR	X								
	11MP48SB02	2	T/WR	X	X			X	X		X	
	11MP48SB04	4	T/WR	X	X						X	
	11MP48SB06	6	T/WR	X	X				X		X	
	11MP48SB08	8	T/WR	X	X				X		X	
	11MP48SB10	10	T/WR	X	X			X	X		X	
	11MP48SB12	12	T/WR   N	X				X	X		X	
	11MP48SB14	14	N									
<b>Pre-1955 Main Processing Area</b>	10MP49SS	SS	T/WR									
	11MP49SB02	2	T/WR	X		X		X		X	X	
	11MP49SB04	4	T/WR	X		X		X	X	X	X	
	11MP49SB06	6	T/WR					X				
	11MP49SB08	8	WR					X				
	11MP49SB10	10	WR   N			X						
	11MP49SB12	12	N									
	11MP49SB14	14	N									
	10MP50SS	SS	T/WR									
	11MP50SB02	2	T/WR					X			X	
	11MP50SB04	4	T/WR   WB					X			X	
	10MP51SS	SS	T/WR	X		X		X	X	X	X	
	11MP51SB02	2	T/WR									
	11MP51SB04	4	F   T/WR					X			X	
	11MP51SB06	6	T/WR   F					X			X	
	11MP51SB08	8	F   N or DN									
	11MP51SB10	10	N or DN									X
11MP51SB12	12	WB									X	

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP51SB14	14	WB								X	
	10MP52SS	SS	T/WR									
	11MP52SB02	2	T/WR	X		X		X			X	
	11MP52SB04	4	T/WR									
	11MP52SB06	6	T/WR			X						
	11MP52SB08	8	T/WR   N or DN			X						
	11MP52SB10	10	N or DN									
	11MP52SB12	12	N or DN									
	11MP52SB14	14	N or DN									
	11MP52SB16	16	N or DN									
	11MP52SB18	18	WB									
	11MP52SB20	20	WB									
	11MP52SB22	22	WB									
	11MP52SB24	24	WB								X	
	11MP52SB26	26	WB   B									
	11MP52--28 NS	28	B									
	11MP52--30 NS	30	B									
	11MP52--32 NS	32	B									
	11MP52--34 NS	34	B									
	11MP52--36 NS	36	B									
	11MP52--38 NS	38	B									
	11MP52--40 NS	40	B									
	11MP52--42 NS	42	B									
	10MP53SS	SS	T/WR	X							X	
	11MP53SB02	2	T/WR	X					X	X	X	
	11MP53SB04	4	F   T/WR					X				
	11MP53SB06	6	N or DN									
	11MP53SB08	8	N or DN									
<b>Pre-1955 Main Processing</b>	10MP54SS	SS	F	X								
	11MP54SB02	2	F   DN or									

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
Area			F									
	11MP54SB04	4	DN or F									
	11MP54SB06	6	DN or F									
	11MP54SB08	8	DN or F									
	10MP55SS	SS	T/WR									
	11MP55SB02	2	T/WR	X		X		X			X	
	11MP55SB04	4	T/WR   N or DN					X				
	11MP55SB06	6	N or DN   WB									
	10MP56SS	SS	N or DN									
	11MP56SB02	2	N or DN									
	11MP56SB04	4	N or DN									
	11MP56SB06	6	N or DN									
	11MP56SB08	8	N or DN									
	11MP56SB10	10	WB									
	10MP57SS	SS	T/WR									
	11MP57SB02	2	T/WR	X		X		X			X	
	11MP57SB04	4	T/WR	X		X		X	X		X	
	11MP57SB06	6	N or DN									
	11MP57SB08	8	N or DN									
	11MP57SB10	10	N or DN									
	10MP58SS	SS	T/WR	X								X
	11MP58SB02	2	T/WR									
	11MP58SB04	4	T/WR					X			X	
	11MP58SB06	6	T/WR									
	11MP58SB08	8	T/WR			X			X	X	X	
	11MP58SB10	10	T/WR		X	X		X	X	X	X	
	11MP58SB12	12	N or DN									

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP58SB14	14	N or DN									
	10MP59SS	SS	WR					X			X	
	11MP59SB02	2	WR					X			X	
	11MP59SB04	4	WR					X			X	
	11MP59SB06	6	WR					X				
	11MP59SB08	8	WR									
	11MP59SB10	10	WR					X				
	11MP59SB12	12	WR   N					X				
	11MP59SB14	14	N (lo-ess)								X	
	11MP59SB16	16	N (lo-ess)									
	10MP60SS	SS	T/WR	X								
	11MP60SB02	2	T/WR									
	11MP60SB04	4	T/WR	X				X	X	X	X	
	11MP60SB06	6	T/WR	X				X	X	X	X	
	11MP60SB08	8	T/WR	X				X	X	X	X	
	11MP60SB10	10	T/WR					X			X	
	11MP60SB12	12	T/WR					X	X		X	
	11MP60SB14	14	T/WR						X		X	
	11MP60SB16	16	T/WR									
	11MP60SB18	18	T/WR   N or DN									
	11MP60SB20	20	N or DN									
	11MP60SB22	22	N or DN									
	11MP60SB24	24	N or DN									
	11MP60SB26	26	N or DN									
	11MP60SB28	28	N or DN									
	11MP60--30 NS	30	N or DN   WB									
	11MP60--32 NS	32	WB									

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP60--33 NS	33	WB									
<b>Pre-1955 Main Processing Area</b>	10MP61SS	SS	T/WR									
	11MP61SB02	2	T/WR   F	X				X			X	
	11MP61SB04	4	N or DN									
	11MP61SB06	6	N or DN									
	10MP62SS	SS	T/WR	X								
	11MP62SB02	2	T/WR	X				X			X	
	11MP62SB04	4	T/WR   N	X		X		X				
	11MP62SB06	6	N									
	11MP62SB08	8	N									
	11MP62SB10	10	N									
	11MP62SB12	12	N									
	11MP62SB14	14	WB									
	11MP62SB16	16	WB									
	11MP62SB18	18	WB									
	11MP62SB20	20	WB									
	11MP62SB22	22	WB									
	11MP62SB24	24	WB									
	11MP62SB26	26	WB									
	11MP62--28 NS	28	B									
	11MP62--29 NS	29	B									
	10MP63SS	SS	T/WR	X								
	11MP63SB02	2	T/WR   N or DN	X								
	11MP63SB04	4	N or DN									
	11MP63SB06	6	N or DN									
	10MP64SS	SS	T/WR									
	10MP65SS	SS	T/WR	X								
	10MP66SS	SS	T/WR	X								X
	11MP66SB02	2	F									
	11MP66SB04	4	N									
	11MP66SB06	6	N									

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP66SB08	8	N									
	11MP66SB10	10	WB									
	11MP66SB12	12	WB									
	11MP66SB14	14	WB									
	11MP66SB16	16	WB									
	11MP66SB18	18	WB									
	11MP66SB20	20	WB									
	11MP66SB22	22	B									
	11MP66--24 NS	24	B									
	11MP66--26 NS	26	B									
	11MP66--28 NS	28	B									
	11MP88--02 NS	2	T/WR									
	11MP88--04 NS	4	T/WR									
	11MP88--06 NS	6	T/WR									
	11MP88--08 NS	8	T/WR									
	11MP88--10 NS	10	T/WR									
	11MP88--12 NS	12	T/WR									
	11MP88--14 NS	14	T/WR									
	11MP88--16 NS	16	T/WR									
	11MP88--18 NS	18	T/WR   N or DN									
	11MP88--20 NS	20	N or DN									
	11MP88--22 NS	22	N or DN									
	11MP88--24 NS	24	N or DN									
	11MP88--26 NS	26	N or DN									
	11MP88--28 NS	28	N or DN									
	11MP88--30 NS	30	N or DN   WB									
	11MP88--32 NS	32	WB									
	11MP88--34 NS	34	WB									
	11MP88--36 NS	36	WB									
	11MP88--38 NS	38	WB									
	11MP88--40 NS	40	WB									

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind	
	11MP88--42 NS	42	WB										
	11MP88--44 NS	44	B										
	11MP88--46 NS	46	B										
	11MP88--48 NS	48	B										
	11MP88--50 NS	50	B										
	11MP88--52 NS	52	B										
	11MP88--54 NS	54	B										
	11MP88--56 NS	56	(mine workings)										
	11MP88--58 NS	58	(mine workings)										
	11MP88--60 NS	60	(mine workings)										
	11MP88--62 NS	62	(mine workings)										
	11MP88--63 NS	63	(mine workings)										
<b>Pre-1955 Main Processing Area</b>	11MP89SB02	2	T/WR   F										
	11MP89SB04	4	T/WR										
	11MP89SB06	6	F										
	11MP89SB08	8	F   T/WR			X		X	X		X		
	11MP89SB10	10	T/WR								X		
	11MP89SB12	12	N										
	11MP89SB14	14	N										
	11MP89SB16	16	N										
	11MP89SB18	18	N										
	11MP89SB20	20	N										
	11MP89SB22	22	N										
	11MP89SB24	24	WB										
	11MP89SB26	26	WB										
	11MP89SB28	28	WB										
	11MP89SB30	30	WB										
11MP89SB32	32	WB											

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP89SB34	34	WB									
	11MP89SB35	35	WB									
	11MP89SB37	37	WB									
	11MP89--38 NS	38	WB									
	11MP89--40 NS	40	WB									
	11MP89--41 NS	41	WB									
	MW04 0-2 NS	2	T/WR									
	MW04 2-4 NS	4	T/WR									
	MW04 4-6 NS	6	T/WR									
	MW04 6-8 NS	8	T/WR									
	MW04 8-10 NS	10	T/WR									
	MW04 10-12 NS	12	T/WR									
	MW04 12-14 NS	14	T/WR									
	MW04 14-16 NS	16	T/WR									
	MW04 16-18 NS	18	T/WR   DN or F									
	MW04 18-20 NS	20	DN or F									
	MW04 20-22 NS	22	DN or F									
	MW04 22-24 NS	24	DN or F									
	MW04 24-26 NS	26	DN or F									
	MW04 26-28 NS	28	DN or F									
	MW04 28-30 NS	30	DN or F									
	MW04 30-31 NS	31	N									
	MW06 0-2 NS	2	T/WR									
	MW06 2-4 NS	4	T/WR									
	MW06 4-6 NS	6	T/WR					X				
	MW06 6-8 NS	8	N									
	MW06 8-10 NS	10	N									
	MW06 10-12 NS	12	N									
	MW06 12-14 NS	14	N									
	MW06 14-16 NS	16	N									
	MW06 16-18 NS	18	N									

**Table A-7 Surface and Subsurface Soil Types, Pre-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Ma-terial	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	MW06 18-20 NS	20	N									
	MW06 20-22 NS	22	N									
	MW06 22-24 NS	24	N									
See Table A-1 for soil type descriptions Key: bgs = below ground surface NS = Not Sampled												

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Ma-terial	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind	
<b>Post-1955 Main Processing Area</b>	10MP030405SS	SS	T/WR	X							X		
	10MP06070809SS	SS	T/WR	X		X		X			X		
	10MP01SS	SS	N										
	11MP01SB02	2	N										
	11MP01SB04	4	N										
	11MP01SB06	6	N										
	11MP01SB08	8	N										
	11MP01SB10	10	N										
	11MP01SB12	12	N										
	11MP01SB14	14	N										
	11MP01SB16	16	N										
	10MP02SS	SS	Stock-piled Ore					X	X			X	
	10MP03SS	SS	T/WR	X								X	
	10MP04SS	SS	T/WR	X								X	
	10MP05SS	SS	T/WR	X								X	
	10MP06SS	SS	T/WR	X								X	
	10MP07SS	SS	T/WR	X								X	
10MP08SS	SS	T/WR	X			X		X			X		
10MP09SS	SS	T/WR				X		X			X		

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	10MP10SS	SS	T/WR	X				X				
	11MP10SB02	2	DN (cut & fill)									
	11MP10SB04	4	WB									
	11MP10SB06	6	WB									
	10MP11SS	SS	T/WR	X								
	11MP11SB02	2	T/WR	X		X			X	X	X	
	11MP11SB04	4	T/WR			X			X	X	X	
	11MP11SB06	6	N									
	11MP11SB08	8	N									
	10MP12SS	SS	T/WR	X						X	X	
	11MP12SB02	2	T/WR	X							X	
	11MP12SB04	4	F									
	11MP12SB06	6	F									
	11MP12SB08	8	DN (cut & fill)									
	11MP12SB10	10	DN (cut & fill)									
	11MP12SB12	12	DN (cut & fill)									
	11MP12SB14	14	N									
	11MP12SB16	16	WB									
	11MP12SB18	18	WB									
	11MP12--20 NS	20	B									
	11MP12--22 NS	22	B									
	10MP13SS	SS	T/WR	X				X			X	
	11MP13SB02	2	T/WR									
	11MP13SB04	4	F	X								
	11MP13SB06	6	DN (cut & fill)									
	10MP14SS	SS	T/WR	X							X	
<b>Post-1955 Main Processing Area</b>	11MP14SB02	2	T/WR								X	
	11MP14SB04	4	T/WR			X	X	X			X	
	11MP14SB06	6	DN (cut &									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
			fill)									
	11MP14SB08	8	DN (cut & fill)									
	11MP14SB10	10	DN (cut & fill)									
	11MP14SB12	12	DN (cut & fill)									
	11MP14SB14	14	DN (cut & fill)									
	11MP14SB16	16	DN (cut & fill)									
	11MP14SB18	18	DN (cut & fill)									
	11MP14SB20	20	DN (cut & fill)									
	11MP14SB22	22	DN (cut & fill)									
	11MP14SB24	24	DN (cut & fill)									
	11MP14SB26	26	DN (cut & fill)									
	11MP14SB28	28	DN (cut & fill)									
	11MP14SB30	30	WB									
	11MP14SB32	32	WB   B									
	11MP14SB34	34	B									
	11MP14SB36	36	B									
	11MP14SB38	38	B									
	11MP14SB40	40	B									
	11MP14SB42	42	B									
	11MP14SB44	44	B									
	11MP14SB46	46	B									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP14SB48	48	B									
	11MP14SB50.5	50	B									
	11MP14SB52	52	B									
	11MP14SB54	54	B									
	11MP14SB56	56	B									
	11MP14SB58	58	B									
	11MP14--60 NS	60	B									
	10MP15SS	SS	T/WR									
	11MP15SB02	2	T/WR								X	
	11MP15SB04	4	DN (cut & fill)									
	11MP15SB06	6	DN (cut & fill)									
	11MP15SB08	8	DN (cut & fill)									
	10MP16SS	SS	T/WR	X							X	
	11MP16SB02	2	T/WR	X							X	
	11MP16SB04	4	DN (cut & fill)									
	11MP16SB06	6	DN (cut & fill)									
	11MP16SB08	8	DN (cut & fill)									
	11MP16SB10	10	DN (cut & fill)									
	10MP17SS	SS	T/WR	X		X						
	11MP17SB02	2	T/WR					X				
	11MP17SB04	4	T/WR					X				
	11MP17SB06	6	F									
	11MP17SB08	8	F									
	11MP17SB10	10	F									
	11MP17SB12	12	F									
	11MP17SB14	14	DN (cut & fill)									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP17SB16	16	DN (cut & fill)									
	11MP17SB18	18	DN (cut & fill)									
	11MP17SB20	20	DN (cut & fill)									
	11MP17SB22	22	DN (cut & fill)									
	11MP17SB24	24	DN (cut & fill)									
	11MP17SB26	26	DN (cut & fill)									
	11MP17SB28	28	DN (cut & fill)									
	11MP17SB30	30	DN (cut & fill)									
	11MP17SB32	32	DN (cut & fill)   WB									
<b>Post-1955 Main Processing Area</b>	10MP18SS	SS	T/WR									
	11MP18SB02	2	T/WR   DN (cut & fill)	X							X	
	11MP18SB04	4	DN (cut & fill)									
	11MP18SB06	6	DN (cut & fill)									
	11MP18SB08	8	DN (cut & fill)									
	11MP18SB10	10	DN (cut & fill)									
	11MP18SB12	12	DN (cut &									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
			fill)									
	11MP18SB14	14	DN (cut & fill)									
	11MP18SB16	16	DN (cut & fill)									
	11MP18SB18	18	DN (cut & fill)									
	11MP18SB20	20	DN (cut & fill)									
	11MP18SB22	22	N									
	10MP19SS	SS	N or DN									
	11MP19SB02	2	N									
	11MP19SB04	4	N									
	11MP19SB06	6	WB									
	10MP20SS	SS	F									
	11MP20SB02	2	DN (cut & fill)									
	11MP20SB04	4	DN (cut & fill)									
	11MP20SB06	6	DN (cut & fill)									
	11MP20SB08	8	DN (cut & fill)									
	11MP20SB10	10	DN (cut & fill)									
	11MP20SB12	12	DN (cut & fill)									
	11MP20SB14	14	N									
	11MP20--16 NS	16	WB									
	11MP20--18 NS	18	B									
	11MP20--20 NS	20	B									
	11MP20--22 NS	22	B									
	11MP20--24 NS	24	B									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP20--26 NS	26	B									
	11MP20--28 NS	28	B									
	11MP20--30 NS	30	B									
	11MP20--31 NS	31	B									
	10MP21SS	SS	F									
	11MP21SB02	2	DN (cut & fill)									
	11MP21SB04	4	DN (cut & fill)									
	11MP21SB06	6	DN (cut & fill)									
	11MP21SB08	8	DN (cut & fill)									
	11MP21SB10	10	DN (cut & fill)									
	11MP21SB12	12	DN (cut & fill)									
	11MP21SB14	14	DN (cut & fill)									
	11MP21SB16	16	N									
	10MP22SS	SS	T/WR	X							X	
	11MP22SB02	2	T/WR	X							X	
	11MP22SB04	4	T/WR	X		X					X	
	11MP22SB06	6	T/WR	X		X						
	11MP22SB08	8	T/WR	X		X						
	11MP22SB10	10	T/WR	X		X					X	
	11MP22SB12	12	T/WR									
	11MP22SB14	14	T/WR									
	11MP22SB16	16	DN (cut & fill)									
	10MP23SS	SS	T/WR	X							X	
	11MP23SB02	2	T/WR									
	11MP23SB04	4	T/WR		X			X	X		X	
	11MP23SB06	6	T/WR		X	X		X			X	

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP23SB08	8	T/WR					X				
	11MP23SB10	10	T/WR					X				
	11MP23SB12	12	T/WR			X		X				
	11MP23SB14	14	T/WR			X		X				
	11MP23SB16	16	T/WR									
	11MP23SB18	18	T/WR									
	11MP23SB20	20	T/WR   RDCA									
	10MP24SS	SS	T/WR	X				X	X		X	
	11MP24SB02	2	T/WR			X						
	11MP24SB04	4	T/WR									
	11MP24SB06	6	T/WR					X			X	
	11MP24SB08	8	T/WR									
	11MP24SB10	10	T/WR		X						X	
	11MP24SB12	12	T/WR		X						X	
	11MP24SB14	14	T/WR	X	X						X	
	11MP24SB16	16	T/WR		X						X	
	11MP24SB18	18	T/WR		X						X	
	11MP24SB20	20	T/WR   N		X							
	11MP24SB22	22	N									
	Post-1955 Main Processing Area	10MP25SS	SS	T/WR								
11MP25SB02		2	T/WR	X				X				
11MP25SB04		4	T/WR	X	X			X				
11MP25SB06		6	T/WR	X	X			X				
11MP25SB08		8	T/WR	X	X			X				
11MP25SB10		10	T/WR	X	X			X				
11MP25SB12		12	T/WR	X	X			X				
11MP25SB14		14	T/WR	X	X			X				
11MP25SB16		16	T/WR	X	X			X			X	
11MP25SB18		18	T/WR	X	X			X			X	
11MP25SB20		20	RDCA									
11MP25SB22		22	RDCA									
11MP25SB24		24	RDCA									
11MP25SB26		26	RDCA									
11MP25SB28		28	RDCA									
11MP25SB30	30	RDCA										

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP25SB32	32	RDCA									
	11MP25SB34	34	RDCA									
	11MP25SB36	36	RDCA   WB									
	10MP26SS	SS	T/WR	X							X	
	11MP26SB02	2	T/WR	X								
	11MP26SB04	4	T/WR	X				X				
	11MP26SB06	6	T/WR									
	11MP26SB08	8	T/WR	X	X					X		
	11MP26SB10	10	T/WR	X						X		
	11MP26SB12	12	T/WR	X						X		
	11MP26SB14	14	T/WR	X						X		
	11MP26SB16	16	T/WR   N	X								
	11MP26SB18	18	N									
	10MP27SS	SS	T/WR									
	11MP27SB02	2	T/WR							X	X	
	11MP27SB04	4	N									
	11MP27SB06	6	N									
	10MP28SS	SS	T/WR	X							X	
	11MP28SB02	2	T/WR							X		
	11MP28SB04	4	T/WR					X	X	X	X	
	11MP28SB06	6	T/WR		X			X		X	X	
	11MP28SB08	8	N									
	11MP28SB10	10	N									
	10MP29SS	SS	T/WR	X							X	
	11MP29SB02	2	T/WR	X								
	11MP29SB04	4	T/WR	X								
	11MP29SB06	6	T/WR	X								
	11MP29SB08	8	T/WR	X								
	11MP29SB10	10	T/WR	X				X				
	11MP29SB12	12	T/WR	X				X				
	11MP29SB14	14	T/WR	X							X	
	11MP29SB16	16	T/WR	X							X	
	11MP29SB18	18	T/WR									
	11MP29SB20	20	N or DN									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind	
	11MP29SB22	22	RDCA										
	11MP29SB24	24	RDCA										
	11MP29SB26	26	RDCA										
	10MP30SS	SS	T/WR	X							X		
	11MP30SB02	2	T/WR										
	11MP30SB04	4	T/WR										
	11MP30SB06	6	T/WR					X				X	
	11MP30SB08	8	T/WR					X				X	
	11MP30SB10	10	N or DN										
	11MP30SB12	12	N or DN										
	11MP30SB14	14	N or DN										
	11MP30SB16	16	N or DN										
	11MP30SB18	18	N or DN										
	11MP30SB20	20	N										
	11MP30--21 NS	21	N										
	<b>Post-1955 Main Processing Area</b>	10MP31SS	SS	B									
11MP31SB02		2	B										
11MP31SB04		4	B										
11MP31--06 NS		6	B										
11MP31--08 NS		8	B										
11MP31--10 NS		10	B										
11MP31--12 NS		12	B										
11MP31--14 NS		14	B										
11MP31--16 NS		16	B										
11MP31--18 NS		18	B										
11MP31--20 NS		20	B										
11MP31--22 NS		22	B										
11MP31--24 NS		24	B										
11MP31--26 NS		26	B										
11MP31--28 NS		28	B										
11MP31--30 NS		30	B										
11MP31--32 NS	32	B											
11MP31--34 NS	34	B											

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP31--36 NS	36	B									
	11MP31--38 NS	38	B									
	11MP31--39 NS	39	B									
	10MP32SS	SS	FT									
	11MP32SB02	2	FT									
	11MP32SB04	4	FT									
	11MP32SB06	6	FT									
	11MP32SB08	8	FT									
	11MP32SB10	10	N or DN									
	11MP32SB12	12	N or DN									
	11MP32SB14	14	N or DN									
	10MP33SS	SS	N									
	11MP33SB02	2	N									
	11MP33SB04	4	B									
	11MP33--06 NS	6	B									
	11MP33--08 NS	8	B									
	11MP33--10 NS	10	B									
	11MP33--12 NS	12	B									
	11MP33--14 NS	14	B									
	11MP33--16 NS	16	B									
	11MP33--18 NS	18	B									
	11MP33--20 NS	20	B									
	11MP33--22 NS	22	B									
	11MP33--24 NS	24	B									
	11MP33--26 NS	26	B									
	11MP33--28 NS	28	B									
	11MP33--30 NS	30	B									
	11MP33--32 NS	32	B									
	11MP33--34 NS	34	B									
	11MP33--36 NS	36	B									
	11MP33--38 NS	38	B									
	11MP33--40 NS	40	B									
	11MP33--42 NS	42	B									
	10MP34SS	SS	FT									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP34SB02	2	FT									
	11MP34SB04	4	FT									
	11MP34SB06	6	FT									
	11MP34SB08	8	FT   N or DN									
	11MP34SB10	10	N or DN									
	11MP34SB12	12	N or DN									
	11MP34SB14	14	N or DN									
	11MP34SB16	16	N or DN									
	11MP34SB18	18	N or DN									
	11MP34SB20	20	WB									
	11MP34--22 NS	22	WB   B									
<b>Post-1955 Main Processing Area</b>	10MP35SS	SS	T/WR	X							X	X
	11MP35SB02	2	T/WR	X							X	X
	11MP35SB04	4	T/WR	X							X	X
	11MP35SB06	6	T/WR	X							X	
	11MP35SB08	8	T/WR	X							X	
	11MP35SB10	10	T/WR									
	11MP35SB12	12	T/WR									
	11MP35SB14	14	T/WR									
	11MP35SB16	16	T/WR									
	11MP35SB18	18	WB									
	11MP35SB20	20	WB									
	11MP35--22 NS	22	B									
	10MP36SS	SS	FT									
	11MP36SB02	2	FT									
	11MP36SB04	4	FT									
	11MP36SB06	6	FT									
	11MP36SB08	8	FT   F									
	11MP36SB10	10	F   FT									
	11MP36SB12	12	WB									
	11MP36SB14	14	WB									
11MP36SB16	16	WB										

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	10MP37SS	SS	DN or F									
	11MP37SB02	2	DN or F									
	11MP37SB04	4	DN or F									
	11MP37SB06	6	DN or F									
	11MP37SB08	8	DN or F									
	11MP37SB10	10	N or DN									
	11MP37SB12	12	N or DN									
	11MP37SB14	14	N or DN   WB									
	11MP37SB16	16	WB									
	11MP37SB18	18	WB									
	11MP37SB20	20	WB									
	11MP37SB22	22	WB   B									
	10MP38SS	SS	T/WR									
	11MP38SB02	2	T/WR								X	X
	11MP38SB04	4	T/WR								X	X
	11MP38SB06	6	T/WR									
	11MP38SB08	8	T/WR								X	X
	11MP38SB10	10	T/WR (+ possible FT)	X								
	11MP38SB12	12	T/WR	X								
	11MP38SB14	14	TWR   N or DN									
	11MP38SB16	16	N or DN									
	10MP39SS	SS	T/WR	X							X	
	11MP39SB02	2	T/WR								X	X
	11MP39SB04	4	T/WR								X	X
	11MP39SB06	6	T/WR								X	X
	11MP39SB08	8	T/WR								X	X
	11MP39SB10	10	T/WR									X

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP39SB12	12	N, DN, or F									
	11MP39SB14	14	WB									
	11MP39--16.5 NS	16.5	B									
<b>Post-1955 Main Processing Area</b>	10MP40SS	SS	T/WR									
	11MP40SB02	2	T/WR	X								
	11MP40SB04	4	T/WR	X								X
	11MP40SB06	6	T/WR									
	11MP40SB08	8	T/WR	X							X	
	11MP40SB10	10	B									
	11MP40SB12	12	B									
	11MP40--14.5 NS	14.5	B									
	10MP67SS	SS	T/WR	X		X					X	
	10MP68SS	SS	F									
	11MP91--02 NS	2	T/WR									
	11MP91--04 NS	4	T/WR									
	11MP91--06 NS	6	T/WR									X
	11MP91--08 NS	8	T/WR									X
	11MP91--10 NS	10	N or DN									
	11MP91--12 NS	12	N or DN									
	11MP91--14 NS	14	N or DN									
	11MP91--16 NS	16	N or DN									
	11MP91--18 NS	18	N or DN									
	11MP91--20 NS	20	N or DN									
	11MP91--22 NS	22	N or DN									
	11MP91--24 NS	24	N or DN   WB									
	11MP91--26 NS	26	WB									
	11MP91--28 NS	28	B									
	11MP91--30 NS	30	B									
	11MP91--32 NS	32	B									
11MP91--34 NS	34	B										

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11MP91--36 NS	36	B									
	11MP91--38 NS	38	B									
	11MP91--40 NS	40	B									
	11MP91--42 NS	42	B									
	11MP91--44 NS	44	B									
	11MP91--46 NS	46	B									
	11MP91--48 NS	48	B									
	11MP91--50 NS	50	B									
	11MP91--51.5 NS	51.5	B									
	MW01 0-2 NS	2	T/WR									
	MW01 2-4 NS	4	T/WR									
	MW01 4-6 NS	6	T/WR									
	MW01 6-8 NS	8	T/WR									
	MW01 8-10 NS	10	T/WR									
	MW01 10-12 NS	12	T/WR									
	MW01 12-14 NS	14	T/WR									
	MW01 14-16 NS	16	T/WR									
	MW01 16-18 NS	18	T/WR									
	MW01 18-20 NS	20	T/WR   N									
	MW01 20-22 NS	22	N									
	MW01 22-24 NS	24	N									
	MW01 24-26 NS	26	N									
	MW01 26-28 NS	28	N									
	MW01 28-30 NS	30	N									
	MW01 30-31 NS	31	N									
	MW03SB 0-2 NS	2	T/WR & FT									
	MW03SB 2-4 NS	4	T/WR & FT									
	MW03SB 4-6 NS	6	T/WR & FT									
	MW03SB 6-8 NS	8	T/WR & FT									
	MW03SB 8-10 NS	10	T/WR & FT									
	MW03SB 10-12 NS	12	T/WR & FT									
	MW03SB 12-14 NS	14	F									

**Table A-8 Surface and Subsurface Soil Types, Post-1955 Main Processing Area**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	MW03SB 14-16 NS	16	N or DN									
	MW03SB 16-18 NS	18	N or DN									
	MW03SB 18-20 NS	20	N or DN									
	MW03SB 20-22 NS	22	N or DN									
	MW03SB 22-24 NS	24	N or DN									
	MW03SB 24-26 NS	26	N or DN									
	MW07 0-2 NS	2	N or DN									
	MW07 2-4 NS	4	N or DN									
	MW07 4-6 NS	6	N or DN									
	MW07 6-8 NS	8	N or DN									
	MW07 8-10 NS	10	N or DN									
	MW07 10-12 NS	12	N or DN									
	MW07 12-14 NS	14	N or DN									
	MW07 14-16 NS	16	N or DN									
	MW07 16-18 NS	18	N or DN									
	MW07 18-20 NS	20	N or DN									
	MW07 20-21 NS	21	N or DN									
	10OP01SS	SS	Tailings	X							X	
See Table A-1 for soil type descriptions Key: bgs = below ground surface NS = Not Sampled												

**Table A-9 Surface and Subsurface Soil Types, Red Devil Creek Downstream Alluvial Area and Delta**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
<b>Red Devil Creek Downstream Alluvial Area and Delta</b>	10RD01SS	SS	N or DN									
	11RD01SB02	2	N or DN									
	11RD01SB04	4	N or DN									
	11RD01SB06	6	N or DN									
	11RD01SB08	8	N or DN									
	11RD01SB10	10	KRA									
	11RD01SB12	12	KRA									
	11RD01SB14	14	KRA									
	11RD01SB16	16	KRA									
	10RD02SS	SS	Mixed RDCA, Soil, and T/WR	X								
	11RD02SB02	2	Mixed RDCA, Soil, and T/WR	X							X	
	11RD02SB04	4	Mixed RDCA, Soil, and T/WR	X							X	
	11RD02SB06	6	Mixed RDCA, Soil, and T/WR									
	11RD02SB08	8	Mixed RDCA, Soil, and T/WR									
	11RD02SB10	10	Mixed RDCA, Soil, and T/WR									
	11RD02SB12	12	KRA									
	11RD02SB14	14	KRA									

**Table A-9 Surface and Subsurface Soil Types, Red Devil Creek Downstream Alluvial Area and Delta**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	10RD03SS	SS	Mixed RDCA, Soil, and T/WR									
	11RD03SB02	2	Mixed RDCA, Soil, and T/WR					X			X	X
	11RD03SB04	4	Mixed RDCA, Soil, and T/WR								X	X
	11RD03SB06	6	Mixed RDCA, Soil, and T/WR								X	X
	11RD03SB08	8	Mixed RDCA, Soil, and T/WR								X	
	11RD03SB10	10	Mixed RDCA, Soil, and T/WR									
	11RD03SB12	12	KRA									
	11RD03SB14	14	KRA									
	11RD03SB16	16	KRA									
	10RD04SS	SS	T/WR					X			X	
	11RD04SB02	2	T/WR   N	X							X	
	11RD04SB04	4	N									
	11RD04SB06	6	N									
	11RD04SB08	8	N									
	11RD04SB10	10	KRA and/or RDCA									
	11RD04SB12	12	KRA and/or RDCA									

**Table A-9 Surface and Subsurface Soil Types, Red Devil Creek Downstream Alluvial Area and Delta**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11RD04SB14	14	KRA and/or RDCA									
	10RD05SS	SS	N or DN									
	11RD05SB02	2	N or DN									
	11RD05SB04	4	N or DN									
	11RD05SB06	6	N or DN									
	11RD05SB08	8	N or DN									
	11RD05SB10	10	N or DN									
	11RD05SB12	12	N or DN									
	11RD05SB14	14	N or DN									
	11RD05SB16	16	WB									
	11RD05--18 NS	18	WB									
	11RD05--20 NS	20	B									
	11RD05--22 NS	22	B									
	11RD05--24 NS	24	B									
	11RD05--25 NS	25	B									
	10RD06SS	SS	DN with local fill									
	11RD06SB02	2	DN with local fill									
	11RD06SB04	4	DN with local fill									
	11RD06SB06	6	DN with local fill	X								
	11RD06SB08	8	N or DN									
	11RD06SB10	10	N or DN									
	11RD06SB12	12	WB									

**Table A-9 Surface and Subsurface Soil Types, Red Devil Creek Downstream Alluvial Area and Delta**

Area	Sample ID	Bottom Depth of Soil Interval (feet bgs)	Interpreted Soil Type	Red Porous Rock	Vitrious Material	Stibnite	Elemental Hg	Cinnabar	Realgar	Orpiment	Vein Material	Distinctive Red Rind
	11RD06SB14	14	WB   B									
	10RD07SS	SS	DN with local fill									
	11RD07SB02	2	DN with local fill									
	11RD07SB04	4	DN with local fill									
	11RD07SB06	6	N or DN									
	11RD07SB08	8	N or DN									
	11RD07SB10	10	N or DN									
	11RD07SB12	12	B									
	10RD20SS	SS	T/WR (road base)									
	11RD20SB02	2	T/WR (road base)									
	11RD20SB04	4	N									
	11RD20SB05	6	N									
	11RD20SB06	8	N									
	11RD20SB08	10	N									
	11RD20SB10	12	N									
	11RD20SB12	14	N									
	11RD20SB14	16	N									
	11RD20SB16	18	N									
	11RD20SB18	20	WB									
	11RD20SB20	22	WB									
	11RD20--22 NS	24	B									
	11RD20--23 NS	23	B									
See Table A-1 for soil type descriptions Key: bgs = below ground surface NS Not Sampled												

# B

## Data Validation Reports

Provided on accompanying disk

# C

## **Summary of Surface Soil, Subsurface Soil, and Groundwater Data**

**Table C-1 Pre-1955 Main Processing Area Surface Soil**

Station ID	Depth (bottom of interval)	Monitoring Well ID	Field Sample ID	Soil Type	Soil																		
					XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)	Qual
10MP424344SS	0.5		10MP424344SS	T/WR		880		1580			1840		590	J	1000		136		3.9	J	1.3		
10MP5051525354SS	0.5		10MP5051525354SS	T/WR		10100	J	9140			3610		2000		2800		144		174		7.6		
10MP55565758SS	0.5		10MP55565758SS	T/WR		764	J	960			1100		920		900		114		15		4		
MP42	0.5		10MP42SS	T/WR	954	560				1207	1770					74	124						
MP43	0.5		10MP43SS	T/WR	1228	720				1824	2080					129	149						
MP44	0.5		10MP44SS	T/WR	935	340				725	860					54	86						
MP45	0.5		10MP45SS	T/WR	427	220				1009	1800					67	87						
MP46	0.5		10MP46SS	T/WR	15,000	13000				5616	4940					136	194						
MP47	0.5		10MP47SS	T/WR	872	90				1499	1180					59	118						
MP48	0.5		10MP48SS	T/WR	6895	5980	J			3825	3940					740	1260						
MP49	0.5		10MP49SS	T/WR	13,100	10900	J			4597	4130					136	176						
MP50	0.5		10MP50SS	T/WR	965	210	J			579	826					56	318						
MP51	0.5		10MP51SS	T/WR	23,300	23300	J			5433	4610					131	119						
MP52	0.5	MW26	10MP52SS	T/WR	23,700	18500	J			5708	5000					176	183						
MP53	0.5		10MP53SS	T/WR	2712	1480	J			2602	3000					85	183						
MP54	0.5		10MP54SS	F	190	20	J			852	1360					25	24.4						
MP55	0.5		10MP55SS	T/WR	3062	1890	J			1345	2150					66	124						
MP56	0.5		10MP56SS	N or DN	515	183	J			280	333					<10.4	19.1						
MP57	0.5		10MP57SS	T/WR	2572	1630	J			1458	2000					97	150						
MP58	0.5		10MP58SS	T/WR	1016	716	J			661	1080					52	114						
MP59	0.5		10MP59SS	WR	143	170	J	110		212	1130		370		36	U	<12.5	115		0.2			
MP60	0.5	MW27	10MP60SS	T/WR	978	660	J			1594	1800					207	144						
MP61	0.5		10MP61SS	T/WR	2183	1200	J			904	1410					49	68						
MP62	0.5	MW24	10MP62SS	T/WR	3405	1590	J			1484	1880					100	165						
MP63	0.5		10MP63SS	T/WR	3632	2680	J			2710	2880					125	150						
MP64	0.5		10MP64SS	T/WR	3008	1810	J			2441	2520					118	172						
MP65	0.5		10MP65SS	T/WR	1692	589	J			895	1200					23	54						
MP66	0.5	MW23	10MP66SS	T/WR	1305	220	J			1722	2490					135	145						

Notes:

For soil type descriptions see Table A-1

Key:

- µg/L Micrograms per liter
- J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.
- mg/kg Milligrams per kilogram
- ppm Parts per million
- SPLP Synthetic precipitation leaching procedure
- TCLP toxicity characteristic leaching procedure
- U Analyte was analyzed for but not detected. Value provided is reporting limit.
- XRF X-ray fluorescence

Table C-2 Post-1955 Main Processing Area Surface Soil

Station ID	Depth (bottom of interval)	Monitoring Well ID	Field Sample ID	Soil Type	Soil																	
					XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)
10MP030405SS	0.5		10MP030405SS	T/WR		5500	J	9250			5580		3050		5700		680		30		5	
10MP06070809SS	0.5		10MP06070809SS	T/WR		4420	J	8190			4520		2810		5400		750		8		3.1	
MP67	0.5		10MP67SS	T/WR	9690	9830	J			5095	5240					477	730					
MP68	0.5		10MP68SS	F	732	351	J			675	959					37	109					
MP01	0.5	MW08	10MP01SS	N	<20.8	20	J	70		80	100		50	U		<10.1	2.6		0.1			
MP02	0.5		10MP02SS	Ore Pile	1244	210	J	90		5967	7310		440			157	88		0.6			
MP03	0.5		10MP03SS	T/WR	7540	4720	J			5734	5200					473	710					
MP04	0.5		10MP04SS	T/WR	8127	5530	J			5613	6670					406	860					
MP05	0.5		10MP05SS	T/WR	8031	4460	J			5529	5660					439	900					
MP06	0.5		10MP06SS	T/WR	7882	5750	J			5756	5640					469	750					
MP07	0.5		10MP07SS	T/WR	11400	8200	J			5510	4280					686	790	J				
MP08	0.5		10MP08SS	T/WR	2363	1220	J			2294	3040					199	295					
MP09	0.5		10MP09SS	T/WR	4725	1990	J			3636	4200					281	560					
MP10	0.5		10MP10SS	T/WR	771	470	J			877	1540					109	172					
MP11	0.5		10MP11SS	T/WR	9,424	6980	J			4607	5320					399	660				11.3	
MP12	0.5	MW11	10MP12SS	T/WR	14,300	10900	J			5496	4870					231	304					
MP13	0.5		10MP13SS	T/WR	16,000	12100	J			6050	4890					493	690					
MP14	0.5	MW10	10MP14SS	T/WR	5132	3400	J			1791	2320					111	162				75.8	
MP15	0.5		10MP15SS	T/WR	15,000	11800	J			5604	4660					188	217					
MP16	0.5		10MP16SS	T/WR	3483	1570	J	2790		5043	6950		3870	3200		241	290		5.7			
MP17	0.5	MW09	10MP17SS	T/WR	9493	6180	J	7740		5608	5540		4900	11000		298	460		14.7			
MP18	0.5		10MP18SS	T/WR	7412	4810	J			2303	2570					81	136				4	U
MP19	0.5		10MP19SS	N or DN	139	40				127	170					17	38				4	U
MP20	0.5	MW13	10MP20SS	F	75	40				164	230					41	62					
MP21	0.5		10MP21SS	F	839	80				299	360					44	63					
MP22	0.5		10MP22SS	T/WR	2545	2500				1722	1960					105	106					
MP23	0.5		10MP23SS	T/WR	10,000	8720				4456	4380					211	261					
MP24	0.5		10MP24SS	T/WR	2861	1180				2204	2020					301	440					
MP25	0.5	MW14	10MP25SS	T/WR	14,500	14100		9240		5533	5400		3820	5700		783	1340		21	J		
MP26	0.5		10MP26SS	T/WR	15,100	15100		11200		6315	6420		4890	9000		1182	1620		12	J		
MP27	0.5		10MP27SS	T/WR	9801	8480		10700		6781	6100		3660	7300		313	250		1.5	J		
MP28	0.5		10MP28SS	T/WR	8388	4780				5871	5350					446	820					
MP29	0.5	MW15	10MP29SS	T/WR	19,100	16700		31300		6986	6170		6000	13800		303	440		7	J		
MP30	0.5	MW16	10MP30SS	T/WR	2643	720				3063	2930					121	400					
MP31	0.5	MW18	10MP31SS	B	<20.9	7				18	19					<9.2	0.28					
MP32	0.5		10MP32SS	FT	1983	1430		3660		6854	9880		2310	2800		69	127		3.3	J		
MP33	0.5	MW19	10MP33SS	N	<17.9	9				18	18					<9.6	1.46					
MP34	0.5		10MP34SS	FT	1129	780		480		5148	8510		700	J	900	39	79		1.2	J		
MP35	0.5		10MP35SS	T/WR	3032	1680				1777	2390					80	183					
MP36	0.5		10MP36SS	FT	733	690		510		3854	7050		570	J	700	63	75		1.4	J	4	U
MP37	0.5		10MP37SS	DN or F	<23.2	20				45	60					<10.7	3.6					
MP38	0.5	MW20	10MP38SS	T/WR	963	760				709	992					78	154					
MP39	0.5	MW21	10MP39SS	T/WR	3605	1910				1470	1770					43	42					
MP40	0.5	MW22	10MP40SS	T/WR	837	267				231	375					<12.4	15					
OP01	0.5		10OP01SS	Calcine Pile	17,800	3520	J	1950		6537	5340		4430	29100		48	170		4.8	J	0.3	

Notes:

For soil type descriptions see Table A-1

- Key:
- µg/L Micrograms per Liter
- J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.
- mg/kg Milligrams per kilogram
- ppm Parts per million
- SPLP Synthetic precipitation leaching procedure
- TCLP toxicity characteristic leaching procedure
- U Analyte was analyzed for but not detected. Value provided is reporting limit.
- XRF X-ray fluorescence

**Table C-3 Red Devil Creek Downstream Alluvial Area and Delta Surface Soils**

Station ID	Depth (bottom of interval)	Monitoring Well ID	Field Sample ID	Soil Type	Soil																	
					XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)
RD01	0.5		10RD01SS	N or DN	<21.7	0.61	U			20	39						1.74					
RD02	0.5		10RD02SS	Mixed RDCA, Soil, and T/WR	1625	530	J			1037	1280						43					
RD03	0.5		10RD03SS	T/WR	807	479	J			784	950						28					
RD04	0.5		10RD04SS	Mixed RDCA, Soil, and T/WR	2465	381	J	620		1463	1210		540				99		37			
RD05	0.5	MW32	10RD05SS	N or DN	<19.3	39	J			57	67						3.8					
RD06	0.5		10RD06SS	DN with local fill	1078	677	J	1290		820	1250		660				186		40			
RD07	0.5		10RD07SS	DN with local fill	44	30	J			58	76						16					
RD20	0.5	MW33	10RD20SS	T/WR (road base)	2175	974	J			1094	1310						75					

**Table C-4 Red Devil Creek Upstream Area Surface Soil**

Station ID	Depth (bottom of interval)	Monitoring Well ID	Field Sample ID	Soil Type	Soil																	
					XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)
RD08	0.5		10RD08SS	DN (KG)	<21.6	1.2	U			24	30						<9.7	0.9				
RD09	0.5		10RD09SS	DN (KG)	<22.9	1.4	UJ	50	U	130	20		50	J			<10.7	2		0.1	UJ	
RD10	0.5		10RD10SS	RDCA	20.4	30	J			18	220						<8.7	6.4				
RD11	0.5		10RD11SS	RDCA	<17.6	14	J	50	U	21	41		50	UJ			<7.2	6.6		0.7	J	
RD12	0.5		10RD12SS	RDCA	<18.6	0.69	UJ	50	U	19	25		50	U			<7.5	0.79		0.1	U	
RD13	0.5	MW12	10RD13SS	RDCA	<16.5	0.8	UJ			8	20						<6.9	0.6				
RD14	0.5		10RD14SS	RDCA	<19.3	0.7	UJ			8	13						<7.9	0.96				
RD15	0.5		10RD15SS	RDCA	<19.0	0.65	UJ			<7.0	8						<7.7	0.13				
RD16	0.5		10RD16SS	RDCA	<19.0	8	J			9	0.47	U					<7.7	0.25				
RD17	0.5		10RD17SS	RDCA	<20.2	0.62	UJ			9	0.47	U					<8.5	0.14				
RD18	0.5		10RD18SS	RDCA	<18.2	0.8	UJ	50	U	23	40		50	U			<8.0	1.57		0.1	U	
RD19	0.5		10RD19SS	RDCA	<17.2	0.76	UJ	50	U	10	12		50	U			<6.9	1.86		0.1	U	

Notes to Tables C-3 and C-4:  
 For soil type descriptions see Table A-1

Key to Tables C-3 and C-4:  
 J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.  
 U Analyte was analyzed for but not detected. Value provided is reporting limit.  
 ppm Parts per million  
 mg/kg Milligrams per kilogram  
 µg/L Micrograms per Liter  
 SPLP Synthetic precipitation leaching procedure  
 TCLP toxicity characteristic leaching procedure  
 XRF X-ray fluorescence

**Table C-5 Dolly Sluice Surface Soil**

Station ID	Depth (bottom of interval)	Field Sample ID	Soil Type	Soil																			
				XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)	Qual	
DS01	0.5	10DS01SS	SO	<25.7	40	J	60		438	1010		50	U				169	71		1.6	J		
DS02	0.5	10DS02SS	SO	71	40	J			244	550							25	22					
DS03	0.5	10DS03SS	DN	<20.0	21	J			177	355							15	16					

**Table C-6 Rice Sluice Surface Soil**

Station ID	Depth (bottom of interval)	Field Sample ID	Soil Type	Soil																			
				XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)	Qual	
RS01	0.5	10RS01SS	SO	<18.5	34	J	50	U	27	29		50	U				<8.4	1.25		0.1	U		
RS02	0.5	10RS02SS	SO	<21.6	9	J			20	30							<10.2	1.15					
RS03	0.5	10RS03SS	SO or DN or N	<21.1	0.53	UJ			80	110							<9.4	3.57					

Notes to Tables C-5 and C-6:  
 For soil type descriptions see Table A-1

Key to Tables C-5 and C-6:  
 J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.  
 U Analyte was analyzed for but not detected. Value provided is reporting limit.  
 ppm Parts per million  
 mg/kg Milligrams per kilogram  
 µg/L Micrograms per Liter  
 SPLP Synthetic precipitation leaching procedure  
 TCLP toxicity characteristic leaching procedure  
 XRF X-ray fluorescence

**Table C-7 Surface Mined Area Surface Soil**

Station ID	Depth (bottom of interval)	Monitoring Well ID	Field Sample ID	Soil Type	Soil																		
					XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (ug/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (ug/L)	Qual	TCLP Arsenic (ug/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (ug/L)	Qual	TCLP Mercury (ug/L)	Qual
MP41	0.5	MW29	10MP41SS	DN	57	39		50	U	252	516		50	U			<11.3	8		0.9	J		
SM01	0.5		10SM01SS	DN (KG, MZ)	94	40	J			762	1710						20	29					
SM02	0.5		10SM02SS	DN (KG, MZ)	73	80	J			1762	3620						<14.7	44					
SM03	0.5		10SM03SS	DN (KG, MZ)	52	90	J	50	U	1335	2290		170				20	21		1.3			
SM04	0.5		10SM04SS	DN (KG, MZ)	48	20	J			512	1470						13	31					
SM05	0.5		10SM05SS	DN (KG, MZ)	252	140	J	50	U	3650	5120		560				46	102		1.6			
SM06	0.5		10SM06SS	DN (KG, MZ)	51	30	J			587	890						<13.4	25					
SM07	0.5		10SM07SS	DN (KG, MZ)	<25.3	2.3	UJ	50	U	5208	8510		300				53	174		4.2			
SM08	0.5		10SM08SS	DN (KG, MZ)	<24.9	10	J			148	230						<12.5	8					
SM09	0.5		10SM09SS	DN (KG, MZ)	<24.7	1.1	UJ			164	190						<12.9	9					
SM10	0.5		10SM10SS	DN (loess)	<21.9	0.45	UJ			15	12						<10.0	0.15	J				
SM11	0.5		10SM11SS	N or DN (loess)	<21.4	0.49	UJ			10	11						<10.1	0.17	J				
SM12	0.5		10SM12SS	DN (KG and loess)	<23.6	1.2	UJ	50	U	63	90		50	U			<10.5	5.4	J	0.1	U		
SM13	0.5		10SM13SS	DN (KG)	69	40	J	110		520	670		50	U			<11.8	23	J	1.3	J		
SM14	0.5		10SM14SS	DN (loess)	<21.7	0.48	UJ			<8.0	10						<9.8	0.14	J				
SM15	0.5		10SM15SS	DN (KG)	<21.3	0.48	UJ			18	21						<10.2	0.62	J				
SM16	0.5		10SM16SS	DN (KG)	<23.3	1.2	UJ			132	350						<11.4	8.8	J				
SM17	0.5		10SM17SS	DN (KG)	<22.2	20	J			158	361						<10.9	12	J				
SM18	0.5		10SM18SS	DN (KG)	<28.5	1.2	UJ	50	U	270	230		50	U			<14.8	11	J	0.3	J		
SM19	0.5		10SM19SS	DN (KG)	<23.6	20	J	50	U	313	670		70				<11.8	14	J	2	J		
SM20	0.5		10SM20SS	DN (loess)	<20.5	0.48	UJ			<8.6	9						<10.3	0.11	J				
SM21	0.5		10SM21SS	DN (KG)	<24.1	0.47	UJ	50	U	47	39		50	U			<10.5	2	J	0.1	U		
SM22	0.5		10SM22SS	DN (KG)	<21.2	0.49	UJ			29	17						<9.8	0.05	J				
SM23	0.5		10SM23SS	DN (KG)	1035	508	J	1430		195	223		90				<10.7	8.2	J	1	J		
SM24	0.5		10SM24SS	DN (KG)	<23.0	1.2	UJ			13	0.9	U					<10.2	0.26	J				
SM25	0.5		10SM25SS	DN (KG)	<22.3	1.1	UJ			19	40						<11.9	0.9	J				
SM26	0.5		10SM26SS	DN (KG)	<22.0	0.49	UJ			9	13						<9.6	0.64	J				
SM27	0.5		10SM27SS	DN (KG)	<25.3	1.2	UJ	50	U	20	20		50	U			<13.2	1.9	J	0.2	J		
SM28	0.5		10SM28SS	DN (KG and loess)	471	109	J	380		235	177		50	U			<10.3	17	J	1.4	J		
SM29	0.5		10SM29SS	DN (loess)	<23.8	0.5	UJ			12	11						<10.5	0.17	J				
SM30	0.5		10SM30SS	WB	<21.5	0.54	UJ			29	46						<9.7	1.9	J				

Notes:

For soil type descriptions see Table A-1

Key:

µg/L Micrograms per liter

J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.

mg/kg Milligrams per kilogram

ppm Parts per million

SPLP Synthetic precipitation leaching procedure

TCLP toxicity characteristic leaching procedure

U Analyte was analyzed for but not detected. Value provided is reporting limit.

XRF X-ray fluorescence



















Table C-10 Red Devil Creek Downstream Alluvial Area and Delta Subsurface Soil

Station ID	Depth (bottom of interval)	Monitoring Well ID	Field Sample ID	Soil Type	Groundwater Encountered During Drilling	Monitoring Well Screened Interval and	Soil												Groundwater																			
							XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (ug/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (ug/L)	Qual	TCLP Arsenic (ug/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (ug/L)	Qual	TCLP Mercury (ug/L)	Qual	Antimony - Total (ug/L)	Qual	Antimony, Dissolved (ug/L)	Qual	Arsenic, Total (ug/L)	Qual	Arsenic, Dissolved (ug/L)	Qual	Mercury, Total (ng/L)	Qual	Mercury, Dissolved (ng/L)	Qual	Methyl Mercury (ng/L)
RD20	2	MW33	11RD20SB02	T/WR (road base)			1,413				1,137					48																						
	4		11RD20SB04	N			146				171					ND																						
	5		11RD20SB05	N			93				216					12																						
	6		11RD20SB06	N			ND	7.69			28	21.5				ND	3.89	J																				
	8		11RD20SB08	N			ND				23					ND																						
	10		11RD20SB10	N			ND				19					ND																						
	12		11RD20SB12	N			49				32					ND																						
	14		11RD20SB14	N			ND				36					ND							427	J	420	J	15.2	14.4	115	4.58	0.05	U						
	16		11RD20SB16	N			NS				NS					NS							427	J	420	J	15.2	14.4	115	4.58	0.05	U						
	18		11RD20SB18	WB			265	163	J		83	128				21	59.4	J					427	J	420	J	15.2	14.4	115	4.58	0.05	U						
	20		11RD20SB20	WB			176	13.5		269	J	708	128		20	U	26	14.9	J	1.09			427	J	420	J	15.2	14.4	115	4.58	0.05	U						
	22		NS	B																			427	J	420	J	15.2	14.4	115	4.58	0.05	U						
	23.0		11RD20GW	B																			427	J	420	J	15.2	14.4	115	4.58	0.05	U						

Notes:  
 μg/L Micrograms per liter  
 For soil type descriptions see Table A-1

Key:  
 J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.  
 mg/kg Milligrams per kilogram  
 ng/L Nanograms per Liter  
 ppm Parts per million

SPL Synthetic precipitation leaching procedure  
 TCL toxicity characteristic leaching procedure  
 U Analyte was analyzed for but not detected. Value provided is reporting limit.  
 XRF X-ray fluorescence

Table C-11 Red Devil Creek Upstream Area Subsurface Soil

Station ID	Depth (bottom of interval)	Monitoring Well ID	Field Sample ID	Soil Type	Groundwater Encountered During Drilling	Monitoring Well Screened Interval and	Soil												Groundwater																			
							XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)	Qual	Antimony - Total (µg/L)	Qual	Antimony, Dissolved (µg/L)	Qual	Arsenic, Total (µg/L)	Qual	Arsenic, Dissolved (µg/L)	Qual	Mercury, Total (ng/L)	Qual	Mercury, Dissolved (ng/L)	Qual	Methyl Mercury (ng/L)
RD13	2	MW12	11RD13SB02	RDCA	1	4.0 - 14.0	NR				15					ND																						
	4		11RD13SB04	RDCA			NR	2.81	J			ND	6.01					ND	0.367	J																		
	6		11RD13SB06	RDCA			NR	6.25	J	28.3	J	16	8.63		20	U		ND	0.287	J	0.4	U		0.505	J	0.522	J	13.5		13.9		54.1		1.14		0.05	U	
	8		11RD13SB08	RDCA			NR					14						ND							0.505	J	0.522	J	13.5		13.9		54.1		1.14		0.05	U
	10		11RD13SB10	RDCA			NR			52.2	J	28			20	UJ		ND			0.4	U		0.505	J	0.522	J	13.5		13.9		54.1		1.14		0.05	U	
	12		11RD13SB12	RDCA			NR					14						ND							0.505	J	0.522	J	13.5		13.9		54.1		1.14		0.05	U
	14		11RD13SB14	RDCA			NR	3.91	J			10	12.8					ND	3.92						0.505	J	0.522	J	13.5		13.9		54.1		1.14		0.05	U
	15		11RD13GW	RDCA																					0.505	J	0.522	J	13.5		13.9		54.1		1.14		0.05	U
	16		11RD13SB16	RDCA			NR					14						ND							0.505	J	0.522	J	13.5		13.9		54.1		1.14		0.05	U

Notes:

For Soil Type descriptions see Table A-1

Key:

- µg/L Micrograms per Liter
- J Analyte detected but relative percent difference was outside control limits therefore concentration is estimated.
- mg/kg Milligrams per kilogram
- ND Non Detect
- ng/L Nanograms per Liter
- NS Not Sampled
- ppm Parts per million
- SPLP Synthetic precipitation leaching procedure
- TCLP toxicity characteristic leaching procedure

**Table C-12 Dolly Sluice Subsurface Soil**

Station ID	Depth (bottom of interval)	Field Sample ID	Soil Type	Groundwater Encountered During Drilling	Soil																	
					XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)
DS01	2	11DS01SB02	SO		ND					55						ND						
	4	11DS01SB04	SO		ND					251						39						
	6	11DS01SB06	SO		ND	11.6		42.5	J	628	1200		38	J		51	326	J	5.92	J		
	8	11DS01SB08	SO		ND					235						16						
	10	11DS01SB10	SO	9	ND	11.4				197	234					13	48.2	J				
	12	11DS01SB12	SO		ND					144						22						
	14	11DS01SB14	KRA		ND					316						21						
16	11DS01SB16	KRA	ND		1.4				11	13.3					ND	1.46	J					
DS02	2	11DS02SB02	SO		64					153					16							
	4	11DS02SB04	SO		78	31.5	J			186	360	J			17	133						
	6	11DS02SB06	SO		67					143					16							
	8	11DS02SB08	SO		ND					109					13							
	10	11DS02SB10	SO		96	122	J			165	205	J			27	16.4						
	12	11DS02SB12	KRA	10.5	ND					15					ND							
	14	11DS02SB14	KRA		ND	0.886	J			12	12	J				ND	0.168					

Notes:

For Soil Type descriptions see Table A-1

Key:

µg/L Micrograms per Liter

J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.

mg/kg Milligrams per kilogram

ND Non Detect

ppm Parts per million

SPLP Synthetic precipitation leaching procedure

TCLP toxicity characteristic leaching procedure

XRF X-ray fluorescence

**Table C-13 Rice Sluice Subsurface Soil**

Station ID	Depth (bottom of interval)	Field Sample ID	Soil Type	Groundwater Encountered During Drilling	Soil																	
					XRF Antimony (ppm)	Total Antimony (mg/kg)	Qual	SPLP Antimony (µg/L)	Qual	XRF Arsenic (ppm)	Total Arsenic (mg/kg)	Qual	SPLP Arsenic (µg/L)	Qual	TCLP Arsenic (µg/L)	Qual	XRF Mercury (ppm)	Total Mercury (mg/kg)	Qual	SPLP Mercury (µg/L)	Qual	TCLP Mercury (µg/L)
RS01	2	11RS01SB02	SO		209					66							ND					
	4	11RS01SB04	SO		137	24.7	J			30	54.7	J					ND	6.44				
	6	11RS01SB06	SO		258					99							10					
	8	11RS01SB08	SO		114	68.7	J			125	142	J					ND	27.9				
	10	11RS01SB10	SO	8	99					86							13					
	12	11RS01SB12	SO		128	25.8	J	87.6		78	50	J	20	U			19	7.44	0.4	U		
	14	11RS01SB14	KRA		ND					14								ND				
RS02	2	11RS02SB02	SO		83					52							ND					
	4	11RS02SB04	SO		351	24.4	J			136	138	J					13	33.1				
	6	11RS02SB06	SO		89					101							11					
	8	11RS02SB08	SO		ND	34.5	J			86	93.4	J					ND	8.07				
	10	11RS02SB10	SO	9	81					70							ND					
	12	11RS02SB12	SO		71					60							ND					
	14	11RS02SB14	KRA		ND	1.17	J			13	8.01	J					ND	0.198				
16	11RS02SB16	KRA	ND						ND							ND						

Notes:

For Soil Type descriptions see Table A-1

Key:

µg/L Micrograms per liter

J Analyte detected but relative percent difference was outside control limits; therefore, concentration is estimated.

mg/kg Milligrams per kilogram

ND Non Detect

ppm Parts per million

SPLP Synthetic precipitation leaching procedure

TCLP toxicity characteristic leaching procedure

U Analyte was analyzed for but not detected. Value provided is reporting limit.

XRF X-ray fluorescence



