

Code	From		To		Recov.		No.		Unit	Description
	10	14	16	20	22	24	26	28		
	0	0	21	6					B4	CASING
	21	6	42	1					B4	9/8 Boulders & clay - very poor recovery.
	42	1	43	1					5	## → 7 ## Yellow brown sand is non-calcareous and hosts extremely friable sandy blocks of massive sulphide. Unit is strongly suspected to be refractory. Recovery is very poor, upper and lower contacts are sand bound and no orientation is available. Oxidation does not appear to exist - no limonite - no tarnish other than very slight black color developed along margins of sandy blocks. Uncertain grade.
	43	1	44	7					2	PP (4→5L) 55:45 Dark gray to black and brassy yellow unit is non-calcareous and hosts weak PbZn mineralization. Unit can be considered graphitic quartzite which hosts 45-50% 1.0-5.0cm bands of generally siliceous semimassive sulphides to pyritic massive sulphides bands; or, semimassive to massive sulphides hosting 45-50% 1.0-3.0cm bands of graphitic quartzite? Take your pick! Bands are sharp and oriented // S ₂ . Interval is hard, strongly broken and has good recovery. Upper contact is marked by sandy massive sulphide uphole and no orientation is available. Lower contact is sharp, parallel S ₂ and noted by a lack of semimassive to massive sulphide bands downhole. Estin-D.A. grade is 1-2%.

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Code	From		To		Recov.		No.		Unit	Description
	10	14	16	20	22	24	26	28		
	44.7		49.5						2	± → 30gg 22PG H
										Dark gray to black, non-calcareous, strongly siliceous, strongly mineralized graphitic quartzite contains a localized minor phyllic component. Within banding is generally well developed. Pb+Zn mineralization trend with S ₁ and S ₂ and occurs as bands 0.1-1.0cm wide. Rock is very hard, strongly to very strongly broken and has good recovery. Upper and lower contacts are sharp with upper contact N ₂ . Lower contact is marked by an irregular quartz vein of lower unit. Estimated grade is 15-20%.
	49.5		51.0						2	(60ZGP) 70:30 M → H
										Dark grey to black, non-calcareous graphitic quartzite hosts 30-35% milky white irregular quartz veins and clots throughout. Vein hosts no detectable carbonate but does host moderate remobilized Pb+Zn mineralization. Banding within quartzite is disrupted by veins and clots. Rock is very hard moderately mineralized though, and is generally strongly broken with good recovery. Upper contact is sharp and marked by an irregular quartz vein. Lower contact is sharp and parallel S ₂ .

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1	10	14 16	20 22 24 26 28	30	34 35	
	51.0	55.0			5	±#cL ±@ (44##jL ± → 72) 85:15 Brassy yellow sporadically weakly calcareous often with associated porous nature and sporadic limonite development commonly coating fractures. Limonite development is weak and sporadic. An estimated 60% of unit is at this porous, calcareous and possibly refractory. Porous intervals are very slightly rarely moderately friable into sand. Interval is crudely banded and locally displays a well healed brecciated texture. Interval hosts thin bands of strongly altered, weakly limonitic, non-calcareous, fuchsite-bearing metabasite at 53.2-53.3 and 53.9-54.2. Metabasite contacts are sharp and // banding (S ₂ ?). Massive sulphides are slightly hard locally slightly friable. Unit is strongly broken and has good recovery. Upper and lower contacts are sharp and parallel S ₂ (banding). Grade is difficult to estimate, and may vary from 1-10%.
	55.0	57.9			7	±L (5±#@ : 44##je) 75:25:trace H Light grayish brown, non-calcareous, strongly baritic well banded moderately mineralized unit hosts 25-30% 10-25cm bands of pyritic massive sulphides. Pyritic intervals are commonly slightly porous, very weakly calcareous and very slightly hard to be friable into sandy material, and may locally be refractory. At 55.4-55.5 pyritic massive sulphides are

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1	10	14 16	20 22 24	26 28 30	34 35	
						lightly coated with limonite on fractures. Contacts with pyritic and baritic massive sulphides are sharp and parallel banding. Interbed hosts trace-1% strongly altered, weakly calcareous metabasite bands < 1.0cm wide. Limonite is very rare and occurs as weak to moderate coatings on fracture surfaces. Interbed is slightly hard, moderately broken and has good recovery. Upper and lower contacts are sharp and parallel banding (S ₂ ?).
	57.9	59.0			5	±c ±@ (7±e 4± 44 [#]) 85:15:trace Brassy yellow, locally light grayish brown, very weakly calcareous. Pyritic massive sulphides contain 70-80% pyrite and hosts 10-15% baritic massive sulphides occurring in 2-3cm bands // banding. S-strongly altered, non-calcareous, fuchsite metabasite wisps (dots) and bands are rare and do not exceed 1cm in width. Both pyritic and baritic massive sulphides are locally porous with < 1mm pore spaces. Rock is slightly hard, moderately broken; locals which are porous are slightly more broken. Recovery is good throughout. Upper and lower contacts are sharp and // banding (S ₂ ?).
	59.0	61.6			7	±c ±@ → 5 (5 → 74) 90:10 Yellowish brown, non-calcareous; locally weak to moderately calcareous baritic massive sulphides host 0-15% 1.5-2.0cm

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	10	14	16	20	22	24	26	28			30
											irregular and discontinuous clotts of calcite and 1.0cm veins of calcite. Unit contains 40-50% pyrite and 20% clotts and breccia fragments of pyritic massive sulphides. Breccia is well healed with a fine grained slightly porous sporadically near black matrix. Breccia is matrix supported, locally fragment supported. Interval hosts a porous and slightly permeable band at 59.0-59.15. Interval is slightly hard slightly broken and has good recovery. Upper contact is sharp and parallel banding (5'). Lower contact is sharp and irregular-possibly related to well healed breccia. Estimated grade is 10-12%.
	61.6		62.1						5	±c	Brassy yellow, generally noncalcareous massive pyritic sulphides are generally massive and textureless. Unit contains 80% pyrite. Rock is slightly hard, moderately broken and has good recovery. Unit is sporadically weakly to moderately calcareous over the lowest 15cm. Upper contact is sharp and irregular, lower contact is also sharp and irregular but is undoubtly controlled by the underlying well healed breccia.

Code	From	To	Recov.	No.	Unit	Description
1	10	14	16	20	22 24 26 28 30	34 35
	62.10	62.11	62.18		7	cc ±e (5cc → 74) 60:40 Brownish yellow and brassy yellow, strongly to very strongly calcareous unit is moderately brecciated and hosts 40% pyritic massive sulphides occurring as fragments in a well healed breccia. Matrix of breccia is slightly to highly porous occasionally very dark approaching black. Unit hosts scattered calcite clots from 3mm to 1.5x4cm. Clots are independent of banding. Banding is fairly well formed and is crossed by breccia. Rock is slightly hard, moderately broken and has good recovery. Upper contact is sharp and irregular. Lower contact is sharp, parallel banding and noted as a loss in calcite content and a highly porous, permeable and friable band of lower unit. Estimated grade is 7-10%.
	62.8	62.95	3		7	±c ±e (5±c → 74) Medium brownish gray, generally non-calcareous baritic massive sulphides are typically well banded. Interval hosts a 25cm pyritic massive sulphide band at 64.1 which is generally non-calcareous and displays a well healed breccia feature. Pyritic sulphides contain sharp contacts // banding in baritic units. Both baritic and pyritic sulphides are sporadically calcareous with calcite generally occurring in irregular discontinuous fractures, occasionally as disseminated threads resembling fractures but not visible with reaction to acid. Interval contains patchy clots of highly porous, highly permeable and friable rock at 62.8 - 62.95. Rock is generally slightly hard, slightly

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
											broken and has good recovery. Upper and lower contacts are sharp and // banding (S ₂). Estimated grade is 15-20%.
	65.	3	65.	9					52	##±P ZG N	White and sporadically light brown, non-calcareous, intensely oxidized to clay (?). Clay is slightly compact and hosts wisps and clasts of unit 52 near upper contact. Unit 52 hosts sporadic clasts of pyrite and very rare clasts of oxidized (black) Pb+Zn. Rock is very soft, very strongly broken, locally crushed and has good recovery. Upper contact is very sharp, and parallel S ₂ and banding of upper unit. Lower contact is sharp, irregular and marked by quartz vein of lower unit. No grade expected.
	65.	9	68.	1					54	±P ±g Ql	Medium to light tanish-yellow-green, non-calcareous, PS ₂ foliated phyl. hosts trace: 1% pyrite clasts and 3-5% <1.0cm bands and wisps of strong silification occurring parallel S ₂ . Interval has a 0-3cm irregular quartz blob at the upper contact with strongly chloritized margins. Unit is soft to very soft, moderately to strongly broken // S ₂ and has good recovery. Upper contact is

Code	From		To		Recov.				No.				Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
														sharp and irregular. Lower contact is gradational over 30cm with a non-altered phyllitic component of lower unit becoming progressively more dominant down hole.
	68.1		69.6									29	± Q (20 → 72)	85:15 Medium locally medium dark gray $CS_2 \rightarrow PS_2$ foliated unit is non-calcareous and is generally strongly broken // S_2 . Locally unit is slightly to moderately darker in color. Darker color is a result of darker chlorite and only very rarely because of a slight graphitic component. Darker bands are thin 0.5-2.0 cm wide and // S_2 . Rock is soft to slightly soft, and sporadically is crushed and approaches gouge. Upper contact is gradational over 30cm with a loss of upper unit's alteration down hole. Lower contact sharp and marked by a 3cm irregular gouge band.
	69.6		71.4									54	± P:20 ± QP	light greenish yellow, non-calcareous, PS_2 foliated phyllite is moderately to strongly sericitic and hosts scattered wisps and clasts of pyrite, sphalerite and galena. Interval also hosts 0-7% quartz-carbonate veins thin 1.0-3.0cm wide generally // S_2 that host trace - 3% pyrite and D-trace galena & sph. Rock is moderately soft, strongly broken // S_2 and has good

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1	10	14 16	20 22 24	25 28 30	34 35	
						good recovery. Upper contact is marked by a 2-3cm gouge band, below gouge band alteration is weak but become progressively stronger over the next 35cm. Lower contact is sharp and marked by quartz vein.
	74.4	74.5			29	±P±ZG ±QPK (72) 90:10 N
						Medium gray, non-calcareous phyllite is P ₅ foliated with P ₅ fabric generally controlled by shear fabrics of no distinct orientation. Quartz veins are typically irregular and also contain P ₅ fabric. Pyrite occurs as scattered grains within phyllite but more commonly associated with quartz veins. Unit hosts 0-5% quartz-carbonate veins (carbonate(?)). Interval hosts 10-15% 1-10cm bands of gouge. Rock is slightly salt strongly broken and has good recovery. Upper contact is sharp, irregular and marked by quartz vein of upper unit with gouge below. Lower contact is sharp and parallel banding at lower unit. Lowest 25cm of interval contains a highly contorted P ₅ fabric - disrupted by shearing and also hosts scattered wisps and clots of Galena and sphalerite. No portion of interval hosts grade above 1/2% combined.
	74.5	75.2			31	ZZGP (8M) 95:05 V
						Purplish brown, non-calcareous, intensely mineralized with spherule, siliceous unit contains 10-15% disseminated cblts within

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1	10	14 16	20 22 24	26 28 30	34 35	
						moderately siliceous sphaleritic matrix. Unit is weakly banded and hosts a 3-4cm band of P ₀ at upper contact. P ₀ band is // banding. Rock is very hard moderately broken and has good recovery. Upper contact is sharp and // banding. Lower contact is sharp and // banding of this unit and S ₁ of lower unit. Estimated grade is 40-50% combined Pb+Zn.
	75.2	77.1			52	±P ±QkP (422 H.) 98:02 Bu-H ton, slightly green, non-calcareous sericitic phyllite is P ₅ foliated and commonly contains a low angle (wrt CA) shear fabric which disrupts P ₅ . Interval hosts 2% stringers, bands, and clots of intensely mineralized (Sph) sulphides occurring as fragments within shear fabric. Mineralized fragments are elongated // shear fabric. Rock is soft to moderately soft and hosts 3-5% irregular quartz-ankerite veins and clots. Rock is strongly broken - commonly crushed. Recovery is good to fair. Upper contact is sharp and // banding and S ₁ . Lower contact is sharp and oriented // shear fabric @ 10° wrt CA. No grade above 1% over 10cm.
	77.1	77.5			Q	H Purple brown, non-calcareous, strongly magnetic P ₀ rich massive sulphides becomes less magnetic and strongly sph rich over lowest 10cm. Unit is massive and textureless. Rock is very hard, slightly broken

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1	10	14 16	20 22 24	26 28 30	34 35	
						and has good recovery. Upper contact is // upper shales fabric and trends 10' vert C.A. Lower contact is sharp and // S ₂ / banding. Estimated grade is 10%.
	77.5	78.4			7	±@ (602G) 80:20 light brown to tan, non-calcareous highly basitic unit hosts 20-25% pyrite. Unit also contains 20% very light gray to white highly irregular quartz veins and blebs on the dm-scale. Veins and blebs contains medium grained galena and sphalerite - of a remobilized nature. Injected quartz contains very sharp contacts with basitic ore. Basitic unit is slightly hard to slightly soft, slightly broken and has good recovery. Banding is fairly well developed and is slightly contorted adjacent quartz injection. Upper and lower contacts are sharp and parallel banding (S ₂ ?) Estimated grade is 10-12%. lowest 10cm is moderately porous and slightly permeable.
	78.4	80.9			3	22G ±c (2) 98:02 Dark purple and light gray, generally non-calcareous, strongly siliceous unit is intensely mineralized and hosts 10-15% pyrite. Calcite is very sporadic and limited to open fractures which generally trend @ 240 / 20 vert S ₂ or banding. Unit hosts 2% graphitic quartzite (barren of Pb+Zn) discontinuous fragments and wisps oriented within S ₂ . Rock is

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28	30		34
											Very hard, moderately to slightly broken and has good recovery. Upper and lower contacts are sharp and // S ₂ . Estimated grade is 35%.
	80.9		82.8						3	→ 4	Light gray and medium yellowish gray, non-calcareous unit is strongly siliceous and hosts 30-35% pyrite occurring in cm-dm bands that are fairly well defined locally appearing patchy. Pb+Zn mineralization is very weak. Rock is very hard moderately to slightly broken, recovery is good throughout. Upper and lower contacts are sharp and // banding (S ₂).
	82.8		85.9						3	Z ± 226 (3L → 4 : 2) 80 : 15 : 05	Light gray and purplish yellow, non-calcareous, strongly siliceous unit hosts 10-30% pyrite and generally hosts moderate sphalerite disseminated with pyrite. Locally mineralization is intense over 10-15cm and also billion over 20-50cm bands. Unit is fairly well bedded. Rock is to very hard, slightly broken and has good recovery. Upper and lower contacts are sharp and parallel banding (S ₁). Estimated grade averages 7-10%.

Code	From	To	Recov.	No.	Unit	Description					
1	10	14	16	20	22	24	26	28	30	34	35
	85.9	86.8			52	→ 20 [#] s	(52g → 20 [#] sg) 85:15				
							Light to medium grayish yellow, non-calcareous, moderately to weakly sericitic unit is ps foliated and hosts 15% slightly silicified bands generally 0.5cm wide. Rock is very soft to soft, hard where siliceous, moderately broken and has good recovery. Upper contact is sharp, slightly irregular and // S _g . Lower contact is gradational over 20cm and noted as a loss of silicification and sericitic alteration.				
							No grade.				
	86.8	89.9			29	±g (72)	95:05				
							Medium gray, rarely medium dark gray, non-calcareous ps foliated, thin to thick is locally slightly graphitic. Unit hosts 5% gouge occurring normally as low angle bands < 1.0cm wide cross-cutting S _g . More sandy gouge occurs as 5-10cm bands // S _g . Upper contact is gradational over 20cm.				
		89.9					FDH				

CODE	FROM	TO	SAMPLE	INTR.	REC (m)	UNIT	DESCRIPTION						
1	10	14	18	20	22	26	28	30	32	34	38	40	42
	10.	12.									WASTA		
	12.	13.	64404						0.		15	# → 7# re-factory (1)	
	13.	14.	4015						1.		2	PP	
	14.	16.	4016						1.		12		
	16.	17.	4017						1.		2		
	17.	18.	4018						1.		2		
	18.	19.	4019						0.		2		
	19.	21.	4110						1.		60	(2)	
	21.	21.	4111						0.		5	→ 7	
	21.	23.	4112						1.		5		
	23.	24.	4113						0.		5	minor 44 #j	
	24.	25.	4114						0.		5	moder. 44 #j	
	25.	26.	4115						1.		5	(7) 85:15	
	26.	27.	4116						1.		7		
	27.	29.	4117						0.		5		
	29.	30.	4118						1.		5		
	30.	31.	4119						1.		7	±c	
	31.	32.	420						0.		5		
	32.	32.	421						0.		7	cc ±e	
	32.	34.	422						1.		7	±c ±e	
	34.	35.	423						1.		7	±c ±e	
	35.	35.	424						0.		52	# P±g ZG	
	35.	37.										WASTA	
	37.	38.	425						0.		3	22Gp (8M) 95:05	
	38.	39.	426						1.		52	±Pkp (422) 98:02	
	39.	39.	427						0.		18		
	39.	40.	428						0.		17		
	40.	41.	429						1.		3	22G ±c (2) 98:02	
	41.	42.	430						1.		3	22G ±c (2) 98:02	
	42.	42.	431						1.		3	L	
	42.	44.	432						1.		3	2 ± 22G	
	44.	44.	433						0.		3	L	
	44.	45.	64434						1.		3	2 ± 22G	
	45.	49.										WASTA	
												G.O.H.P 89.9	

