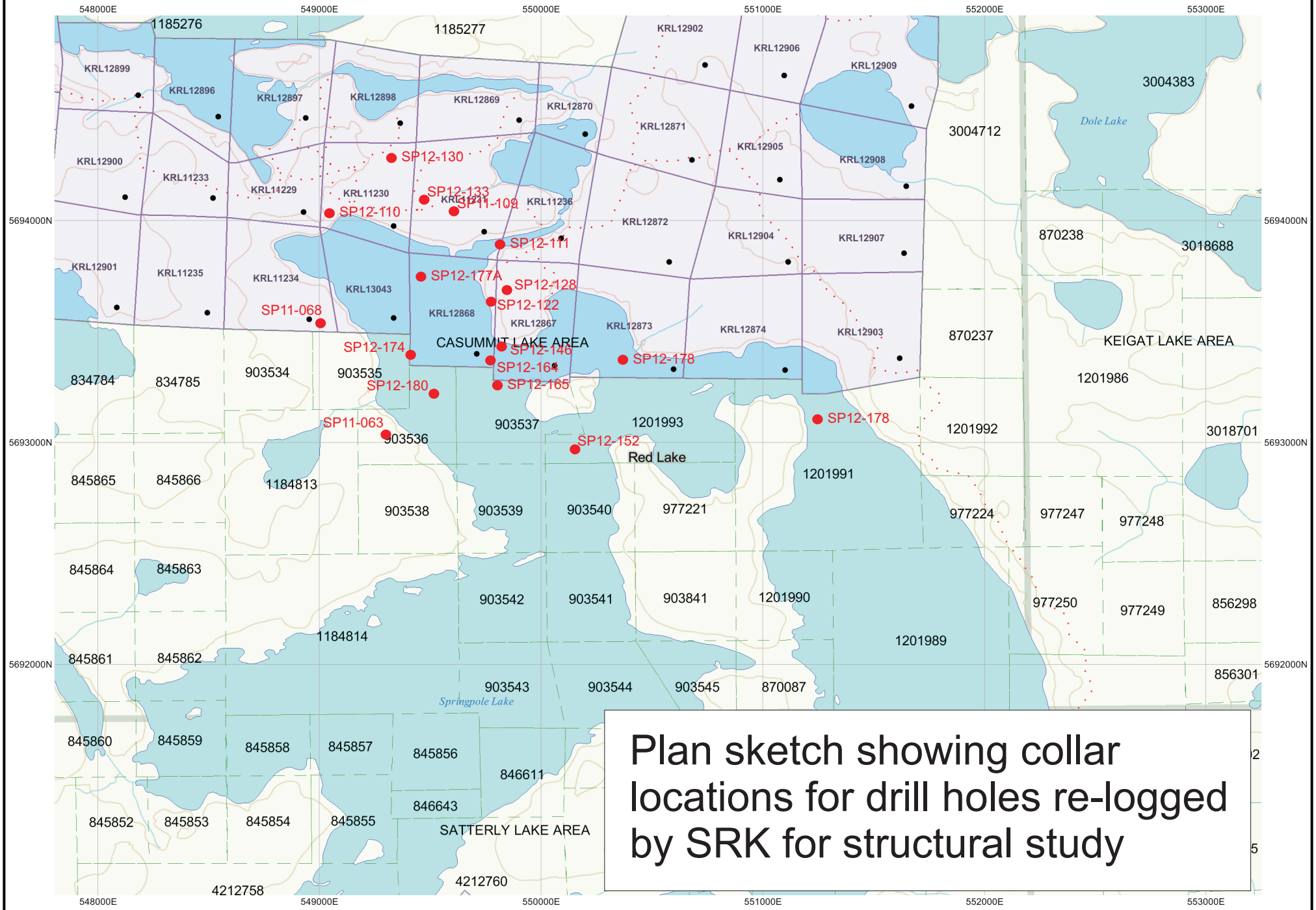
Addendum to SRK Report on Springpole Structural Model

by Carl Nagy

Dated: Dec 16, 2013

Relogged Boreholes - collar locations

DH_ID	System	Easting	Northing	elevation	Azimuth	Dip	Length	Claim #
SP11-063	UTM84-15N	549,327.56	5,693,024.90	399.97	40	-45	975.0	903536
SP11-068	UTM84-15N	549,008.54	5,693,528.99	398.72	40	-50	902.0	KRL11234
SP11-109	UTM84-15N	549,615.30	5,694,036.68	398.29	224	-45	600.0	KRL11231
SP12-110	UTM84-15N	549,098.32	5,694,038.18	391.57	0	-90	480.5	KRL11230
SP12-111	UTM84-15N	549,819.21	5,693,896.10	386.76	220	-45	568.0	KRL11231
SP12-122	UTM84-15N	549,781.23	5,693,629.16	391.54	220	-45	587.0	KRL12868
SP12-128	UTM84-15N	549,841.35	5,693,687.74	393.82	222	-45	654.0	KRL12867
SP12-130	UTM84-15N	549,289.49	5,694,274.53	401.44	219	-45	614.0	KRL11230
SP12-133	UTM84-15N	549,456.50	5,694,078.28	400.69	220	-45	527.0	KRL11231
SP12-146	UTM84-15N	549,825.15	5,693,428.15	391.15	0	-90	455.0	KRL12867
SP12-152	UTM84-15N	550,155.00	5,692,964.18	391.65	0	-90	671.0	1201993
SP12-164	UTM84-15N	549,776.49	5,693,365.97	391.7	0	-90	464.0	KRL12868
SP12-165	UTM84-15N	549,805.09	5,693,251.70	392.78	0	-90	495.5	903537
SP12-174	UTM84-15N	549,409.25	5,693,396.55	391.6	0	-90	506.0	KRL12868
SP12-177A	UTM84-15N	549,441.66	5,693,753.67	391.62	0	-90	450.0	KRL12868
SP12-178	UTM84-15N	550,368.82	5,693,373.21	391.52	0	-90	395.0	KRL12873
SP12-180	UTM84-15N	549,529.50	5,693,235.87	391.57	0	-90	440.0	903536
SG12-189	UTM84-15N	551,347.74	5,693,093.43	391.44	0	-90	221.0	1201991



Plan sketch showing collar locations for drill holes re-logged by SRK for structural study

SRK Relogged Drill holes logging codes

Codes		
Rock strength		Fragment size
	1	> 30 cm
	2	10 - 30 cm
	3	2 - 10 cm
	4	< 2 cm
mechanical	mech	mechanical
natural	nat	natural
both	both	mechanical based on natural
Alteration	pot	potassic
	pot_epi	potassic/ epidote combined
	epi	epidote
	arg_i	argillic intermediate
	arg_p	argillic pervasive
Lithology	And	Andesite (greenstone)
	Tm	Trachyte, megacrystic
	Tp	Trachyte, porphyritic
	Ta	Trachyte, aphanitic
	Tl	Trachyte, layered
	Bv	Breccia, volcanic ?
	Bh	Breccia, hydraulic
	Sed	Metasediments (BIF, sandstone, conglomerate, greywacke/ mudstone)
	L	Lamprophyre dyke
	P	Pegmatite (quartz-feldspar veins)
	O	Other
Strain intensity	high	High strain
	int	Intermediate
	low	Low/ no strain
Texture	S1phy	Foliation, phyllitic/ densely spaced
	S1sch	Foliation, schistose
	Myla	Augenmylonitic
	Myl	Mylonitic
	SC	SC-fabric (with S equivalent to foliation, i.e. sc succesive to foliation)
	S0	Bedding (both sedimentary and magmatic flow banding)
Porosity	high	High
	int	Intermediate
	no	No

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP11-063	124.0	139.5	1	nat		And	low				Competent and	CN
SP11-063	139.5	285.0	3	both	arg_i	Tp	int		high		Tp, crumbly to disked fracture style - mainly nat, likely some mech due to nat conditions, lower porosity in higher strain intervals (247-252m)	CN
SP11-063	285.0	306.0	2	both		Tp	int				Disked rock, some mech, but likely due to nat conditions	CN
SP11-063	306.0	337.0	3	both	arg_i	Tp	int				Disked to local rubble zones	CN
SP11-063	337.0	384.0	3	nat	arg_i	Ta	low		high		Contact in rubble b/t Tp(low P) & Ta(high P), not all rubble, but weak easily breakable rock	CN
SP11-063	384.0	483.0	4	nat	arg_p	Ta					Complete powder - nothing visible. Fluorite horizon (464-465m)	CN
SP11-063	483.0	588.0	3	both	arg_m	Tl	low		high		Disked style rock, transition from Ta to Tl at end of rubble zone	CN
SP11-063	588.0	624.0	3	both		Ta	int		low		Semi-disked, finely laminated dark Ta (could be metased)	CN
SP11-063	624.0	684.0	2	both	epi	And	low				Vesicle-filled style of epidote alt, local zones of more broken core - see RQD for deets	CN
SP11-063	684.0	715.0	1	nat		And	low				Very comp And (could be Ta), minor epi	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP11-068	0.0	124.0	1	nat		And	low	S1phy			mod fol std andesite	CN
SP11-068	124.0	126.0	1	nat		And	high	Myl			high strain, std competency	CN
SP11-068	126.0	262.0	1	nat		And	int	S1phy			mod fol std andesite	CN
SP11-068	262.0	263.0	1	nat		And	high	S1phy			high strain, std competency	CN
SP11-068	263.0	902.0	1	nat		And	int	S1phy			May contain volcanic breccia or clast bearing and	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP11-109	0.0	69.4	1	nat		Tm	low					CN
SP11-109	69.4	80.0	1	nat		Ta	int	S1phy				CN
SP11-109	80.0	121.0	1	nat		Ta	int	S1phy				CN
SP11-109	121.0	124.0	1	nat		Tm	low					CN
SP11-109	124.0	138.0	1	nat		T1	int	S1phy				CN
SP11-109	138.0	178.5	1	nat		Bv	low					CN
SP11-109	178.5	211.0	1	nat		Tl	low					CN
SP11-109	211.0	362.8	1	nat		Tl	low					CN
SP11-109	362.8	363.7	3	nat		Sed	high	Myla				CN
SP11-109	363.7	373.0	3	nat		Tl	high	Myl				CN
SP11-109	373.0	385.0	3	nat	pot	Tl	high	S1phy				CN
SP11-109	385.0	430.0	3	nat	pot_epi	Tl	high	Myl				CN
SP11-109	430.0	508.0	4	nat	arg_p	Tl	int		high			CN
SP11-109	508.0	545.0	4	nat	arg_p	Ta	int	S1phy	high	80		CN
SP11-109	545.0	573.0	3	nat	arg_i	Ta	int	S1phy		80		CN
SP11-109	573.0	600.0	1	nat		Ta	int	S1phy		80		CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_110	0.0	98.0	2	nat	epi	Tp						JK
SP12_110	98.0	99.8	2	nat	bio	Tp						JK
SP12_110	99.8	100.1	4	nat	bio	Tp					breaks along bio-planes	JK
SP12_110	100.1	139.6	2	nat	epi	And						JK
SP12_110	139.6	142.6	2	nat	epi	Ta					With pegmatite or qz-fsp vein	JK
SP12_110	142.6	143.2	2	nat	epi	Sed_BIF					folded BIF with abundant pyrite	JK
SP12_110	143.2	164.0	2	nat	epi	Sed						JK
SP12_110	164.0	199.4	2	nat	epi	Ta						JK
SP12_110	199.4	206.3	4	mech	epi	Tm			int			JK
SP12_110	206.3	227.0	3	nat	epi	And_Sed	high	S1sch			intensely sheared andesite and BIFs, abundant pyrite	JK
SP12_110	227.0	236.5	2	nat	epi	Ta			low			JK
SP12_110	236.5	239.5	3	nat	epi	Bh	high	S1sch			foliated breccia, volcanic? With metasediments?	JK
SP12_110	239.5	247.0	3	nat	epi	Bh	high	S1sch	high		foliated breccia, some metasediment layers	JK
SP12_110	247.0	253.7	4	nat	epi	Bh	high		high		abundant bio	JK
SP12_110	253.7	256.5	3	mech	epi	Tp					abundant bio	JK
SP12_110	256.5	256.8	4	mech	epi	Tp						JK
SP12_110	256.8	261.4	3	mech	epi	Tp						JK
SP12_110	261.4	264.3	4	both	epi	Tp						JK
SP12_110	264.3	268.5	3	nat	epi	Tl					pervasive epi-alteration	JK
SP12_110	268.5	269.1	3	nat	epi	Tl			int			JK
SP12_110	269.1	276.8	3	nat	epi	Tl			high			JK
SP12_110	276.8	280.7	3	nat	epi	And			int		porosity increased in vicinity of qz veins	JK
SP12_110	280.7	281.5	4	nat	epi	Tp			high			JK
SP12_110	281.5	287.2	3	nat	epi	Tp			high			JK
SP12_110	287.2	288.6	4	nat	epi	Tp			high			JK
SP12_110	288.6	288.9	3	nat	epi	Tp			high			JK
SP12_110	288.9	310.4	2	nat	epi	Tp			low			JK
SP12_110	310.4	322.7	4	nat	arg_i	Tp			high			JK
SP12_110	322.7	330.8	3	nat	arg_i	Tp						JK
SP12_110	330.8	333.2	4	nat	epi	Tp			high		abundant calcite	JK
SP12_110	333.2	345.9	3	nat	epi	Tp			high			JK
SP12_110	345.9	381.8	4	nat	arg_i	Tp			high			JK
SP12_110	381.8	381.9	4	nat	epi	Sed_sand					reddish sandstone	JK
SP12_110	381.9	383.5	3	nat	epi	Ta						JK
SP12_110	383.5	383.8	4	both	epi	Ta		S1sch				JK
SP12_110	383.8	388.0	3	nat	epi	Ta						JK
SP12_110	388.0	395.0	4	nat	epi	Ta			high		abundant epi-veins	JK
SP12_110	395.0	431.8	4	nat	arg_i	Ta					abundant pyrite	JK
SP12_110	431.8	480.5	3	nat	arg_i	Ta						JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_111	7.0	12.0	1	nat	epi	And						JK
SP12_111	12.0	14.1	1	nat	epi	Ta	high					JK
SP12_111	14.1	17.8	1	nat	epi	And						JK
SP12_111	17.8	23.0	1	nat	epi	Sed_chert						JK
SP12_111	23.0	23.4	1	nat	epi	Tp	high					JK
SP12_111	23.4	26.8	1	nat	epi	Bv	high	S1sch				JK
SP12_111	26.8	32.6	1	nat	epi	Tp	high				grain size 1 mm	JK
SP12_111	32.6	35.2	1	nat	epi	O					10-20 cm thick Qz-turmaline-veins	JK
SP12_111	35.2	39.3	1	nat	epi	Bv	high	S1sch			foliated breccia	JK
SP12_111	39.3	45.2	1	nat	epi	Tp	high					JK
SP12_111	45.2	49.4	1	nat	epi	Tm	high				pervasively epi-altered	JK
SP12_111	49.4	50.4	1	nat	epi	L						JK
SP12_111	50.4	52.2	1	nat		P					Qz and Pegmatite veins	JK
SP12_111	52.2	57.4	1	nat	epi	Ta	high	S1sch				JK
SP12_111	57.4	60.1	1	nat	epi	Ta	high	S1sch			with post-foliation feldspar porphyroblasts, folded veins and newly developed s1 as fold axial plane cleavage	JK
SP12_111	60.1	77.3	1	nat	epi	Tp	high	Myla			qz-tourmaline stockwork	JK
SP12_111	77.3	83.6	1	nat	epi	Bv	high	Myl			qz-tourmaline stockwork	JK
SP12_111	83.6	345.7	2	mech		O					several different rock types, not logged for lithology	JK
SP12_111	345.7	345.9	1	nat	epi	Ta						JK
SP12_111	345.9	348.5	1	nat	epi	Tm	high					JK
SP12_111	348.5	349.5	4	nat	epi	Ta						JK
SP12_111	349.5	354.4	4	nat	pot_epi	Tm	no				biotite-alteration	JK
SP12_111	354.4	356.4	4	nat	bt	Ta					pervasively biotite altered	JK
SP12_111	356.4	358.1	1	nat	pot_epi	Tm			low			JK
SP12_111	358.1	358.6	3	nat	pot_epi	Tm			int			JK
SP12_111	358.6	364.5	4	nat	epi	Tm			high			JK
SP12_111	364.5	365.0	3	nat	epi	Tp						JK
SP12_111	365.0	369.0	4	both	arg_i	Tp						JK
SP12_111	369.0	374.2	2	nat	epi	Tp						JK
SP12_111	374.2	378.1	4	nat	arg_i	Tp			low			JK
SP12_111	378.1	379.2	3	nat	pot_epi	Tp			int			JK
SP12_111	379.2	379.4	4	nat	epi	Tp			high			JK
SP12_111	379.4	379.7	3	nat	epi	Tp			high			JK
SP12_111	379.7	379.8	4	nat	pot_epi	Tp			high			JK
SP12_111	379.8	380.7	3	nat	pot_epi	Tp			high			JK
SP12_111	380.7	380.9	3	nat	epi	Ta		S1sch				JK
SP12_111	380.9	381.9	2	nat	pot_epi	Tp						JK
SP12_111	381.9	382.9	3	nat	epi	Ta		S1sch				JK
SP12_111	382.9	383.3	3	nat	pot_epi	Tp			high			JK
SP12_111	383.3	389.2	4	mech	epi	Tp						JK
SP12_111	389.2	391.0	3	nat	pot_epi	Tp					epidote veins	JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_111	391.0	391.6	2	nat	pot_epi	Tp			low			JK
SP12_111	391.6	391.7	4	mech	pot_epi	Tp						JK
SP12_111	391.7	392.2	3	nat	pot_epi	Tp						JK
SP12_111	392.2	397.5	3	nat	pot_epi	Tp			high			JK
SP12_111	397.5	401.1	2	nat	pot_epi	Tp						JK
SP12_111	401.1	411.0	2	nat	pot_epi	Tm						JK
SP12_111	411.0	418.6	2	nat	pot_epi	Tp	no					JK
SP12_111	418.6	419.3	2	nat	epi	P						JK
SP12_111	419.3	435.0	2	nat	pot_epi	Tp	no					JK
SP12_111	435.0	436.1	4	nat	epi	Tp	no		low		qz-tourmaline veins	JK
SP12_111	436.1	437.4	3	nat	epi	Tp	low		low			JK
SP12_111	437.4	438.9	3	nat	epi	Tl	low					JK
SP12_111	438.9	439.3	4	nat	epi	Ta						JK
SP12_111	439.3	440.2	2	nat	epi	Ta						JK
SP12_111	440.2	440.5	3	nat	epi	Ta						JK
SP12_111	440.5	442.9	3	nat	epi	Tp						JK
SP12_111	442.9	443.3	4	nat	epi	Ta			high		qz veins	JK
SP12_111	443.3	448.9	3	nat	epi	Tp						JK
SP12_111	448.9	449.0	4	nat	epi	Tp						JK
SP12_111	449.0	458.6	2	nat	epi	Tp						JK
SP12_111	458.6	459.6	3	nat	epi	Tp						JK
SP12_111	459.6	459.6	2	nat	epi	P				45		JK
SP12_111	459.6	463.1	2	nat	epi	Tp						JK
SP12_111	463.1	464.6	3	nat	epi	Tp			int			JK
SP12_111	464.6	468.8	2	nat	epi	Tp			low			JK
SP12_111	468.8	469.8	3	nat	epi	Tp			int			JK
SP12_111	469.8	473.9	2	nat	epi	Tp			no			JK
SP12_111	473.9	474.6	3	nat	epi	Tp	int		int		fluorite	JK
SP12_111	474.6	476.0	4	nat	epi	Tp	int		int		fluorite	JK
SP12_111	476.0	477.5	3	nat	epi	Tp	int		int		fluorite	JK
SP12_111	477.5	480.2	4	nat	epi	Tp	int		high			JK
SP12_111	480.2	481.8	2	nat	pot_epi	Tp	int	S1sch	high			JK
SP12_111	481.8	482.5	3	nat	epi	Tp			high		fluorite in voids	JK
SP12_111	482.5	485.2	2	nat	epi	Tp			int			JK
SP12_111	485.2	486.8	3	nat	epi	Tp	int					JK
SP12_111	486.8	489.1	4	nat	epi	Tp			high		biotite-alteration	JK
SP12_111	489.1	490.6	2	nat	epi	Tp	int		low			JK
SP12_111	490.6	491.7	4	nat	epi	Tp			high			JK
SP12_111	491.7	495.1	2	nat	epi	Tp			no			JK
SP12_111	495.1	495.6	3	nat	epi	Tp			high			JK
SP12_111	495.6	499.7	2	nat	epi	Tp			no			JK
SP12_111	499.7	500.3	3	nat	epi	Tp			high			JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_111	500.3	505.5	4	nat	epi	Tp			high			JK
SP12_111	505.5	506.0	4	nat	epi	Ta						JK
SP12_111	506.0	568.0	4	nat	epi	Tp						JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-122	9.0	29.0	1	nat	epi	Tm	high					CN
SP12-122	29.0	32.0	4	nat	arg_p	Tm	int					CN
SP12-122	32.0	34.0	3	nat	arg_i	Tm	high	Myla				CN
SP12-122	34.0	100.0	1	nat		Tl	int					CN
SP12-122	100.0	101.0	4	nat		Tp	int					CN
SP12-122	101.0	121.0	1	nat		Tp	low					CN
SP12-122	121.0	123.0	2	nat		Tl	high	Myl				CN
SP12-122	123.0	161.0	1	nat		Tl	high					CN
SP12-122	161.0	175.0	2	nat		Tl	high		high			CN
SP12-122	175.0	179.0	3	nat		Bh	low		high			CN
SP12-122	179.0	188.0	2	nat		Tl	high		high			CN
SP12-122	188.0	196.0	3	nat		Tl	int		high			CN
SP12-122	196.0	216.5	3	nat		Ta	int		high			CN
SP12-122	216.5	238.5	3	nat	arg_i	Tl	int		high			CN
SP12-122	238.5	268.0	4	nat	arg_p	Ta	int					CN
SP12-122	268.0	330.0	3	nat	arg_i	Tp	high	Myl				CN
SP12-122	330.0	335.0	3	nat	arg_i	Tm	low				CONTACT DEFINED BY CLAY ALTERATION	CN
SP12-122	335.0	337.5	3	nat		L	int				Very friable along contacts & foliation	CN
SP12-122	337.5	353.0	1	nat	epi	Tm	low					CN
SP12-122	353.0	382.0	3	nat		Ta	int		int			CN
SP12-122	382.0	450.0	4	nat	arg_p	Ta	int				No apparent reason for start of rubble zone?	CN
SP12-122	450.0	499.5	2	both		Tl	int					CN
SP12-122	499.5	587.0	1	nat		Tl	int					CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_128	53.0	62.5	2	nat	epi	Tm	low					JK
SP12_128	62.5	66.8	2	nat	epi	Tm	high					JK
SP12_128	66.8	81.8	2	nat	epi	Tm	high		high			JK
SP12_128	81.8	97.7	4	nat	arg_i	Tm	high					JK
SP12_128	97.7	100.0	4	nat	arg_p	Tm	high		high			JK
SP12_128	100.0	100.1	2	nat	epi	O					Qz vein	JK
SP12_128	100.1	102.0	2	nat	epi	Bv	high	S1phy				JK
SP12_128	102.0	103.4	2	nat	epi	Tp	high	S1phy				JK
SP12_128	103.4	111.8	2	nat	arg_i	Bv						JK
SP12_128	111.8	113.3	2	nat	arg_p	Tp						JK
SP12_128	113.3	114.0	4	nat	arg_p	Tp						JK
SP12_128	114.0	114.4	2	nat	epi	Tp						JK
SP12_128	114.4	116.5	4	nat	arg_p	Tp						JK
SP12_128	116.5	118.7	4	nat	arg_p	Ta						JK
SP12_128	118.7	122.0	3	nat	arg_p	Tp						JK
SP12_128	122.0	122.1	3	nat	arg_i	Tp	high	Myla			Ta slivers in Tp groundmass	JK
SP12_128	122.1	124.3	3	nat	epi	Tp						JK
SP12_128	124.3	124.9	4	mech	epi	Tp	high	S1phy			Tp with foliated Bv	JK
SP12_128	124.9	130.0	2	nat	epi	Tp	high	S1phy			Tp with foliated Bv	JK
SP12_128	524.0	525.0	2	nat	epi	Tp	high	S1sch			high amount of disseminated pyrite	JK
SP12_128	525.0	525.3	4	mech	epi	Tp	high	S1sch	int		high amount of disseminated pyrite, much fluorite	JK
SP12_128	525.3	533.0	2	nat	epi	Tp	high	S1sch				JK
SP12_128	533.0	536.7	3	nat	epi	Tp	high	S1sch	low			JK
SP12_128	536.7	537.0	3	nat	epi	Tp	high	Myla			with fluorite	JK
SP12_128	537.0	554.0	2	nat	epi	Ta	int	S1sch	int			JK
SP12_128	554.0	598.3	2	nat	epi	Ta	int		high			JK
SP12_128	598.3	616.0	2	nat	epi	Tp	high	Myla	int		boudinaged feldspar "foliated breccia"	JK
SP12_128	616.0	620.4	2	nat	epi	Ta	high	S1phy	int			JK
SP12_128	620.4	626.4	2	nat	epi	Ta	high	S1phy	high			JK
SP12_128	626.4	630.0	2	nat	epi	Tp	high	S1sch			Gabbro???	JK
SP12_128	630.0	648.0	4	both	epi	Tp	int	S1sch	int		high amount of pyrite	JK
SP12_128	648.0	654.0	4	nat	arg_i	Ta	int	S1phy	high		high amount of pyrite	JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-130	0.0	370.0	1	nat		And	low				Classic greenstone	CN
SP12-130	370.0	377.0	1	nat		Sed	low		int		Finely layered sed w. clast of megacrystic trachyte	CN
SP12-130	377.0	425.0	1	nat		Bv	low				Definitely volcanic breccia - loaded with clasts	CN
SP12-130	425.0	430.0	1	nat		Sed	low				Intra-flow? Seds	CN
SP12-130	430.0	516.0	1	nat		Bv	low				Some fine grained and looking intervals within	CN
SP12-130	516.0	525.0	1	nat		Sed	low				Conglomerate	CN
SP12-130	525.0	614.0	1	nat		Bv	low				Could also be conglom	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-133	0.0	81.5	1	nat		Volcanic/Tl - undiffer	low				Competent volcanic package or Tl	CN
SP12-133	81.5	82.2	3	both		Volcanic/Tl - undiffer	low				Competent volcanic package or Tl	CN
SP12-133	82.2	100.0	1	nat		Volcanic/Tl - undiffer	low				Competent volcanic package or Tl	CN
SP12-133	100.0	101.2	3	both		Volcanic/Tl - undiffer	low				Competent volcanic package or Tl	CN
SP12-133	101.2	170.0	1	nat		Volcanic/Tl - undiffer	low				Competent volcanic package or Tl	CN
SP12-133	170.0	223.0	1	nat		Bv	low				No strain volc brec or Tl that is completely unstrained	CN
SP12-133	223.0	237.0	4	nat	arg_p	Tl	low		high		Volc Brec/Tl - complete rubble	CN
SP12-133	237.0	259.7	3	nat	arg_p	Tl	low				volc Brec/Tl - high arg alt but NOT rubble, but weak, breaks easy	CN
SP12-133	259.7	260.1	3	nat	pot_epi	Tm	int				Switch to megacrystic dominated	CN
SP12-133	260.1	261.0	1	nat		L	low				Lampro dyke - no strain - late?	CN
SP12-133	261.0	271.0	2	nat	pot_epi	Tm	low		high		VERY porous, weak rock, easily breaks	CN
SP12-133	271.0	293.0	3	nat	arg_p	Tm	low		high		Not complete rubble but breaks VERY easily	CN
SP12-133	293.0	294.0	3	nat	bt	O	low				Pure bt - weak and breaks easily	CN
SP12-133	294.0	322.0	3	nat	arg_p	Tm	low		high		Epi also present in matrix	CN
SP12-133	322.0	365.5	4	nat	arg_p	Tm	low		high		Somehwhat coherent rock in places, but mainly very weak	CN
SP12-133	365.5	394.0	4	nat	arg_p	Tm	low		high		Interlayered (~2m layers) of fol Ta & low strain Tm	CN
SP12-133	394.0	420.0	3	nat	arg_i	Tl	low		high		Resembles Volc Brec like start of hole, could also be Tl	CN
SP12-133	420.0	422.5	4	nat	arg_p	Tl	low				Resembles Volc Brec like start of hole, could also be Tl	CN
SP12-133	422.5	439.0	4	nat	arg_p	Ta	int			90	Rubble contact b/t Tl/VolcBrec & fine grained Ta	CN
SP12-133	439.0	450.0	3	nat	arg_p	Ta	int		int	90	Very weak arg alt Ta, from rubble to intensely disked & mod strain foliated	CN
SP12-133	450.0	470.0									NO DATA	CN
SP12-133	470.0	475.0	4	nat	arg_p	Ta	int	S1phy	high	90		CN
SP12-133	475.0	479.0	3	nat	arg_i	Ta	int	S1phy	high	90		CN
SP12-133	479.0	487.0	2	nat		Ta	int	S1phy	int	90		CN
SP12-133	487.0	490.0	2	nat		Ta	int	S1phy	low	90		CN
SP12-133	490.0	527.0	1	nat		Ta	int	S1phy		90		CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-146	0.0	83.5	1	nat	epi	Tm	int				Intensely foliated along thin epidote dominated planes, no fabric within megacrystic rock	CN
SP12-146	83.5	124.5	1	nat		Ta	int				Fine grained trach w. rare megacrystic layers	CN
SP12-146	124.5	125.5	1	nat	pot	Ta	int				Pot altered at contact b/t finer grained phase of rock	CN
SP12-146	125.5	128.0	3	both	arg_m	Ta	int				Small broken zone focused around pot alt	CN
SP12-146	128.0	198.0	1	nat		Ta	int			45	Fine grained fol trach	CN
SP12-146	198.0	212.0	2	nat	arg_m	Ta	int		int		Decimeter intervals of higher porosity, arg alt, foliation = weaker rock, b/t competent Ta	CN
SP12-146	212.0	234.0	1	nat		Ta	int				Std - competent fol trach	CN
SP12-146	234.0	276.0	3	nat	arg_i	Ta	int		high		Competent intervals mixed w. non-competent rubbly intervals	CN
SP12-146	276.0	313.0	4	nat	arg_p	Ta	int		high		Litho contact defines approx end of rubble zone	CN
SP12-146	313.0	318.0	4	nat	arg_i	Tl	int		high		Gradual decrease out of rubble zone going downhole	CN
SP12-146	318.0	378.0	1	nat		Tl	int				Gradual change to no xeno bearing trach, only foliated fine grained	CN
SP12-146	378.0	395.0	1	nat		Ta	int				Gradual change to no xeno bearing trach, only foliated fine grained	CN
SP12-146	395.0	412.0	1	nat		Tl	low				Layered megacrystic & fine grained trach	CN
SP12-146	412.0	455.0	1	nat		Ta	int				Foliated fine grained trach	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_152	46.7	50.0	4	nat	epi	Tm			high		high amount of pyrite	JK
SP12_152	50.0	50.3	4	nat	epi	O					Qz vein, contact	JK
SP12_152	50.3	52.0	3	nat	epi	Ta			int			JK
SP12_152	52.0	52.8	3	nat	epi	Ta			high			JK
SP12_152	52.8	53.4	4	nat	epi	Ta						JK
SP12_152	53.4	58.6	4	nat	epi	Tp	high	S1phy				JK
SP12_152	58.6	61.5	4	nat	epi	Tp	high		high		foliated breccia, high amount of biotite	JK
SP12_152	61.5	63.4	4	nat	arg_p	Tp						JK
SP12_152	63.4	65.9	3	nat	arg_p	Tp						JK
SP12_152	65.9	68.0	4	nat	arg_p	Tp	high					JK
SP12_152	68.0	80.3	2	mech	epi	Tp	high	S1sch	low			JK
SP12_152	80.3	83.0	4	mech	epi	Tp	high	S1sch	int			JK
SP12_152	83.0	97.0	2	nat	epi	Ta	high	S1phy				JK
SP12_152	97.0	98.8	3	nat	arg_i	Tp	high	S1sch				JK
SP12_152	98.8	109.9	2	nat	arg_i	Tp	high	S1sch				JK
SP12_152	109.9	113.8	2	nat	pot	Tm	high	Myla				JK
SP12_152	113.8	120.0	2	nat	pot	Tm-Ta	high	S1sch				JK
SP12_152	120.0	127.5	2	nat	epi	Ta	high					JK
SP12_152	127.5	127.9	2	nat	epi	Ta-Sed	high	S1sch			high amount of pyrite	JK
SP12_152	268.0	268.9	2	nat	epi	Tp	high	S1sch				JK
SP12_152	268.9	269.0	4	nat	arg_p	Tp						JK
SP12_152	269.0	292.0	2	nat	epi	Tp	high	Myla				JK
SP12_152	292.0	293.2	3	nat	pot_epi	Tm	high	Myl				JK
SP12_152	293.2	297.0	2	nat	epi	Tp	high	Myl				JK
SP12_152	297.0	298.2	2	nat	epi	Tp-Ta	high	S1sch				JK
SP12_152	298.2	298.8	2	nat	pot_epi	Tm	high	S1sch				JK
SP12_152	298.8	308.0	2	nat	epi	Tp	high	S1sch			strain partitioning low-strain porpyry-high strain lesser porphyrs	JK
SP12_152	308.0	321.0	2	mech	epi	Tp	high	S1sch	high			JK
SP12_152	321.0	391.0	1	nat	epi	Tp						JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-164	17.0	26.0	3	both	arg_m	Tp	high	S1phy	int	45	Well fol porph trach, broken up	CN
SP12-164	26.0	46.5	2	both	arg_m	Tp	int	S1phy			Locally fractured	CN
SP12-164	46.5	51.5	4	nat	arg_p	Tp	high	S1phy		75	Not complete rubble, but intensely broken up	CN
SP12-164	51.5	69.0	3	nat	arg_m	Tp	high	S1phy		75	Local intervals class 3, other intervals competent = class 2	CN
SP12-164	69.0	74.5	1	nat		Tp	int	S1phy			Competent fol trach	CN
SP12-164	74.5	76.0	4	nat	arg_i	Tp	int	S1phy		65	Arg alt rubbly interval	CN
SP12-164	76.0	95.0	2	nat	arg_m	Tp	int	S1phy			Local minor arg intervals that are also locally fractured	CN
SP12-164	95.0	97.0	1	nat		Tp	int		int		Competent rock, but has voids	CN
SP12-164	97.0	103.0	2	nat		Tp	int				Competent	CN
SP12-164	103.0	104.8	4	nat		Tp	int	S1phy	high		Damage zone represents transition to fine grained aphantic dark black trach	CN
SP12-164	104.8	120.0	1	nat		Ta	int	S1phy			Fine grained dark apanitic trach	CN
SP12-164	120.0	128.0	3	nat		Ta	int	S1phy	high		Rock not high fractured but voids makes weak	CN
SP12-164	128.0	128.5	4	nat	arg_p	Ta	int	S1phy	high		Rubble zone	CN
SP12-164	128.5	149.9	2	nat		Ta	int	S1phy	low		Locally void bearing, typically fairly competent	CN
SP12-164	149.9	150.2	4	nat		Ta	int	S1phy			Damage zone represents transition from fine grained aphantic dark black trach to porph trach	CN
SP12-164	150.2	168.0	2	nat		Tp	int	S1phy			Local zones of <0.5m chl/arg rubble	CN
SP12-164	168.0	176.0	3	nat		Ta	int	S1phy	high		Local zones of rubble, class 2-3	CN
SP12-164	176.0	184.0	2	nat		Ta	int	S1phy			Locally fractured rock, well foliated	CN
SP12-164	184.0	184.7	3	nat	arg_m	Ta	int	S1phy	high		High voids, zones of rubble b/t more competent rock, high veining	CN
SP12-164	184.7	184.9	4	nat		Bh	low		high		Hydrolic breccia in Ta	CN
SP12-164	184.9	200.0	3	nat	arg_m	Ta	int	S1phy	high		High voids, zones of rubble b/t more competent rock, high veining	CN
SP12-164	200.0	212.0	1	nat		Ta	int	S1phy			Std fol Ta	CN
SP12-164	212.0	226.0	2	nat	arg_m	Ta	int	S1phy			Competent rock with local rubble zones	CN
SP12-164	226.0	232.0	3	both	arg_m	Ta	int	S1phy	low		Disk-ed style broken up rock	CN
SP12-164	232.0	258.0	4	nat	arg_p	Ta	int		high		Complete rubble, likely Ta, but not definitive - brown color - see photo for rubble litho contact	CN
SP12-164	258.0	290.0	4	nat	arg_p	Tl	int		high		Complete rubble, in xeno layered rock - grey color - see photo for rubble litho contact	CN
SP12-164	290.0	299.0	1	nat		Tl	int	S1phy			Competent - locally fractured xeno/laytered trach	CN
SP12-164	299.0	331.5	1	nat	epi	Tl	int	S1phy			Minor epi layering, more layers of xeno/megacrystic	CN
SP12-164	331.5	353.0	2	both		Ta	int	S1phy			Epidote & fractured contact b/t above Tl & Ta	CN
SP12-164	353.0	369.0	1	nat		Tl	int	S1phy			Gradational contact from Ta to this Tl - SEE PIC	CN
SP12-164	369.0	371.0	3	both		Tl	int	S1phy	high		Weak b/c of voids	CN
SP12-164	371.0	377.0	1	nat		Tl	int	S1phy				CN
SP12-164	377.0	384.0	3	both		Tl	int	S1phy	high		Weak b/c of voids - breaks in disk-esk fragments	CN
SP12-164	384.0	393.5	3	both	pot_epi	Tm	low		high		Likely megacrystic phase of Tl, weak b/c voids, pot in phenos, epi in matrix	CN
SP12-164	393.5	410.5	3	both	epi	Tl	low		high		Likely megacrystic phase of Tl, weak b/c voids, pot in phenos, epi in matrix	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-164	410.5	413.0	3	both	pot_epi	Tl	low		low		Likely megacrystic phase of Tl, weak b/c voids, pot in phenos, epi in matrix	CN
SP12-164	413.0	437.0	4	nat	arg_m	Ta	int	S1phy	high		Transition from megacryst dominated Tl to Ta, Tl is class 3, Ta is 4 - transition at contact, see pics	CN
SP12-164	437.0	453.5	3	both		Ta	int	S1phy	high		Mech disked core + weak b/c voids, occasionally looks meta-sed - esk	CN
SP12-164	453.5	464.0	1	nat		Ta	int	S1phy			Competent fine grained fol trach	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_165	22.8	38.7	4	mech	arg_i	Tp	high	S1sch				JK
SP12_165	38.7	39.5	3	mech	arg_i_epi	Tp	high	S1sch				JK
SP12_165	39.5	41.0	4	mech	epi	Tp	high	S1sch				JK
SP12_165	41.0	41.4	3	mech	epi	Tp	high	S1sch				JK
SP12_165	41.4	42.1	4	mech	epi	Tp	high	S1sch				JK
SP12_165	42.1	42.8	2	mech	epi	Tp	high	S1sch				JK
SP12_165	42.8	43.4	3	mech	epi	Tp	high	S1sch				JK
SP12_165	43.4	43.8	4	mech	epi	Tp	high	S1sch				JK
SP12_165	43.8	44.6	3	mech	epi	Tp	high	S1sch				JK
SP12_165	44.6	44.7	4	mech	epi	Tp	high	S1sch				JK
SP12_165	44.7	47.0	3	mech	epi	Tp	high	S1sch				JK
SP12_165	47.0	51.7	4	both	epi	Tp	high	S1sch			increasing arg alteration	JK
SP12_165	51.7	52.2	3	both	epi	Tp	high	S1sch				JK
SP12_165	52.2	52.4	4	both	epi	Tp	high	S1sch				JK
SP12_165	52.4	53.0	3	both	epi	Tp	high	S1sch				JK
SP12_165	53.0	53.1	4	nat	epi	Tp	high	S1sch				JK
SP12_165	53.1	56.1	3	nat	epi	Tp	high	S1sch				JK
SP12_165	56.1	59.4	4	nat	epi	Tp	high	S1sch				JK
SP12_165	59.4	59.6	3	nat	epi	Tp	high	S1sch				JK
SP12_165	59.6	60.0	4	nat	arg_i	Tp	high	S1sch				JK
SP12_165	60.0	62.1	2	nat	epi	Tp	high	S1sch	int		epi-veins	JK
SP12_165	62.1	62.4	4	nat	epi	Tp	high	S1sch				JK
SP12_165	62.4	65.2	3	nat	epi	Tp	high	S1sch	high			JK
SP12_165	65.2	65.8	3	nat	epi	Tp	high	S1sch				JK
SP12_165	65.8	68.0	3	nat	epi	Tp	high	S1sch	high		epi-, calcite and fluorite veins	JK
SP12_165	68.0	69.0	4	nat	epi	Tp	high	S1sch	high		epi-, calcite and fluorite veins	JK
SP12_165	69.0	70.8	2	nat	epi	Tp	high	S1sch	high		epi-, calcite and fluorite veins	JK
SP12_165	70.8	71.6	4	nat	epi	Tp	high	S1sch	high		Qz veins	JK
SP12_165	71.6	75.3	2	nat	epi	Tp	high	S1sch	int			JK
SP12_165	75.3	81.5	3	nat	epi	Tp	high	S1sch	high		epi-cc veins, py-veins	JK
SP12_165	81.5	83.6	4	nat	arg_p	Tp	high	S1sch				JK
SP12_165	83.6	85.1	3	nat	arg_p	Tp	high	S1sch	high			JK
SP12_165	85.1	86.0	4	nat	arg_p	Tp	high	S1sch	high			JK
SP12_165	86.0	87.0	3	nat	arg_p	Tp	high	S1sch	high			JK
SP12_165	87.0	87.7	4	nat	arg_i	Tp			high			JK
SP12_165	87.7	88.9	3	nat	arg_i	Tp			high			JK
SP12_165	88.9	89.0	4	nat	arg_i	Tp			high			JK
SP12_165	89.0	90.9	3	nat	arg_i	Tp			high			JK
SP12_165	90.9	92.0	4	nat	arg_i	Tp			high			JK
SP12_165	92.0	92.6	3	nat	arg_i	Tp			high			JK
SP12_165	92.6	92.8	4	nat	arg_i	Tp			high			JK
SP12_165	92.8	108.7	3	nat	arg_i	Tp			high		bio- and py-rich	JK

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DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_165	108.7	115.8	4	nat	arg_p	Tp						JK
SP12_165	115.8	118.9	3	nat	arg_i	Tp			int			JK
SP12_165	118.9	119.8	4	nat	arg_i	Tp						JK
SP12_165	119.8	120.4	3	nat	arg_i	Tp						JK
SP12_165	120.4	120.9	4	nat	arg_i	Tp						JK
SP12_165	120.9	121.3	2	nat	arg_i	Tp						JK
SP12_165	121.3	122.8	4	nat	arg_i	Tp						JK
SP12_165	122.8	123.4	4	nat	epi_arg_i	Tp	high	S1sch				JK
SP12_165	123.4	126.4	3	nat	epi	Tp	high	S1sch				JK
SP12_165	126.4	127.7	2	nat	epi	Tp	high	S1sch				JK
SP12_165	127.7	129.5	3	nat	epi	Tp	high	S1sch				JK
SP12_165	129.5	130.8	4	nat	arg_i	Tp						JK
SP12_165	130.8	131.5	3	nat	arg_i	Tp						JK
SP12_165	131.5	131.9	4	nat	arg_i	Tp						JK
SP12_165	131.9	134.0	3	nat	arg_i	Tp						JK
SP12_165	134.0	134.1	2	nat	epi	O					Feldspar vein	JK
SP12_165	134.1	155.3	3	nat	arg_i	Tp						JK
SP12_165	155.3	155.6	4	nat	arg_i	Tp						JK
SP12_165	155.6	159.8	2	nat	arg_i	Tp						JK
SP12_165	159.8	161.1	4	nat	arg_p	Tp						JK
SP12_165	161.1	164.5	2	nat	arg_p	Tp						JK
SP12_165	164.5	164.8	4	nat	arg_p	Tp						JK
SP12_165	164.8	166.6	3	nat	arg_p	Tp						JK
SP12_165	166.6	167.7	4	nat	arg_p	Tp						JK
SP12_165	167.7	170.2	2	nat	arg_p	Tp						JK
SP12_165	170.2	170.4	4	mech	arg_p	Tp						JK
SP12_165	170.4	172.9	2	nat	arg_p	Tp						JK
SP12_165	172.9	173.1	4	mech	arg_p	Tp						JK
SP12_165	173.1	174.4	2	nat	epi	Tp						JK
SP12_165	174.4	174.5	4	mech	epi	Tp						JK
SP12_165	174.5	175.9	2	nat	epi	Tp		S1sch			breaks parallel to foliation	JK
SP12_165	175.9	176.9	3	nat	epi	Tp						JK
SP12_165	176.9	177.6	4	nat	epi	Tp			high		high abundance of pyrite	JK
SP12_165	177.6	179.4	3	nat	epi	Tp			high			JK
SP12_165	179.4	181.0	4	nat	arg_i	Tp						JK
SP12_165	181.0	181.8	3	nat	epi	Tp			high			JK
SP12_165	181.8	182.1	4	nat	arg_i	Tp			high			JK
SP12_165	182.1	183.0	3	nat	epi	Tp						JK
SP12_165	183.0	188.8	4	nat	arg_i	Tp			high			JK
SP12_165	188.8	193.0	3	nat	epi	Tl						JK
SP12_165	193.0	259.4	4	nat	arg_p							JK
SP12_165	259.4	260.8	3	nat	arg_i	Tp			high			JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_165	260.8	264.0	4	nat	arg_i	Tp			high			JK
SP12_165	264.0	264.5	3	nat	arg_i	Tp			high			JK
SP12_165	264.5	266.7	4	nat	arg_i				high			JK
SP12_165	266.7	268.0	3	nat	arg_i							JK
SP12_165	268.0	269.9	4	nat	arg_i				high		high abundance of pyrite	JK
SP12_165	269.9	271.0	3	nat	epi							JK
SP12_165	271.0	271.2	4	nat	epi				high		epidote veins	JK
SP12_165	271.2	273.1	3	nat	epi							JK
SP12_165	273.1	278.4	4	nat	arg_i				high			JK
SP12_165	278.4	280.6	3	nat	epi							JK
SP12_165	280.6	282.1	2	nat	bio	Tl						JK
SP12_165	282.1	282.8	4	nat	bio							JK
SP12_165	282.8	283.6	3	nat	epi	Tl						JK
SP12_165	283.6	287.8	4	nat	arg_p	Tl						JK
SP12_165	287.8	291.0	3	nat	epi	Tl						JK
SP12_165	291.0	324.2	2	nat	epi	Tl						JK
SP12_165	324.2	330.3	2	nat	pot	Tl						JK
SP12_165	330.3	342.2	3	nat	epi	And_Sed	high				high-strain andesite with metasediment layers	JK
SP12_165	342.2	343.6	2	nat	pot_epi	Tm	no		int		with epidote and fluorite	JK
SP12_165	343.6	344.6	3	nat	pot_epi	Ta	high	S1sch				JK
SP12_165	344.6	347.8	3	nat	pot	Tm	low		int			JK
SP12_165	347.8	350.1	4	nat	pot	Tm	low		high			JK
SP12_165	350.1	352.9	3	nat	epi	Ta	high	S1sch				JK
SP12_165	352.9	353.6	3	nat	epi	Tm			high			JK
SP12_165	353.6	355.0	4	nat	epi	Tm			high			JK
SP12_165	355.0	356.4	3	nat	epi	Tm						JK
SP12_165	356.4	358.8	2	nat	epi	Tm						JK
SP12_165	358.8	359.0	2	nat	epi	Tl	high					JK
SP12_165	359.0	371.3	2	nat	epi	Tm	no					JK
SP12_165	371.3	373.6	3	nat	epi	Tm			high			JK
SP12_165	373.6	377.2	4	nat	epi	Ta			high			JK
SP12_165	377.2	380.1	4	nat	arg_i	Ta						JK
SP12_165	380.1	383.2	4	nat	epi	Ta					decreasing argillic alteration	JK
SP12_165	383.2	384.0	3	nat	epi	Ta						JK
SP12_165	384.0	385.0	4	mech	epi	Ta						JK
SP12_165	385.0	390.0	4	nat	arg_i	Ta			high			JK
SP12_165	390.0	397.2	3	nat	arg_i	Ta			high			JK
SP12_165	397.2	398.1	3	nat	arg_i	Tm						JK
SP12_165	398.1	399.2	3	nat	arg_i	Ta						JK
SP12_165	399.2	399.5	4	nat	arg_i	Ta					high abundance of pyrite	JK
SP12_165	399.5	400.2	3	nat	arg_i	Ta						JK
SP12_165	400.2	402.8	3	nat	epi	Tm			int			JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_165	402.8	403.8	3	nat	epi	Ta	high					JK
SP12_165	403.8	404.0	3	nat	epi	Tm			high			JK
SP12_165	404.0	405.1	3	nat	epi	Ta						JK
SP12_165	405.1	405.2	3	nat	epi	Tm						JK
SP12_165	405.2	406.3	3	nat	epi	Ta						JK
SP12_165	406.3	407.0	4	nat	epi	Tm	no				with qz-tourmaline veins	JK
SP12_165	407.0	410.3	4	nat	epi	Ta						JK
SP12_165	410.3	410.4	3	nat	epi	Tm		S1sch				JK
SP12_165	410.4	411.1	4	nat	epi	Ta	high	S1sch				JK
SP12_165	411.1	411.5	3	nat	epi	Tm	high	S1sch			epidote-qz veins	JK
SP12_165	411.5	412.2	4	nat	epi	Ta	high	S1sch				JK
SP12_165	412.2	414.0	4	nat	epi	Tm			high			JK
SP12_165	414.0	415.0	4	nat	epi	Ta						JK
SP12_165	415.0	424.5	4	nat	epi	Tm	high					JK
SP12_165	424.5	428.7	4	nat	epi	Ta						JK
SP12_165	428.7	495.3	2	nat	epi	Tl					folded qz veins, feldspar-porphyrs replaced by epidote	JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-174	205.0	299.0	1	nat		And	int	S1sch		45	Could be trach	CN
SP12-174	299.0	302.0	4	nat	arg_m	And	int	S1phy				CN
SP12-174	302.0	356.0	1	nat		Ta	int	S1phy		80	Could be and	CN
SP12-174	356.0	375.0	3	nat	arg_i	Ta	int	S1phy	int		Could be and	CN
SP12-174	375.0	398.5	2	both		Tl	int					CN
SP12-174	398.5	414.0	1	nat		Tl	int					CN
SP12-174	414.0	418.0	4	nat	arg_i	Tl	int		high			CN
SP12-174	418.0	436.0	3	nat		Tl	int		high			CN
SP12-174	436.0	456.0	3	both		Ta	int	S1phy	int		Could be and	CN
SP12-174	456.0	479.0	3	both	epi	Ta	low				Could be and	CN
SP12-174	479.0	506.0	1	nat	epi	Ta	low				Could be and	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_177A	73.5	93.0	4	nat		Tx	int	fol				JK
SP12_177A	93.0	96.9	4	nat	arg_i							JK
SP12_177A	96.9	97.6	4	nat								JK
SP12_177A	97.6	103.3	4	nat	arg_i				int		103.3: qz as open space filling in large cavity	JK
SP12_177A	103.3	104.4	4	nat							2 decaying to 4	JK
SP12_177A	104.4	114.0	4	nat								JK
SP12_177A	114.0	117.0	4	nat							2 decaying to 4	JK
SP12_177A	117.0	120.6	4	nat								JK
SP12_177A	120.6	123.6	2	nat	arg_i							JK
SP12_177A	123.6	151.8	4	nat								JK
SP12_177A	248.8	274.0	4	nat	arg_i_chl							JK
SP12_177A	274.0	293.5	4	nat	arg_p							JK
SP12_177A	293.5	317.0	4	nat	arg_p	Bv						JK
SP12_177A	317.0	320.8	3	nat	arg_p	Bv						JK
SP12_177A	320.8	321.0	4	nat	arg_p	Bv						JK
SP12_177A	321.0	321.2	3	nat	arg_p	Bv						JK
SP12_177A	321.2	331.3	4	nat	arg_p	Bv						JK
SP12_177A	331.3	332.0	3	nat	arg_p	Bv						JK
SP12_177A	332.0	333.4	3	nat	arg_p	Bv						JK
SP12_177A	333.4	336.0	4	nat	arg_p	Bv						JK
SP12_177A	336.0	337.0	3	nat	arg_p	Bv						JK
SP12_177A	337.0	340.1	4	nat	arg_p	Bv						JK
SP12_177A	340.1	343.0	3	nat	arg_p	Bv						JK
SP12_177A	343.0	343.6	4	nat	arg_p	Bv						JK
SP12_177A	343.6	346.5	3	nat	arg_p	Bv						JK
SP12_177A	346.5	346.8	4	nat	arg_p	Bv			int		cc-vugs	JK
SP12_177A	346.8	348.0	3	nat	arg_p	Bv						JK
SP12_177A	348.0	348.3	4	nat	arg_p	Bv			int		cc-vugs	JK
SP12_177A	348.3	351.7	3	nat	arg_p	Bv						JK
SP12_177A	351.7	352.0	4	nat	epi							JK
SP12_177A	352.0	355.0	3	nat	epi							JK
SP12_177A	355.0	356.2	4	nat	epi	Ta	high?	S1phy			fine-grained chlorite-rich rock	JK
SP12_177A	356.2	366.4	3	nat	epi							JK
SP12_177A	366.4	367.0	4	nat	epi				high		collapsed vugs	JK
SP12_177A	367.0	367.6	3	nat	epi							JK
SP12_177A	367.6	391.6	4	nat	epi				int		Stockwork, failure along py-rich fractures	JK
SP12_177A	391.6	414.0	3	nat	epi							JK
SP12_177A	414.0	414.1	4	nat	epi						cc-veins, oxides	JK
SP12_177A	414.1	417.7	3	nat	epi							JK
SP12_177A	417.7	418.0	4	nat	epi				high		collapsed vugs	JK
SP12_177A	418.0	424.5	3	nat	epi							JK
SP12_177A	424.5	425.0	4	nat	epi				high			JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_177A	425.0	430.0	3	nat	epi							JK
SP12_177A	430.0	433.9	4	nat	epi							JK
SP12_177A	433.9	436.9	4	nat	epi	Ta	high?	S1phy			fine-grained chlorite-rich rock	JK
SP12_177A	436.9	440.5	3	nat	epi							JK
SP12_177A	440.5	445.6	2	nat	epi	And					py-mgt-andesite	JK
SP12_177A	445.6	447.0	4	nat	epi							JK
SP12_177A	447.0	450.0	3	nat	epi							JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-178	0.0	25.0	2	both		And	int					CN
SP12-178	25.0	27.0	3	nat	arg_m	And	high					CN
SP12-178	27.0	50.9	2	both		And	int					CN
SP12-178	50.9	51.0	3	both		And	high					CN
SP12-178	51.0	53.4	2	both		And	int					CN
SP12-178	53.4	53.5	3	both		And	high					CN
SP12-178	53.5	59.0	2	both		And	int					CN
SP12-178	59.0	80.0	1			And	int					CN
SP12-178	80.0	82.5	3	both		And	int					CN
SP12-178	82.5	88.5	1			And	int					CN
SP12-178	88.5	101.8	2	both		And	int					CN
SP12-178	101.8	102.1	3	nat	arg_m	And	int				Alteration & narrow ruble zones occur perpendicular to core-axis which is approx sub-horizontal b/c near vertical drilled hole	CN
SP12-178	102.1	110.1	1			And	int					CN
SP12-178	110.1	111.5	3	both	arg_m	And	int				Appears to form along vein contact	CN
SP12-178	111.5	117.2	2	both		And	int					CN
SP12-178	117.2	117.7	3	both		And	int					CN
SP12-178	117.7	119.0	1			And	int					CN
SP12-178	119.0	119.3	3	both		And	int					CN
SP12-178	119.3	120.2	1			And	int					CN
SP12-178	120.2	121.0	3	both		And	int					CN
SP12-178	121.0	122.8	1			And	int					CN
SP12-178	122.8	123.0	3	both		And	int					CN
SP12-178	123.0	124.1	1			And	int					CN
SP12-178	124.1	124.3	3	both		And	int					CN
SP12-178	124.3	133.5	1			And	int					CN
SP12-178	133.5	139.8	3	both		And	int					CN
SP12-178	139.8	152.0	1			And	int					CN
SP12-178	152.0	153.0	3	both		And	int					CN
SP12-178	153.0	194.0	1			And	int					CN
SP12-178	194.0	201.0	3	both		And	int				Disked style rock	CN
SP12-178	201.0	221.0	1			And	int					CN
SP12-178	221.0	222.0	3	both		Tp	int				Potential contact b/t And & Tp - may not be true	CN
SP12-178	222.0	231.5	1			Tp	int					CN
SP12-178	231.5	232.5	3	both		Tp	int					CN
SP12-178	232.5	280.0	1			Tp	int					CN
SP12-178	280.0	281.0	2	both		Tp	int					CN
SP12-178	281.0	312.5	1			Tp	int					CN
SP12-178	312.5	314.5	2	both		Tp	int		int			CN
SP12-178	314.5	318.0	1	nat		Tp	int					CN
SP12-178	318.0	322.0	3	both		Tp	int					CN
SP12-178	322.0	329.8	4	both		Tp	int					CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-178	329.8	342.0	2	nat		Tp	int					CN
SP12-178	342.0	366.0	3	mech		Tp	int					CN
SP12-178	366.0	375.0	1	nat		Tp	int					CN
SP12-178	375.0	377.5	3	both		Tp	int					CN
SP12-178	377.5	395.0	1	nat		Tp	int					CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12-180	45.6	52.4	1	nat		L	low				weakly fol lamp dyke	CN
SP12-180	52.4	70.5	1	nat		And	int				Competent and	CN
SP12-180	70.5	71.5	4	nat	chl	And	int				brittle chl zone	CN
SP12-180	71.5	76.0	1	nat		And	int				Competent and	CN
SP12-180	76.0	76.5	4	nat	chl	And	int				complete clay	CN
SP12-180	76.5	82.5	1	nat		And	int				Competent and	CN
SP12-180	82.5	85.0	4	nat	chl	And	int				choritized rubble	CN
SP12-180	85.0	92.2	1	nat		And	int				Competent and	CN
SP12-180	92.2	94.0	4	nat	chl	And	int				choritized rubble	CN
SP12-180	94.0	104.7	1	nat		And	int				Competent and	CN
SP12-180	104.7	105.0	4	nat	chl	And	int				choritized rubble	CN
SP12-180	105.0	111.5	1	nat		And	int				Competent and	CN
SP12-180	111.5	120.0	3	nat	arg_m	And	int				very minor arg, prob chl too, could be Tp	CN
SP12-180	120.0	123.8	1	nat		And	int				Competent and	CN
SP12-180	123.8	126.5	3	nat	chl	And	int				choritized rubble	CN
SP12-180	126.5	133.0	1	nat		And	int				Competent and	CN
SP12-180	133.0	133.5	3	nat	chl	And	int				choritized rubble	CN
SP12-180	133.5	142.5	1	nat		And	int				Competent and	CN
SP12-180	142.5	145.5	3	nat	chl	And	int				choritized rubble	CN
SP12-180	145.5	157.0	1	nat		And	int				Competent and	CN
SP12-180	157.0	158.3	3	nat	pot	And	int				clay, minor pot	CN
SP12-180	158.3	159.5	1	nat		And	int				Competent and	CN
SP12-180	159.5	161.0	3	nat	chl	And	high				clay, chl	CN
SP12-180	161.0	164.3	1	nat		And	int				Competent and	CN
SP12-180	164.3	167.1	3	nat	chl	And	int				chloritized rubble, very weak	CN
SP12-180	167.1	173.0	1	nat		And	int				Competent and	CN
SP12-180	173.0	178.5	2	nat		And	int		int		Voids present, rock competent	CN
SP12-180	178.5	183.0	3	nat		And	int		int		Fractured, crumbly b/c of voids	CN
SP12-180	183.0	186.5	1	nat	epi	And	int				Epidote filled vesicles? Competent rock.	CN

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SP12_180	185.6	188.3	1	nat	epi	And	int	S1phy				JK
SP12_180	188.3	188.4	4	nat	epi	O		S1phy		45	Veins and stockwork, pyrite and epidote	JK
SP12_180	188.4	191.0	1	nat	epi	And	int	S1phy				JK
SP12_180	191.0	191.1	4	mech	epi	O					Epidote vein	JK
SP12_180	191.1	191.3	1	nat	epi	And	int	S1phy				JK
SP12_180	191.3	191.8	4	both	epi						epi & py	JK
SP12_180	191.8	192.0	1	nat	epi							JK
SP12_180	192.0	192.1	3	nat	epi				high		collapsed vugs	JK
SP12_180	192.1	192.3	2	nat	epi					85	fractures along epi-cc veins	JK
SP12_180	192.3	194.7	3	nat	epi							JK
SP12_180	194.7	195.0	4	nat	arg_p							JK
SP12_180	195.0	195.1	2	nat	epi							JK
SP12_180	195.1	195.2	4	nat	arg_p			S1phy			foliation-parallel alteration	JK
SP12_180	195.2	197.5	2	nat	epi							JK
SP12_180	197.5	198.0	3	nat	epi	O				75	quartz-epidote vein	JK
SP12_180	198.0	213.5	2	nat	epi							JK
SP12_180	213.5	215.0	4	nat	arg_p	And					high amount of py	JK
SP12_180	215.0	226.0	2	nat	epi							JK
SP12_180	226.0	227.0	4	nat	arg_i	Bv		S1phy	high		Foliated Bv means pre-deposit formation. Several Quartz veins	JK
SP12_180	227.0	248.0	4	both	arg_i	Bv						JK
SP12_180	248.0	330.3	4	nat	arg_p						high amount of pyrite	JK
SP12_180	330.3	336.8	2	mech	epi	Tp		S1phy				JK
SP12_180	336.8	336.8	2	mech	epi	Sed_sand						JK
SP12_180	336.8	350.0	2	mech	epi	And	high	S1phy				JK
SP12_180	350.0	357.5	2	mech	epi	And	high	S1phy				JK
SP12_180	357.5	357.8	2	mech	epi	O				35	Qz vein 30 cm thick	JK
SP12_180	357.8	359.6	2	nat	epi	And	high	S1phy				JK
SP12_180	359.6	360.0	4	nat	epi	And	high	S1phy			Sericite-talc alteration	JK
SP12_180	360.0	365.1	3	mech	epi	And	high	S1phy				JK
SP12_180	365.1	372.5	2	nat	epi	And	high	S1phy				JK
SP12_180	372.5	384.0	4	both	epi	And	high	S1phy				JK
SP12_180	384.0	385.0	4	mech	epi	And	high	S1phy				JK
SP12_180	385.0	398.0	3	mech	epi	And	high	S1phy			mechanical damage zone parallel foliation	JK
SP12_180	398.0	404.0	4	mech	arg_i	And	high	S1phy				JK
SP12_180	404.0	405.0	3	mech	epi	And	high	S1phy				JK
SP12_180	405.0	414.2	4	mech	epi	And	high	S1phy				JK
SP12_180	414.2	414.3	3	nat	epi	Sed_sand	high	S0			Red-beige-laminated sandstone	JK
SP12_180	414.3	431.2	4	mech	epi	And	high	S1phy				JK
SP12_180	431.2	431.3	3	nat	epi	P						JK
SP12_180	431.3	440.0	4	mech	epi	And	high	S1phy				JK

SRK Drill logs for Relogged Drill holes used in Structural Study for Springpole Project

DH_ID	From	To	Rock strength	mechanical /natural	Alteration	Lithology	Strain intensity	Texture	Porosity	Alpha angle	Comment	Geologist
SG12-189	34.9	51.5	4	nat	arg_p	Tp	int				Pot & epi alt also, Pot intense, maybe Tl, Tp, or Tm	CN
SG12-189	51.5	56.0	3	nat	arg_p	Ta	int		high		Transition to Ta	CN
SG12-189	56.0	87.3	3	nat	arg_p	Tp	int		int		Pot & epi alt also, local zones of pure rubble crumble	CN
SG12-189	87.3	92.0	4	nat	arg_p	Ta	int		high		Intense pot alt, some epi, complete crumble	CN
SG12-189	92.0	119.0	1	nat		Ta	int				LOCAL semi-foliated breccias - appear hydrolic, with carb/epi matrix	CN
SG12-189	119.0	134.5	3	both		Tm	low		low		CONSIDERABLE MECHANICAL FAILURE, minor voids assist as well, could be Tp/Tm	CN
SG12-189	134.5	141.0	3	both	arg_m	Ta	int		high		Considerable mech & nat(voids), also at transition from Tp/Tm	CN
SG12-189	141.0	221.0	1	nat	arg_m	And	low				And or Ta. 30cm class 4 zones of high arg alt. NOTE: Arg present along fractures - see pics	CN