



## ASX Announcement

16 January 2019

### Santa Cruz Gold Projects Update

#### Highlights:

- **Infill sampling at Cachi Prospects confirms gold-silver anomalism.**
- **Visible Gold identified at the Morena Prospect.**

Dark Horse Resources Limited (ASX: DHR; the Company) continues the surface exploration works across its portfolio of Santa Cruz gold projects (**Figure 1**). These have previously been referred to separately as Los Domos, Cachi and the DHR-PROAR group of tenements. The Company now refers to them collectively as the Santa Cruz gold projects because exploration is now advancing across the portfolio of the Company's tenements in Santa Cruz province.

An additional 200 rock samples were collected by Dark Horse geologists across the Santa Cruz projects in November and December 2018. This brings the total number of reconnaissance samples collected this field season to 584. All samples have been assayed for a diverse suite of elements. The latest work completes reconnaissance sampling of green field targets identified by former workers and recent Landsat-8 imagery, and includes infill sampling at a number of prospects within the Cachi tenement - Vetás Cachi, Morena, Vetás NW, Cachi Centro, Los Bloques and Cachi Norte from south to north, **Figure 2**).

Gold (Au) grades vary from below detection limit to a maximum of 3.8 g/t Au; 8 samples are in excess of 0.2 g/t Au and 4 greater than 0.5 g/t Au. Silver (Ag) grades vary from below detection limit to a maximum of 68ppm Ag; 65 samples are in excess of 5ppm Ag and 16 greater than 20ppm Ag.

These results are statistically comparable to the 384 samples collected earlier in the field season and reported to the ASX on December 14, 2018 which displayed a data range up to 9.72 g/t Au and 226ppm Ag. In that release 19% of the gold samples were anomalous and 16% of the silver samples were anomalous.

Strong anomalism is also seen in arsenic and antimony. The arsenic (As) distribution contains 13 samples with values greater than 500ppm As and 1 sample in excess of 0.5% As. Antimony (Sb) has 5 samples in excess of 50ppm Sb. The full suite of geochemistry results are included as **Table A**.

Infill sampling at Vetás Cachi has confirmed previous assays and a new prospect has been identified and sampled at El Cruce with anomalous results (**Figure 2**).



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Dark Horse Director Jason Beckton visited the Cachi project with the senior Argentine geological team in early January (**refer Photo 1**) and during this trip **visible gold** was observed in several rock specimens. At Morena, iron sulphide/oxide breccia hosting visible gold (**Photo set 2**) occurs in subcrop along the downslope of a prominent ridge formed by silica replacement. This is a characteristic feature of a number of prominent epithermal systems (Cerro Moro, Slovakia, Palmarejo) where the mineralization occurs in a geomorphologically recessive zone caused by easily erodible sulphides parallel to a silica rich fault that has acted as a fluid barrier.



**Photo 1: Dark Horse Director Jason Beckton with senior Argentine geologist Nicolas Stoessel at an outcropping epithermal quartz vein within the Cachi Project.**



**Photo 2 Visible Gold in Sulphide Breccia; Morena Prospect**

Regional reconnaissance work to date has confirmed the Cachi and Rosita Norte tenements as prospective for epithermal gold-silver mineralization. Other tenements in the Santa Cruz portfolio continue to be explored and evaluated.

Environmental permitting has commenced for the Cachi project to allow further testing by trenching and drilling. Ongoing, definitive results will be reported to the market as they come to hand.

The Company has terminated its agreement with the vendor of the Los Domos gold project in Santa Cruz because the significant amount of surface exploration work carried out by Dark Horse concluded the potential rhyolitic breccia/epithermal target is at a depth not conducive to the Company's current resource objectives.

Dark Horse is aggressively continuing its lithium resources business in Argentina and a separate update will be provided to the market shortly.

On behalf of the Board  
Mr Karl Schlobohm  
**Company Secretary**

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### Competent Persons Statement

The information herein that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Jason Beckton, who is a member of The Australian Institute of Geoscientists. Mr Jason Beckton is a Director of Dark Horse Resources Ltd.

Mr Beckton has more than five years' experience which is relevant to the style of mineralisation and types of deposits being reported and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves' (the JORC Code). This public report is issued with the prior written consent of the Competent Person(s) as to the form and context in which it appears.

### About Dark Horse Resources

Dark Horse Resources Ltd is an Australian, publicly listed mineral resource company (ASX: DHR), with a particular focus on Argentina, where it has invested in lithium and gold projects, with objectives to:

- Define substantial lithium resources, mine spodumene and brine, and produce high grade lithium products for the domestic and international battery and electronic markets.
- Discover and define several multimillion ounce gold deposits and the production of gold doré.

Dark Horse also has a power generation subsidiary, Dark Horse Energy and a substantial holding (33%) in Australian-based and ASX-listed oil and gas exploration company Lakes Oil NL (ASX:LKO).

Company website: [www.darkhorseresources.com.au](http://www.darkhorseresources.com.au)

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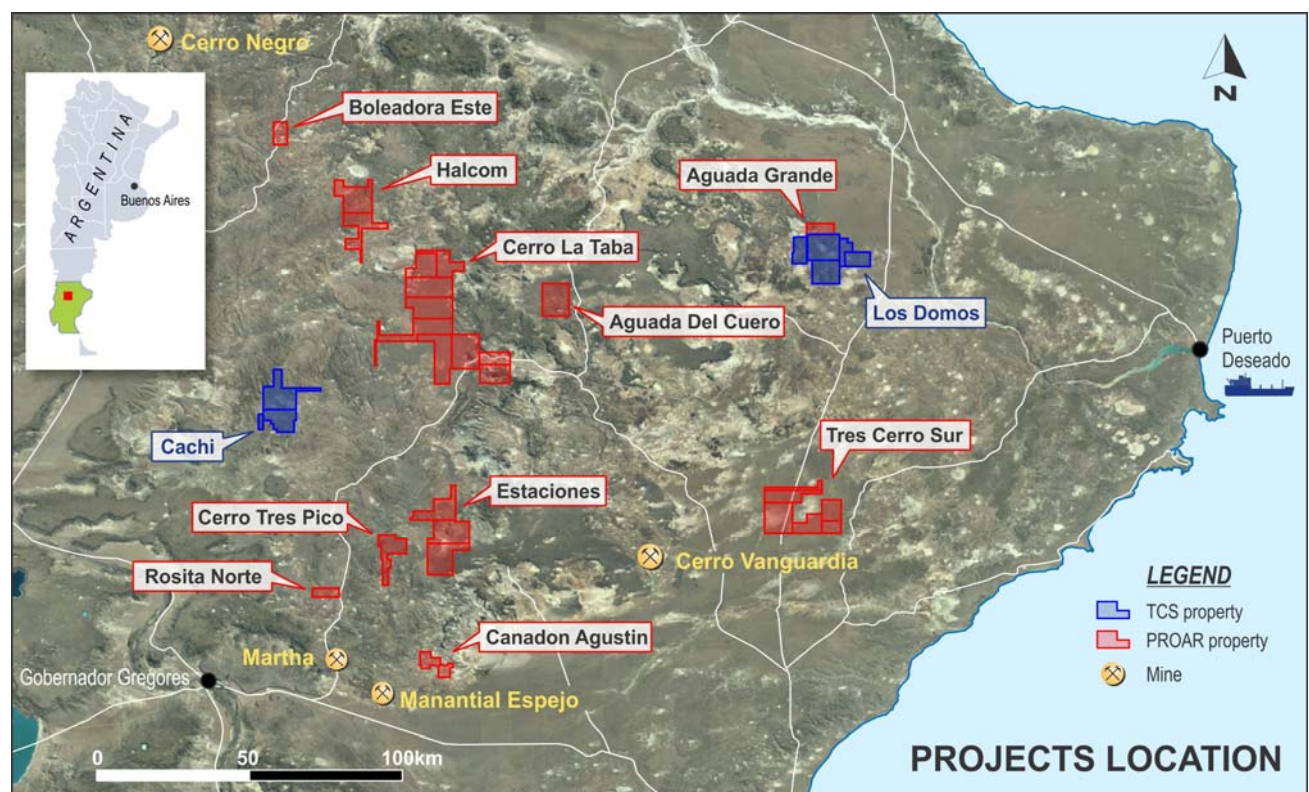


Figure 1 – Overview of Dark Horse properties in Santa Cruz

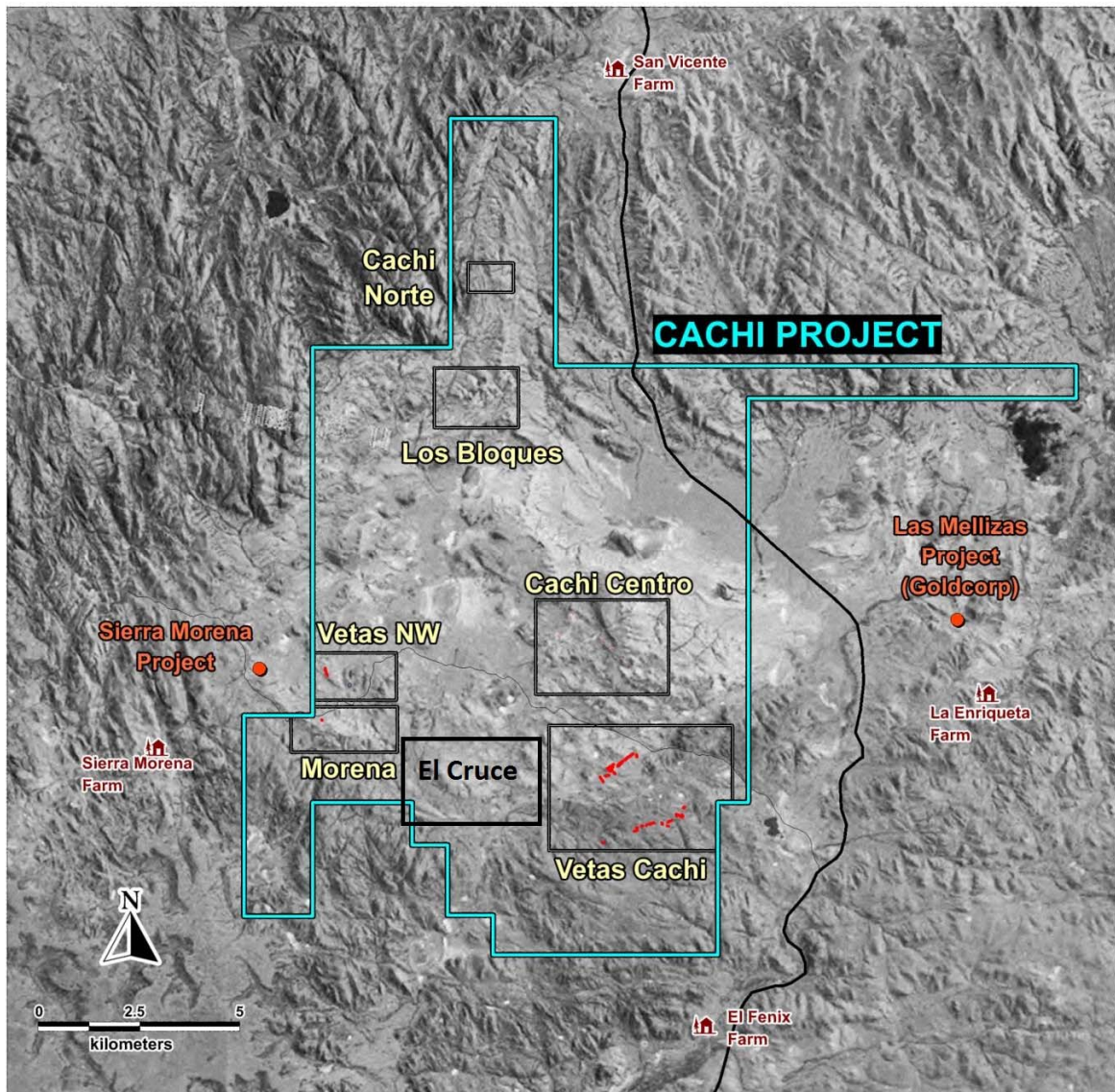


Figure 2 – Cachi lease and major target prospects including the new El Cruce prospect.



**Table A – Full Suite of Rock Chip Sample Results**

Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4201	Rock Chip	Cerro_La_Taba	2497450	4698929	787		0.01	0.2	95.	6.	2.	14.
4202	Rock Chip	Cerro_La_Taba	2497409	4698864	781		0.01	0.2	87.	33.	66.	21.
4203	Rock Chip	Cerro_La_Taba	2497463	4698618	782		0.02	0.2	49.	40.	2.	13.
4204	Rock Chip	La_Anita_Oeste	2593193	4653985	151		0.01	0.2	5.	5.	2.	18.
4205	Rock Chip	La_Anita_Oeste	2592606	4654171	151		0.01	0.2	2.	18.	2.	31.
4206	Rock Chip	La_Anita_Oeste	2591790	4654470	135		0.004	0.2	28.	12.	2.	9.
4207	Rock Chip	La_Anita_Oeste	2591785	4654492	136		0.01	0.2	85.	83.	2.	39.
4208	Rock Chip	La_Anita_Oeste	2591531	4654462	143		0.01	0.2	2.	9.	2.	29.
4209	Rock Chip	La_Anita_Oeste	2590695	4654004	126		0.02	0.2	11.	14.	2.	29.
4211	Rock Chip	La_Anita_Oeste	2590688	4653963	128		0.02	0.2	11.	12.	2.	8.
4212	Rock Chip	La_Anita_Este	2600526	4650855	126		0.01	0.2	9.	6.	2.	16.
4213	Rock Chip	La_Anita_Este	2600365	4650725	122		0.01	0.2	20.	17.	2.	21.
4214	Rock Chip	La_Anita_Este	2600390	4650661	129		0.004	0.2	2.	11.	2.	9.
4215	Rock Chip	La_Anita_Oeste	2591699	4654928	144		0.004	0.2	20.	14.	2.	15.
4216	Rock Chip	La_Anita_Oeste	2591559	4654923	143		0.02	0.2	2.	3.	2.	0.4
4217	Rock Chip	La_Anita_Oeste	2591736	4655402	151		0.02	0.2	2.	0.8	2.	0.4
4218	Rock Chip	Aguada_del_Cuero	2524234	4723324	522		0.004	0.2	6.	26.	2.	0.4
4219	Rock Chip	Aguada_del_Cuero	2522727	4723092	588		0.004	0.2	11.	8.	2.	49.
4220	Rock Chip	Aguada_del_Cuero	2522618	4720447	636		0.004	0.2	7.	10.	2.	47.
4221	Rock Chip	La_Linda	2457716	4738739	753		0.004	0.2	2.	10.	2.	10.
4222	Rock Chip	La_Linda	2457768	4738750	756		0.004	0.2	15.	12.	2.	9.
4223	Rock Chip	La_Linda	2457831	4738714	760		0.004	0.2	8.	8.	2.	22.
4224	Rock Chip	La_Linda	2457834	4738695	771		0.004	0.2	9.	10.	2.	21.
4225	Rock Chip	La_Linda	2457901	4738671	776		0.004	0.2	19.	8.	2.	18.
4226	Rock Chip	La_Linda	2457718	4738710	756		0.004	0.2	17.	7.	2.	7.

Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4227	Rock Chip	La_Linda	2457672	4738692	740		0.004	0.2	9.	6.	2.	8.
4228	Rock Chip	La_Linda	2457662	4738696	741		0.004	0.2	21.	8.	2.	15.
4229	Rock Chip	La_Linda	2452847	4742161	724		0.004	0.2	24.	23.	2.	40.
4230	Rock Chip	La_Linda	2453344	4742464	737		0.004	0.2	2.	14.	2.	37.
4231	Rock Chip	La_Linda	2453283	4742315	757		0.004	0.2	12.	19.	2.	36.
4232	Rock Chip	La_Linda	2453161	4742307	753		0.004	0.2	30.	31.	2.	49.
4233	Rock Chip	La_Linda	2453400	4742772	732		0.004	0.2	12.	18.	2.	39.
4234	Rock Chip	La_Linda	2454045	4742555	748		0.004	0.2	16.	17.	2.	40.
4235	Rock Chip	La_Linda	2454409	4742474	774		0.004	0.2	19.	17.	2.	42.
4236	Rock Chip	La_Linda	2454802	4742821	760		0.004	0.2	15.	13.	2.	43.
4237	Rock Chip	La_Linda	2455723	4742644	776		0.004	0.2	11.	13.	2.	38.
4238	Rock Chip	La_Linda	2455492	4742635	774		0.004	0.2	10.	16.	2.	53.
4239	Rock Chip	La_Linda	2455548	4742349	814		0.004	0.2	21.	17.	2.	51.
4241	Rock Chip	La_Linda	2456412	4742689	752		0.004	0.2	2.	14.	2.	23.
4242	Rock Chip	La_Linda	2456608	4742589	763		0.004	0.2	2.	12.	2.	14.
4243	Rock Chip	La_Linda	2457260	4742397	853		0.004	0.2	21.	19.	2.	39.
4244	Rock Chip	La_Linda	2457200	4742084	822		0.004	0.2	22.	12.	2.	34.
4245	Rock Chip	La_Linda	2457231	4742061	827		0.004	0.2	18.	13.	2.	30.
4246	Rock Chip	La_Linda	2457183	4742103	822		0.004	0.2	17.	12.	2.	29.
4247	Rock Chip	La_Linda	2457150	4742136	825		0.004	0.2	16.	13.	2.	32.
4248	Rock Chip	La_Linda	2457123	4742168	832		0.004	0.2	29.	18.	2.	35.
4249	Rock Chip	La_Linda	2457233	4742078	816		0.004	0.2	33.	19.	2.	46.
4251	Rock Chip	La_Linda	2456936	4742336	832		0.004	0.2	15.	14.	2.	34.
4252	Rock Chip	La_Linda	2456971	4742751	770		0.004	0.2	2.	13.	2.	31.
4253	Rock Chip	La_Linda	2454343	4744965	789		0.004	0.2	2.	0.8	2.	9.
4254	Rock Chip	La_Linda	2454318	4744996	783		0.004	0.2	21.	11.	2.	30.
4255	Rock Chip	La_Linda	2454320	4744998	788		0.004	0.2	24.	15.	2.	32.
4256	Rock Chip	La_Linda	2454322	4744998	789		0.004	0.2	26.	13.	2.	32.

Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4257	Rock Chip	La_Linda	2454324	4744999	788		0.004	0.2	18.	19.	2.	27.
4258	Rock Chip	La_Linda	2454327	4745005	787		0.004	0.8	25.	15.	2.	32.
4259	Rock Chip	La_Linda	2454618	4745138	843		0.004	0.2	16.	13.	2.	28.
4260	Rock Chip	La_Linda	2454713	4744655	823		0.004	0.2	38.	14.	2.	22.
4261	Rock Chip	La_Linda	2454750	4744641	838		0.004	0.2	15.	9.	2.	26.
4262	Rock Chip	La_Linda	2455153	4744505	832		0.004	0.2	6.	7.	2.	14.
4263	Rock Chip	La_Linda	2455713	4744573	843		0.004	0.2	2.	0.8	2.	3.
4264	Rock Chip	La_Linda	2455696	4744609	854		0.004	0.2	7.	8.	2.	15.
4265	Rock Chip	La_Linda	2455719	4744584	848		0.004	0.2	9.	7.	2.	13.
4266	Rock Chip	La_Linda	2455765	4744504	836		0.004	0.2	11.	8.	2.	21.
4267	Rock Chip	La_Linda	2455744	4744505	832		0.004	0.2	20.	15.	2.	23.
4268	Rock Chip	La_Linda	2457112	4744742	830		0.004	0.2	9.	16.	2.	25.
4269	Rock Chip	La_Linda	2457124	4744658	824		0.004	0.2	20.	12.	2.	26.
4270	Rock Chip	La_Linda	2457540	4744565	793		0.004	0.2	2.	6.	2.	50.
4271	Rock Chip	La_Linda	2457265	4746435	821		0.004	0.2	38.	30.	2.	47.
4272	Rock Chip	La_Linda	2457288	4746424	837		0.004	0.2	20.	53.	2.	68.
4273	Rock Chip	La_Linda	2459253	4749252	703		0.004	0.2	16.	22.	2.	35.
4274	Rock Chip	La_Linda	2459315	4749222	710		0.004	0.2	15.	25.	2.	34.
4275	Rock Chip	La_Linda	2459546	4749159	721		0.004	0.2	8.	13.	2.	27.
4276	Rock Chip	La_Linda	2459568	4749044	723		0.004	0.2	10.	17.	2.	36.
4277	Rock Chip	La_Linda	2459645	4749179	730		0.004	0.2	2.	18.	2.	36.
4278	Rock Chip	La_Linda	2459838	4749052	747		0.004	0.2	29.	3.	2.	0.4
4279	Rock Chip	La_Linda	2459937	4749182	794		0.004	0.2	34.	22.	2.	40.
4281	Rock Chip	La_Linda	2459982	4749226	796		0.004	0.2	10.	10.	2.	17.
4282	Rock Chip	La_Linda	2459954	4749246	790		0.004	0.2	55.	9.	2.	18.
4283	Rock Chip	La_Linda	2460043	4749275	813		0.004	0.2	10.	22.	2.	37.
4284	Rock Chip	La_Linda	2460635	4749581	778		0.004	0.2	184.	7.	2.	3.
4285	Rock Chip	La_Linda	2461129	4750235	799		0.004	0.2	56.	4.	2.	20.



Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4286	Rock Chip	La_Linda	2461049	4750138	801		0.004	0.2	13.	0.8	2.	12.
4287	Rock Chip	La_Linda	2461019	4750137	804		0.004	0.2	72.	0.8	2.	7.
4288	Rock Chip	La_Linda	2460972	4750112	802		0.004	0.2	21.	0.8	2.	7.
4289	Rock Chip	La_Linda	2460925	4750070	803		0.004	0.2	151.	0.8	2.	19.
4291	Rock Chip	La_Linda	2460923	4750001	799		0.004	0.2	30.	2.	2.	0.4
4292	Rock Chip	La_Linda	2461173	4749666	782		0.004	0.2	10.	0.8	2.	3.
4293	Rock Chip	La_Linda	2461066	4749572	788		0.004	0.2	10.	6.	2.	21.
4294	Rock Chip	La_Linda	2461070	4749569	788		0.004	0.2	6.	6.	2.	10.
4295	Rock Chip	La_Linda	2461433	4749760	795		0.004	0.2	8.	5.	2.	18.
4296	Rock Chip	La_Linda	2461422	4749746	791		0.004	0.2	2.	5.	2.	17.
4297	Rock Chip	La_Linda	2461386	4749741	794		0.004	0.2	2.	4.	2.	8.
4298	Rock Chip	La_Linda	2461352	4749709	785		0.004	0.2	2.	4.	2.	5.
4299	Rock Chip	La_Linda	2461276	4749662	778		0.004	0.2	14.	6.	2.	12.
4300	Rock Chip	La_Linda	2462643	4750289	782		0.004	0.2	14.	7.	2.	11.
4301	Rock Chip	La_Linda	2462649	4750534	783		0.004	0.2	12.	13.	2.	6.
4302	Rock Chip	La_Elegida	2433411	4777814	771		0.02	0.2	2.	21.	2.	24.
4303	Rock Chip	La_Elegida	2433430	4777651	767		0.004	0.2	2.	24.	2.	31.
4304	Rock Chip	La_Elegida	2433078	4777712	827		0.004	0.2	9.	29.	2.	29.
4305	Rock Chip	La_Elegida	2432837	4777928	778		0.004	0.2	6.	19.	2.	37.
4306	Rock Chip	La_Elegida	2430046	4776713	779		0.004	0.2	6.	16.	2.	25.
4307	Rock Chip	La_Elegida	2454127	4754814	727		0.004	0.2	2.	20.	2.	102.
4308	Rock Chip	La_Elegida	2451997	4760621	695		0.004	0.2	21.	7.	2.	0.4
4309	Rock Chip	La_Linda	2462736	4748788	766		0.004	0.2	12.	17.	2.	23.
4310	Rock Chip	La_Linda	2462440	4749575	798		0.004	0.2	48.	9.	2.	21.
4311	Rock Chip	La_Linda	2462246	4750014	829		0.004	0.2	63.	38.	2.	48.
4312	Rock Chip	La_Linda	2462644	4750217	781		0.004	0.2	2.	4.	2.	16.
4313	Rock Chip	La_Linda	2462667	4750189	779		0.004	0.2	8.	0.8	2.	8.
4314	Rock Chip	La_Linda	2462679	4750170	778		0.004	0.2	8.	5.	2.	15.

Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4315	Rock Chip	La_Linda	2462763	4750100	771		0.004	0.2	24.	6.	2.	13.
4316	Rock Chip	La_Linda	2462751	4750092	774		0.004	0.2	10.	5.	2.	10.
4317	Rock Chip	Aguada_Grande	2605570	4746237	175		0.004	0.2	7.	18.	2.	47.
4318	Rock Chip	Aguada_Grande	2605431	4746404	165		0.004	0.2	2.	14.	2.	34.
4319	Rock Chip	Aguada_Grande	2605415	4746438	168		0.004	0.2	2.	18.	2.	28.
4321	Rock Chip	Aguada_Grande	2605387	4746480	178		0.004	0.2	11.	9.	2.	43.
4322	Rock Chip	Aguada_Grande	2605207	4746447	166		0.004	0.2	2.	15.	2.	25.
4323	Rock Chip	Aguada_Grande	2605175	4746461	162		0.004	0.2	2.	14.	2.	14.
4324	Rock Chip	Aguada_Grande	2605068	4746411	156		0.004	0.2	6.	10.	2.	7.
4325	Rock Chip	Aguada_Grande	2604893	4746519	143		0.004	0.2	8.	11.	2.	25.
4326	Rock Chip	La_Elegida	2455398	4761233	693		0.004	0.2	78.	3.	2.	0.4
4327	Rock Chip	La_Elegida	2455445	4761253	694		0.004	1.1	22.	3.	2.	0.4
4328	Rock Chip	La_Elegida	2455579	4761541	687		0.01	0.2	41.	4.	2.	0.4
4329	Rock Chip	La_Elegida	2456009	4762297	703		0.004	1.1	25.	50.	2.	0.4
4331	Rock Chip	La_Elegida	2455522	4762373	738		0.01	0.2	16.	16.	2.	20.
4332	Rock Chip	La_Elegida	2452201	4761017	699		0.004	0.2	14.	31.	2.	0.4
4745	Rock Chip	Este_Cachi_Central	2429252	4689128	674		0.004	0.2	10.	17.	2.	31.
4746	Rock Chip	Cachi_Los_Bloques	2430035	4695337	780		0.004	0.2	19.	18.	2.	15.
4747	Rock Chip	Cachi_Norte	2429212	4699196	812		0.004	0.2	36.	6.	2.	2.
4748	Rock Chip	Cachi_Norte	2429257	4699031	819		0.02	0.2	169.	13.	2.	9.
4749	Rock Chip	Cachi_Norte	2429289	4698975	821		0.004	0.2	116.	12.	2.	13.
4750	Rock Chip	Cachi_Norte	2429306	4698955	822		0.004	0.2	75.	0.8	2.	0.4
4751	Rock Chip	Cachi_Norte	2429397	4698665	816		0.004	0.2	117.	28.	2.	7.
4752	Rock Chip	Cachi_Norte	2429293	4698373	805		0.004	0.6	66.	3.	2.	2.
4753	Rock Chip	Cachi_Norte	2429351	4698418	809		0.004	0.2	7.	7.	2.	22.
4754	Rock Chip	Cachi_Norte	2429334	4698524	813		0.004	0.2	15.	11.	2.	21.
4755	Rock Chip	Cachi_Norte	2429401	4698555	817		0.004	0.2	40.	8.	2.	5.
4756	Rock Chip	Cachi_Norte	2429416	4698516	816		0.004	0.2	37.	19.	2.	3.

Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4758	Rock Chip	Cachi_Norte	2429053	4697443	773		0.004	0.2	27.	15.	2.	23.
4759	Rock Chip	Vetas_Cachi	2432398	4686894	764		2.85	2.	1072.	134.	2.	10.
4760	Rock Chip	Vetas_Cachi	2432390	4686877	765		0.2	1.4	2337.	281.	2.	22.
4761	Rock Chip	Vetas_Cachi	2432423	4686912	761		3.8	9.3	167.	30.	2.	4.
4762	Rock Chip	Vetas_Cachi	2432625	4687093	750		0.09	0.2	588.	22.	2.	40.
4763	Rock Chip	Vetas_Cachi	2432034	4686670	740		0.07	3.8	164.	13.	2.	35.
4764	Rock Chip	Vetas_Cachi	2432022	4686648	742		0.5	16.5	1122.	80.	2.	40.
4765	Rock Chip	Vetas_Cachi	2431973	4686607	750		0.2	11.3	895.	119.	97.	34.
4766	Rock Chip	Vetas_Cachi	2431921	4686597	753		0.08	2.4	232.	13.	2.	4.
4767	Rock Chip	Vetas_Cachi	2431875	4686546	752		0.05	0.2	576.	11.	2.	3.
4768	Rock Chip	Vetas_Cachi	2431925	4686617	749		0.06	1.5	383.	42.	2.	13.
4769	Rock Chip	Vetas_Cachi	2431945	4686637	746		0.13	1.9	749.	31.	2.	10.
4770	Rock Chip	Vetas_Cachi	2431971	4686684	735		0.02	0.2	244.	21.	2.	12.
4771	Rock Chip	Vetas_Cachi	2431825	4686575	758		0.16	2.3	229.	58.	2.	8.
4772	Rock Chip	Vetas_Cachi	2431808	4686555	758		0.16	4.2	241.	172.	47.	12.
4773	Rock Chip	Vetas_Cachi	2431550	4686585	728		0.33	0.6	422.	7.	2.	12.
4774	Rock Chip	Vetas_Cachi	2431305	4686608	737		0.02	6.	85.	16.	2.	5.
4775	Rock Chip	Vetas_Cachi	2431280	4686627	740		0.04	1.9	42.	10.	2.	3.
4778	Rock Chip	El_Cruce	2430758	4685889	714		0.004	0.2	24.	6.	2.	7.
4779	Rock Chip	El_Cruce	2430826	4685886	715		0.02	0.2	97.	8.	2.	2.
4780	Rock Chip	El_Cruce	2430835	4685891	714		0.05	0.9	184.	9.	2.	4.
4781	Rock Chip	El_Cruce	2430857	4685890	714		0.004	0.2	179.	15.	2.	4.
4782	Rock Chip	El_Cruce	2430845	4685880	713		0.02	1.4	399.	11.	2.	12.
4783	Rock Chip	El_Cruce	2430543	4686075	730		0.02	0.2	57.	21.	2.	1.
4784	Rock Chip	El_Cruce	2430492	4686089	726		0.03	3.9	106.	10.	2.	4.
4785	Rock Chip	El_Cruce	2430375	4686182	709		0.02	0.2	46.	10.	2.	2.
4786	Rock Chip	El_Cruce	2430380	4686108	710		0.004	2.2	49.	18.	2.	0.4
4787	Rock Chip	El_Cruce	2430364	4686093	711		0.01	1.1	16.	13.	2.	2.



Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4788	Rock Chip	El_Cruce	2430109	4686003	692		0.004	0.2	10.	14.	2.	2.
4789	Rock Chip	El_Cruce	2430085	4685965	688		0.004	0.2	11.	20.	2.	2.
4790	Rock Chip	El_Cruce	2430143	4685998	693		0.004	0.2	9.	11.	2.	2.
4791	Rock Chip	El_Cruce	2430296	4685966	694		0.004	0.6	45.	20.	2.	10.
4792	Rock Chip	El_Cruce	2430299	4685936	689		0.004	0.2	22.	9.	2.	5.
4793	Rock Chip	El_Cruce	2430273	4685933	690		0.004	0.2	15.	10.	2.	4.
4794	Rock Chip	El_Cruce	2430195	4685937	688		0.02	0.2	84.	17.	2.	10.
4795	Rock Chip	El_Cruce	2429993	4685908	686		0.004	0.2	51.	32.	2.	6.
4796	Rock Chip	El_Cruce	2430010	4685913	684		0.02	2.2	43.	16.	2.	6.
4798	Rock Chip	El_Cruce	2429627	4685871	681		0.02	0.2	27.	10.	2.	5.
4799	Rock Chip	El_Cruce	2429695	4685910	686		0.004	0.6	13.	3.	2.	1.
4800	Rock Chip	El_Cruce	2429794	4685933	687		0.004	0.2	21.	4.	2.	5.
4801	Rock Chip	El_Cruce	2428788	4686545	769		0.004	0.2	181.	60.	2.	14.
4802	Rock Chip	El_Cruce	2428786	4686550	763		0.02	0.2	424.	45.	2.	13.
4803	Rock Chip	El_Cruce	2428692	4686481	757		0.004	0.2	136.	17.	2.	44.
4804	Rock Chip	El_Cruce	2427956	4686490	734		0.09	2.1	481.	21.	2.	5.
4805	Rock Chip	El_Cruce	2428263	4686596	806		0.02	0.2	19.	15.	2.	53.
4806	Rock Chip	El_Cruce	2428620	4687355	719		0.004	0.2	148.	52.	2.	10.
4807	Rock Chip	El_Cruce	2425710	4687324	838		0.004	0.2	40.	21.	2.	21.
4808	Rock Chip	El_Cruce	2426149	4687690	821		0.03	0.2	83.	49.	2.	14.
4809	Rock Chip	El_Cruce	2426141	4687722	811		0.04	0.9	6.	51.	2.	4.
4810	Rock Chip	El_Cruce	2426474	4686890	718		0.03	2.6	304.	34.	2.	13.
4811	Rock Chip	El_Cruce	2426539	4686751	716		0.03	0.2	512.	150.	2.	13.
4812	Rock Chip	El_Cruce	2430633	4686302	730		0.27	8.	79.	108.	2.	7.
4813	Rock Chip	El_Cruce	2430657	4686303	731		0.13	3.7	70.	140.	2.	9.
4814	Rock Chip	El_Cruce	2430718	4686304	739		0.04	1.8	24.	43.	2.	6.
4816	Rock Chip	El_Cruce	2431042	4686338	752		0.01	0.2	526.	16.	2.	28.
4817	Rock Chip	El_Cruce	2431047	4686277	748		0.22	0.6	57.	18.	2.	4.

Sample ID	Type	Prospect	East	North	RL	Length	Au_ppm	Ag_ppm	As_ppm	Pb_ppm	Sb_ppm	Zn_ppm
4818	Rock Chip	El_Cruce	2430133	4686565	725		0.02	0.2	505.	427.	2.	15.
4819	Rock Chip	El_Cruce	2430179	4686585	728		0.03	0.2	1430.	972.	2.	35.
4820	Rock Chip	El_Cruce	2430973	4686491	772		0.11	3.	333.	102.	79.	10.
4821	Rock Chip	Vetas_NW	2425360	4689290	739		0.17	0.9	499.	23.	2.	18.
4822	Rock Chip	Vetas_NW	2425286	4689381	718		0.28	46.	674.	1011.	56.	81.
4823	Rock Chip	Vetas_NW	2425318	4689269	729		0.58	67.4	2249.	1274.	130.	133.
4824	Rock Chip	Morena	2426210	4687995	747		0.04	0.2	132.	11.	2.	11.

Note 1: reconnaissance sampling where Length is not specified

Note 2: a negative assay is Below Level of Detection

## JORC Code, 2012 Edition – Table 1 –

## RockChip Sampling

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Stratified random chip sample across outcrop trend, collecting 3-4Kg of material</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource</li> </ul>	<ul style="list-style-type: none"> <li>Field description of outcrop with reference to lithology, alteration,</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	mineralization and structure
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples are analyzed by Alex Stewart Laboratories</li> <li>• Sample preparation of fine crush, riffle split and ring pulverizing of 1kg to 85% &lt; 75µm.</li> <li>• Pulps are analyzed using method codes Au4-30 &amp; ICP-MA-39; a 30g fire assay with an AA finish and a 39 element determination using an aqua-regia digestion with ICP-AES determination.</li> <li>• OREAS® Standards are inserted in the sample sequence at the rate of 1 in 40.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Laboratory CSV files are merged with location data files using unique sample numbers as the key.</li> <li>• No adjustments made to assay data</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are located using handheld GPS receivers.</li> <li>UTM projection Gaus_Kruger_(CIZ2)</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Stage 1 Exploration Sampling only</li> <li>No compositing has been applied.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples are collected transverse to the strike of the outcrop.</li> <li>No bias is believed to be introduced by the sampling method.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples are hand delivered to the laboratory</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Internal review of methodology is undertaken regularly by senior company personnel.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Santa Cruz Project consists of 176,468Ha under an Earn-In agreement with Proar and 43,789Ha under an Earn-In agreement with Tres Cerros Exploraciones.</li> <li>There are no known impediments to exploration in the current area of operations.</li> </ul>

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Greenfields exploration</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration for epithermal gold-silver deposits in the prospective Chon Aike Formation which hosts the Cerro Vanguardia, Mine Marta and Josefina Deposits</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
Relationship between mineralisation	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>on widths and intercept lengths</i>	<p><i>known, its nature should be reported.</i></p> <ul style="list-style-type: none"> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sample Location map included in discussion</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Full sample listing included.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable – stage 1 exploration</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Follow-up mapping and sampling in progress</li> </ul>