



**QUARTERLY OPERATIONS REPORT  
THREE MONTHS ENDING 31 MARCH 2011**

**HIGHLIGHTS**

- **New shallow potash discovery along strike from the Colluli deposit verifies the project to be a “Tier 1” global asset;**
- **Sylvinite mineralisation has been intersected in three of four diamond holes drilled at the new prospect (Col-023, 025, 026) and the mineralisation appears similar to high grade intervals that have been intersected at the Colluli deposit. Grades up to 44% KCl have been intersected within the JORC/43-101 Compliant Colluli Mineral Resource Estimate;**
- **Chemical assays, drilling and scoping study activity has continued to provide encouragement that an open cut mine, processing facility and port operation can be built to support a globally significant potash operation for decades;**
- **Carnallite mineralisation at the project contains a significant percentage of kieserite ( $MgSO_4 \cdot H_2O$ ) mineralisation. Kieserite is a sulphate mineral that is used for the large scale production of SOP ( $K_2SO_4$ ). SOP is a premium priced potash typically fetching +10% of MOP prices;**
- **Engineering scoping and feasibility study activities in progress include;**
  - **Determination of initial pit design parameters;**
  - **Sampling, planning and determination of metallurgical processing route test work and water balance;**
  - **Potash transport route, port facility location study;**
  - **Environmental and social impact study planning;**
  - **Design and planning of a hydrogeological ground and surface water study;**
  - **Marketing study for MOP and SOP production/sales.**
- **Ramp up in drilling activity at the Duketon Nickel Project. Currently two diamond rigs are completing approximately 20 holes at the Rosie Ni-Cu-PGE Prospect. A third aircore rig is completing a ~7,000m program. New previously unreleased drilling highlights include Hole TBDD107 - 3.73m @ 5.12% Ni, 0.50% Cu and 4.00g/t 6PGE's. A JORC-Code Compliant Inferred Mineral Resource Estimate is due at the end of the June quarter;**
- **A 4,127 line km airborne magnetic, radiometric and digital terrain survey was completed at the Duketon Gold Project;**
- **\$2.60 million raised from the conversion of 10,340,000 options;**
- **South Boulder remains highly leveraged to further exploration and development successes and is well funded with ~\$17m in NTA.**

## POTASH PROJECTS

### The Colluli Potash Project

During the period exploration work was focused on drilling and key scoping study activities. An expanded ~5,000m diamond drilling program is in progress and has continued to delineate new shallow potash mineralisation both from within and outside the current JORC/43-101 compliant Mineral Resource Estimate area (Table 1).

Resource Category	Tonnes (Mt)	Grade (% KCl)	Mt (Potash)
<b>Total Inferred</b>	<b>340.86</b>	<b>18.58</b>	<b>63.34</b>
<b>Total Indicated</b>	<b>173.37</b>	<b>18.57</b>	<b>32.20</b>
<b>Total Measured</b>	<b>33.39</b>	<b>18.56</b>	<b>6.20</b>
<b>Total Resources</b>	<b>547.62</b>	<b>18.58</b>	<b>101.74</b>

**Table 1 - Total JORC/43-101 compliant resource by resource category using a variable cut-off grade.**

Towards the end of March a new highly significant potash discovery was made, located ~ 6-12km northwest of the current resource (Figure 1). The new prospect is yet to be named and is referred to as Area B. Shallow potash has been intersected in all diamond holes drilled at Area B to date. The mineralisation occurs over ~5km<sup>2</sup> and is open in all directions. With further drilling, the area of mineralisation is expected to grow significantly. Once chemical assays for the initial drilling are returned, it is expected an updated JORC Exploration Target will be estimated for this prospect.

Diamond drill holes Col-023, 024, 025 and 026 (Table 2) intersected the following:

#### Hole Col-23

- 2.20m of sylvinitite from 33.38m and;
- 3.65m of carnallitite from 37.40m and;
- 6.80m of kainitite from 41.05m.

#### Hole Col-024

- 1.10m of carnallitite from 30.41m and;
- 9.43m of kainitite from 31.51m.

#### Hole Col-025

- 5.51m of sylvinitite from 35.70m and;
- 0.93m of carnallitite from 41.21m and;
- 9.17m of kainitite from 41.93m.

#### Hole Col-026

- 3.25m of sylvinitite from 82.65m and;
- 5.04m of carnallitite from 85.90m and;
- 7.04m of kainitite from 90.94m.

Hole No.	East (m)	North (m)	RL (m)	Azi. (degr.)	Dip (degr.)	E.O.H.	Comment
Col-023	635833	1596782	-122	000	-90	52.60	Assays awaited, approximate thickness 12.65m
Col-024	635677	1597779	-121	000	-90	45.00	Assays awaited, approximate thickness 10.53m
Col-025	636562	1596890	-119	000	-90	54.00	Assays awaited, approximate thickness 15.61m
Col-026	636356	1594877	-122	000	-90	102.00	Assays awaited, approximate thickness 15.33m

**Table 2 - Area B Prospect table of recent drill hole collar details and results.**

South Boulder is particularly encouraged by the significance of the new discovery due to a number of key aspects. The sylvinitite mineralisation is shallow, consistent and of a similar appearance to that of some of the highest grades returned from the Colluli deposit to date. In addition the prospect is located in the same vicinity of the current resource which bodes well for future efficient mining operations.

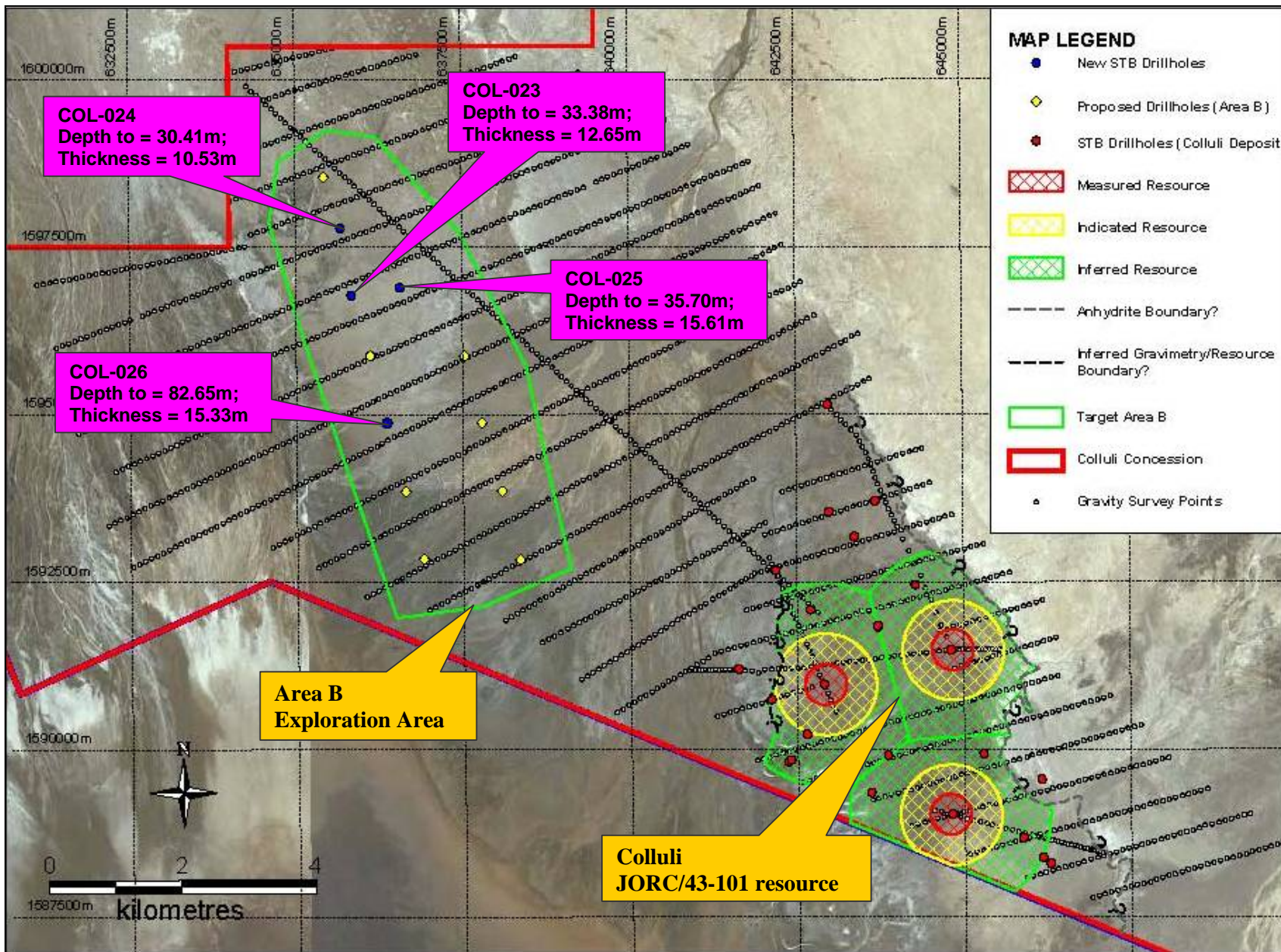


Figure 1 - Colluli Project plan showing drilling, resource categories and proposed gravimetric survey lines.

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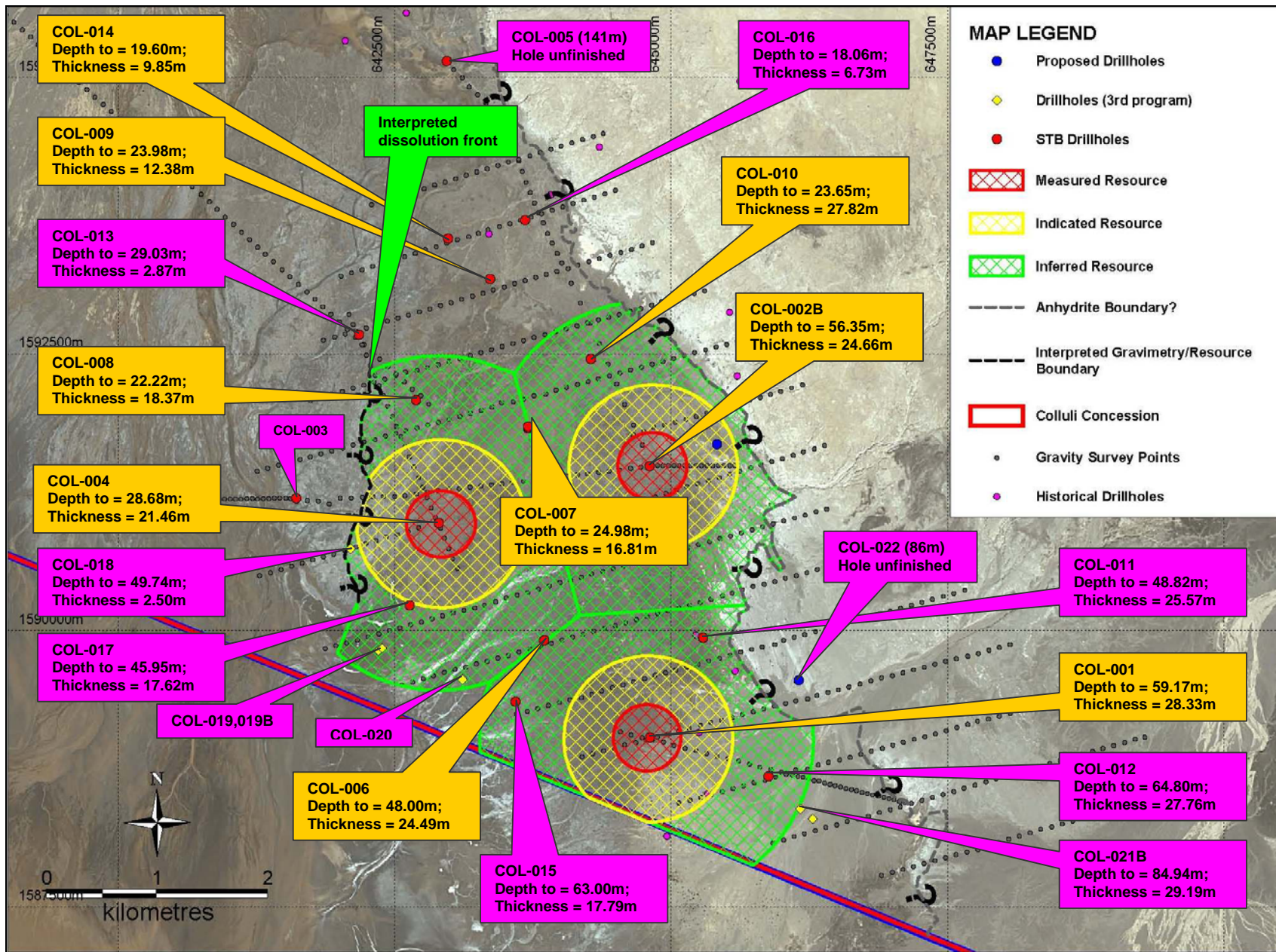


Figure 2 - Colluli Project plan showing drilling and the current JORC/43-101 Mineral Resource Estimate area.

The presence of the mineralisation at Area B has proved the effectiveness of the recently completed ground gravimetric survey as a targeting tool for shallow mineralisation on the project (Figure 1). It is expected that a number of other shallow targets identified from the survey have the potential to host significant potash mineralisation.

Also during the period several chemical assay results from diamond holes drilled within and adjacent to the Colluli Mineral Resource Estimate were returned. The results were very positive and confirm the preliminary geological logging and mineral identification conducted in the field. Chemical assays received during the period are tabled in Table 3 and the locations are shown on Figure 2.

### **Resource Potential/Discussion**

New chemical assays received continue to confirm Colluli as the world's shallowest buried evaporite deposit. As predicted, the geological continuity and predictability of the Colluli deposit, as is typical of numerous other potash deposits across the globe, has been proven through further drilling to be substantially strong.

The JORC Compliant Mineral Resource Estimate resource categories outlined in the ASX release dated 19<sup>th</sup> January 2011 has been proven to be largely correct based on the available drillhole data at the time of compilation. This fact bodes well for future resource estimates and gives management great confidence that resource compilation methods are appropriate for the deposit.

The strong continuity and predictability has facilitated the Inferred resource category to extend up to 1,500m from a potash bearing drill hole (Figure 2). It is expected that new assays received and outstanding, will provide a better estimate of tonnage and grades reported, and allow most of the current drilling area to report to the Measured and Indicated resource categories. Further to this, downhole logging of all holes will be completed in the coming period which will allow geophysical grade estimation comparisons and additional data for an updated Mineral Resource Estimate.

Costly surface and downhole seismic surveys have been put on hold for the time being for targeting shallow potash as the much cheaper ground gravimetric survey method has proven successful in assisting to delineate potash and structure. The use of seismic surveys will be revisited if sufficiently deeper potash layers are intersected in drilling.

Upon receipt of new assay information, there is now a better understanding of the extent of some of the sulphate minerals located within and outside the resource area. Kieserite ( $MgSO_4 \cdot H_2O$ ) is a mineral that can be used for large scale production of SOP ( $K_2SO_4$ ). It has been identified with grades up to 40.56% and is predominantly associated with the Lower Carnallite Member. As indicated in the December Quarterly Report, for the JORC Compliant Mineral Resource Estimate a mineral sample from the Lower Carnallite Member was included in the resource when the carnallite content summed with kieserite content is above 60%.

Kieserite mineralisation at the Colluli Project is thought to be of potential strategic importance due to its extents and the potentially cheap mining costs available by utilising open pit mining methods. There are two main sources of SOP production;

- Natural sulphate minerals mined from a buried evaporite deposit (or dissolved in natural brines) or;
- The conversion of MOP into SOP utilizing the Mannheim Process.

The conversion of Kieserite into SOP is a low energy process and can only be achieved at significant production rates at "sulphate-type" potash deposits because there is sufficient kieserite concentrations. In contrast the conversion of MOP into SOP using the Mannheim process is a high energy process. The significance of the kieserite minerals with the Colluli Project will be investigated further as feasibility studies are completed.

### **Exploration - Development Program**

The completion of ~ 5,000m of diamond drilling is ongoing (~2,000m completed to date) at the Colluli deposit, the Area B prospect and new targets. The program is expected to add substantially to the current resource inventory and will provide many options for mining plans. The program will also be combined with an initial hydrogeological water monitoring and assessment drill program which is planned to involve up to 20 shallow peisometer holes. This data will help form the basis of the project ground and surface water model.

Drilling is occurring concurrently with engineering scoping and feasibility activities. Activities commenced or completed include:

- Scoping study team and board site visit
- Determination of initial pit design parameters;
- Sampling, planning and determination of metallurgical processing route test work and water balance;
- Potash transport route, port facility location study;
- Environmental and social impact study planning;
- Archaeological survey planning;
- Design and planning of a hydrogeological ground and surface water study;
- Marketing study for MOP and SOP production/sales.

An additional rig capable of drilling larger diameter diamond cores is due to commence metallurgical and geotechnical sampling in late May once all necessary approvals have been granted.

Outstanding assays are expected to be returned from the laboratory through April/May and these combined with additional geophysical and drilling information will be utilised to compile an updated Mineral Resource Estimate. This updated estimate will be used as the basis for a detailed engineering scoping study into various production scenarios at the entire Colluli project. This will evaluate primarily, open pit mining and conventional potash processing to produce 1.0 – 10.0Mt p.a of potash for export and domestic supply.

In February/March as part of the engineering scoping study ramp up, the team and South Boulder Board made site investigations and a project needs analysis in consultation with the government of Eritrea. Key tasks were identified and implemented into the project schedule. Further to this the installation of a weather station was delayed and is now scheduled to be completed in May. It is planned to have the engineering scoping study completed by mid 2011.

Hole No.	East (m)	North (m)	RL (m)	Azi. (degr.)	Dip (degr.)	E.O.H.	From	To	Interval (m)	KCl (%)	Comment					
Col-006	643853	1589912	-119	000	-90	91.60	48.00	48.77	0.77	23.40	Sylvinitite					
							51.12	54.56	3.44	34.31	Sylvinitite					
											INCLUDES	51.59	54.56	2.97	35.65	Sylvinitite
												54.56	55.60	1.04	20.19	Upper carnallitite
												70.60	77.76	7.16	11.53	Lower carnallitite
						77.76	87.49	9.73	18.90	Kainitite						
Col-007	643708	1591828	-117	000	-90	60.10	24.98	25.37	0.39	19.35	Sylvinitite					
							38.29	45.39	7.10	13.65	Lower carnallitite					
							45.39	54.71	9.32	18.43	Kainitite					
Col-008	642696	1592083	-120	000	-90	52.60	22.22	24.74	2.52	38.79	Sylvinitite					
															Assays from carnallitite and kainitite intervals for remainder of hole yet to be received	
Col-009	643367	1593178	-113	000	-90	40.60	23.98	24.63	0.65	42.00	Sylvinitite					
							24.82	27.72	2.90	15.60	Lower carnallitite					
							27.72	36.55	8.83	16.97	Kainitite					
Col-010	644278	1592455	-118	000	-90	60.60	23.65	24.98	1.33	37.35	Sylvinitite					
							28.11	39.60	11.49	14.66	Lower carnallitite					
							39.60	54.60	15.00	15.55	Kainitite					
Col-011	645288	1589934	-119	000	-90	93.10					Assays awaited, approximate thickness 25.57m					
Col-012	645881	1588680	-112	000	-90	106.60					Assays awaited, approximate thickness 27.76m					
Col-013	642179	1592673	-118	000	-90	37.60					Assays awaited, approximate thickness 2.87m					
Col-014	642986	1593545	-117	000	-90	34.60	19.60	29.45	9.85	16.17	Kainitite					
Col-015	643596	1589355	-115	000	-90	94.60					Assays awaited, approximate thickness 17.79m					
Col-016	643683	1593710	-115	000	-90	28.60					Assays awaited, approximate thickness 6.73m					
Col-017	642638	1590227	-118	000	-90	72.10					Assays awaited, approximate thickness 17.62m					
Col-018	642104	1590740	-116	000	-90	55.60					Assays awaited, approximate thickness 2.50m					
Col-019	642356	1589817	-125	000	-90	61.00	-	-	-	-	No samples taken					
Col-019B	642391	1589841	-125	000	-90	80.00	-	-	-	-	No samples taken					
Col-020	643114	1589559	-102	000	-90	147.00	-	-	-	-	No samples taken					
Col-021A	646281	1588298	-80	000	-90	51.00	-	-	-	-	Collapsed hole, no samples taken					
Col-021B	646170	1588388	-82	000	-90	117.10					Assays awaited, approximate thickness 29.19m					
Col-22	646155	1589549	-117	000	-90	85.60	-	-	-	-	No samples taken, hole to be deepened					

Table 3 - Colluli Project table of recent drill hole collar details and results.

## DUKETON PROJECT

The Duketon Project comprises ~1,500km<sup>2</sup> of the Achaean Duketon Greenstone Belt and is located ~80kms to 120kms north of Laverton in Western Australia. South Boulder owns 100% of the gold and base metal rights and Independence Group NL (Independence; ASX: IGO) is earning 70% of the nickel rights to selected tenure held by South Boulder as part of the Duketon Nickel Joint Venture (Figure 3).

## DUKETON NICKEL JOINT VENTURE

In April 2004 South Boulder signed a farm-out Joint Venture Agreement with Independence. Under the terms of the agreement Independence will farm-in to earn 70% of the nickel metal rights on tenements held by South Boulder within the Duketon Project by delivery of a Bankable Feasibility Study within 5 years from the grant of the relevant tenement.

The Duketon Nickel Joint Venture (DNJV) covers ultramafic rich stratigraphy in the Duketon Greenstone Belt which are considered highly prospective for Ni-Cu-PGE (Platinum group element) disseminated and massive sulphide mineralisation. The tenure held within the DNJV is shown in Figure 3.

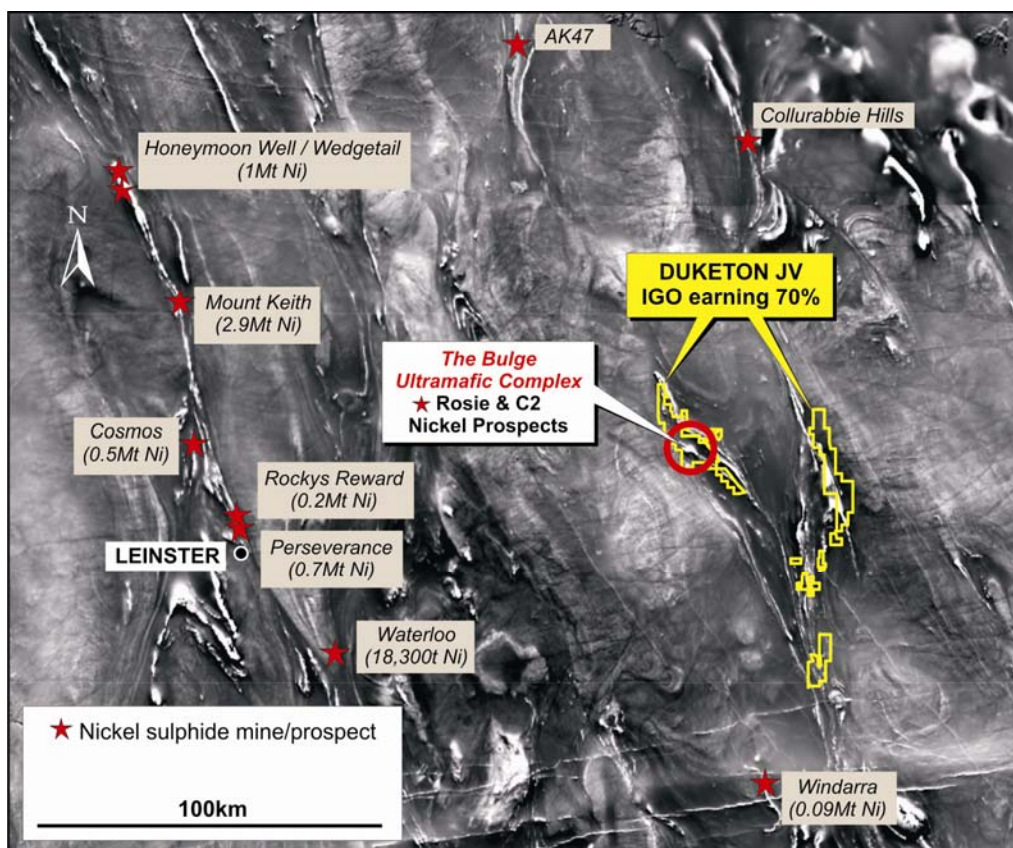


Figure 3 – Duketon Nickel Project over an aeromagnetic image showing proximity to major nickel deposits in the region.

Two key prospects have been defined to date: Rosie and C2. Other than these prospects much of the highly prospective ultramafic units have yet to be effectively tested for nickel-copper-PGE sulphide mineralisation at depth.

### The Bulge Rosie and C2 Prospects

During the period exploration drilling and scoping study work continued as planned to evaluate the potential for an open pit mine at the C2 and an underground mine at the Rosie Ni-Cu-PGE Prospects. The drilling has continued to intersect highly encouraging massive sulphides as well as significant zones of brecciated, stringer and disseminated sulphides.



Subsequent to the end of the period and as detailed in an ASX release dated 8<sup>th</sup> April 2011, two diamond rigs and one air-core rig are completing drill programs at the Duketon Nickel Project. The diamond drilling is part of a major resource definition program designed to test the continuity of mineralisation on a nominal 80m x 80m and 80m x 40m pattern. The targets are typically extensions to known mineralisation such as that identified in Figure 4 below. The drill plan is currently to complete ~20 holes and this is expected to take ~3 months to complete.



**Figure 4 – Duketon Nickel JV Rosie Prospect - TBDD098 Massive sulphide intercept - 5.20m @ 9.13% Ni, 1.09% Cu, 0.21% Co and 7.09g/t PGEs (PGEs include 2.22g/t Pt, 1.74g/t Pd, 0.82g/t Rh, 1.79g/t Ru**

New drilling results include diamond hole TBDD100W1 which intersected downhole intervals of:

- 6.53m @ 2.87% Ni, 0.57% Cu, 0.08% Co and 6.00g/t 6PGE's from 588.47m including;
- 3.77m @ 4.17% Ni, 0.67% Cu, 0.12% Co and 9.51g/t 6PGE's from 589.23m including;
- A "massive sulphide" intercept of 0.81m @ 9.76% Ni, 1.15% Cu, 0.17% Co and 7.77g/t 6PGE's from 589.23m including;
- 0.40m @ 2.26% Ni, 0.61% Cu, 0.29% Co and 45.93g/t 6PGE's from 590.84m includes 44.8g/t Pd.

Diamond hole TBDD107 (previously unreleased) intersected a downhole interval of:

- 3.73m @ 5.12% Ni, 0.50% Cu and 4.00g/t 6PGE's from 509.25m (Figure 5).

The results further confirm the overall continuity of significant mineralisation at the high-grade Rosie Prospect which has mineralisation defined over a strike length of 950m (open) and down dip extent of 600m (open).

Results have confirmed a laterally extensive zone of predominantly disseminated and breccia style mineralisation with discrete zones of massive mineralisation. This style of mineralisation is suggestive of remobilised sulphides possibly flanking a massive sulphide mineralised "channel" or footwall embayment position (Figure 6).

Modelled conductors from downhole TEM logging from new holes are consistent with the current geological interpretation of the main zone of interest outlined to date having a steep plunge and possible footwall depression.

It is planned to have sufficient drilling completed to calculate a JORC-Code compliant Inferred Mineral Resource Estimate by the end of the June 2011 quarter. All the new results are listed in Table 4.



Figure 5 - Rosie Prospect hole TBDD107 showing massive sulphides.

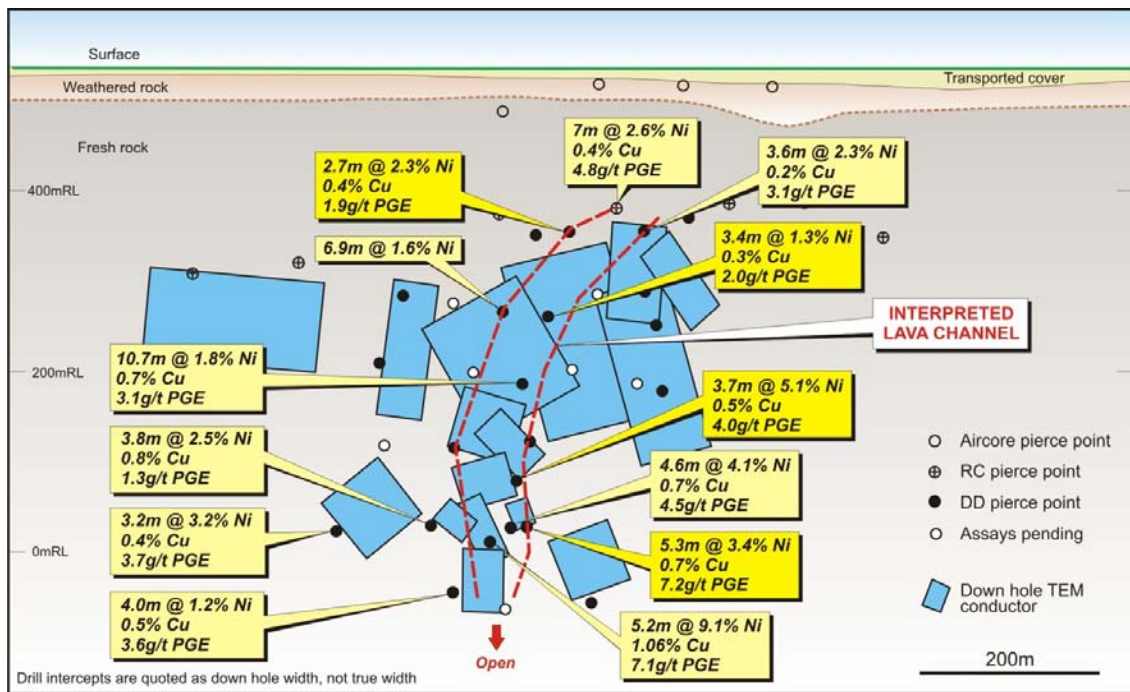


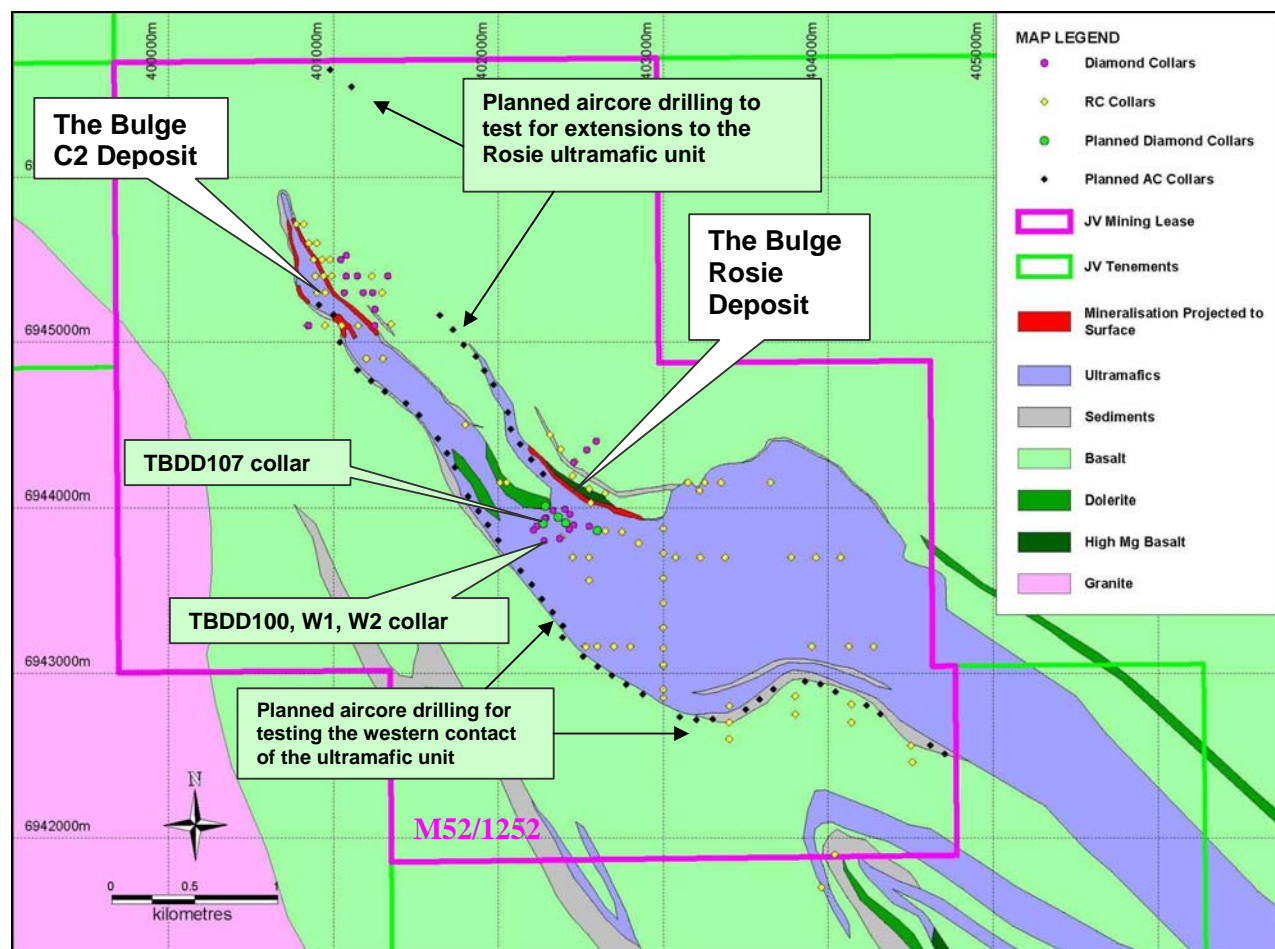
Figure 6 - Duketon JV Rosie Ni-Cu-PGE Prospect Longitudinal Projection showing significant drill intercept long section showing significant drill intercept, down-hole TEM conductors and interpreted lava channel.

HOLE NO	NORTH	EAST	RL	Azi	DIP	TOTAL DEPTH	DEPTH FROM	DEPTH TO	WIDTH	Ni	6PGE	CU	CUT OFF
	(m)	(m)	(m)	(deg.)	(deg.)	(m)	(m)	(m)	(m)	(%)	(g/t)	(%)	(%Ni)
TBDD100	6943800	402278	540	34	-52	549	515.32	516.50	1.18	2.2	3.3	0.26	1.0
TBDD100W1	6943800	402278	540	33	-60	650	589.23	594.53	5.30	3.3	7.2	0.65	1.0
TBDD100W2	6943800	402278	540	46	-67	697	646.21	650.00	3.79	1.4	4.8	0.26	1.0
TBDD101	6943963	402432	540	40	-60	256	210.34	213.00	2.66	2.3	1.9	0.41	1.0
TBDD102	6943991	402404	540	42	-62	255	211.33	212.88	1.55	1.5	2.2	0.25	1.0
TBDD103	6943863	402600	540	4	-60	244	192.30	196.63	4.33	1.5	2.7	0.35	1.0
TBDD104	6943944	402362	540	47	-61	355	314.80	317.23	2.43	1.5	2.1	0.35	1.0
TBDD107	6943905	402272	540	47	-63	583	509.25	512.98	3.73	5.12	4.0	0.50	1.0

Table 4 - Duketon JV Rosie Ni-Cu-PGE diamond drilling results.

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In addition an ~7,000m air-core drilling program has commenced and is designed to test the interpreted western ultramafic contact. The program will also test interpreted extensions to the ultramafic unit that hosts the Rosie mineralisation (Figure 7).



**Figure 7 - Rosie and C2 Ni-Cu-PGE Prospects drilling plan, interpreted geology map and Mining Lease (M52/1252).**

The current drilling program if effective is a precursor of continued work programs and studies into the economic parameters of a mining project comprising an underground mine at Rosie and an adjacent open pit mine at C2. Scoping study activities completed to date include;

- Grant of Mining Lease (22<sup>nd</sup> of November 2010);
- Completion of a flora survey as part of an Environmental Baseline Study;
- POW approvals for resource drilling at Rosie and C2;
- Exploration base camp approvals;
- Water extraction license;
- Engagement of Aboriginal heritage consultants.

### The German Well Prospect

The German Well prospect covers an ultramafic unit located on the eastern flank of the project area towards the northern end of E38/1825. Previous work by IGO has identified a TEM anomaly in close proximity to highly anomalous geochemistry in aircore drilling (max 0.43% Ni, 306ppm Cu, 55ppb Pt+Pd).

No drilling was conducted at the German Well Prospect during the period. A single RC hole (GWRC001: mNorth – 69417700, mEast – 442120, Dip - -60, Azimuth - 90) was drilled to 180m in 2010 and it was designed to test the anomaly. Minor zones containing up to 1-2% disseminated sulphides were intersected. The sulphides were recognised to be pyrite-pentlandite and chalcopyrite. Rock types intersected included diorite, dolerite/basalt and

a medium grained pyroxenite which contained the sulphides. It is currently thought that the results do not explain the anomaly.

Composite 4m assays that were previously received and intercepted:

- 16m @ 0.13% Ni, 170ppm Cu and 102ppm Co from 164-180m including;
- 4m @ 0.18% Ni, 414ppm Cu and 130ppm Co from 176-180m (End of Hole).

### **The Robinson Prospect**

The Robinson Prospect is located within E38/1511 between the Camp Oven and Bulge Prospects. Ground TEM geophysical surveys were completed over 11 strike km of partially covered ultramafic stratigraphy. A total of 93 line km of data was collected, identifying 6 bedrock conductors.

Five of these bedrock conductors are considered to be indicative of sedimentary horizons. The sixth conductor ("Anomaly B") is closely associated with a magnetic anomaly and is considered to be a priority exploration target.

*Note: Most tables, figures and text relating to the DNJV have been provided courtesy of Independence.*

### **DUKETON GOLD PROJECT**

From the early 90's the majority of the Duketon Project was held by Normandy Mining Limited and Newmont Mining Corporation. Although wide spaced reconnaissance exploration was sporadically conducted, the vast majority of the project remains under shallow cover and vastly under explored (Figure 8).

The Duketon Greenstone Belt contains highly prospective geological sequences and mineralised structures. Numerous structures are known to contain significant gold mineralisation and this is demonstrated by the approximately +5M ounces of unmined gold resources currently defined to date within the belt. The +1.5M ounce Moolart Well Gold Project was constructed by Regis Resources NL "Regis" (ASX: RRL) in 2010. This mine is currently the only mining operation in the Duketon Belt. Other recent developments in the belt announced by Regis include the +2.1M ounce Garden Well Deposit which is planned to be another stand alone development. These developments will likely have a very positive impact on the future of the Duketon Belt in terms of infrastructure.

The Achaean Duketon Greenstone Belt is located ~80kms north of Laverton in Western Australia and is dominated by a broad, complex north-northwest trending fold structure known as the Eristoun Syncline. The core of this syncline is occupied by the Ingi-jingi Felsic Volcanic Complex. The Ingi-jingi Felsic Volcanic Complex consists dominantly of rhyolitic and dacitic tuffs, and represents the youngest rocks in the belt. These felsic volcanics are considered highly prospective and underexplored for base metal mineralisation.

The western limb of the Eristoun Syncline is formed by a sequence of mafic and ultramafic volcanics and intrusives, epiclastic and chemical sediments, and minor felsics known as the Bandy Mafics. To the west the Bandy Mafics are bounded by the Hootanui Fault and the Granite Hills Batholith.

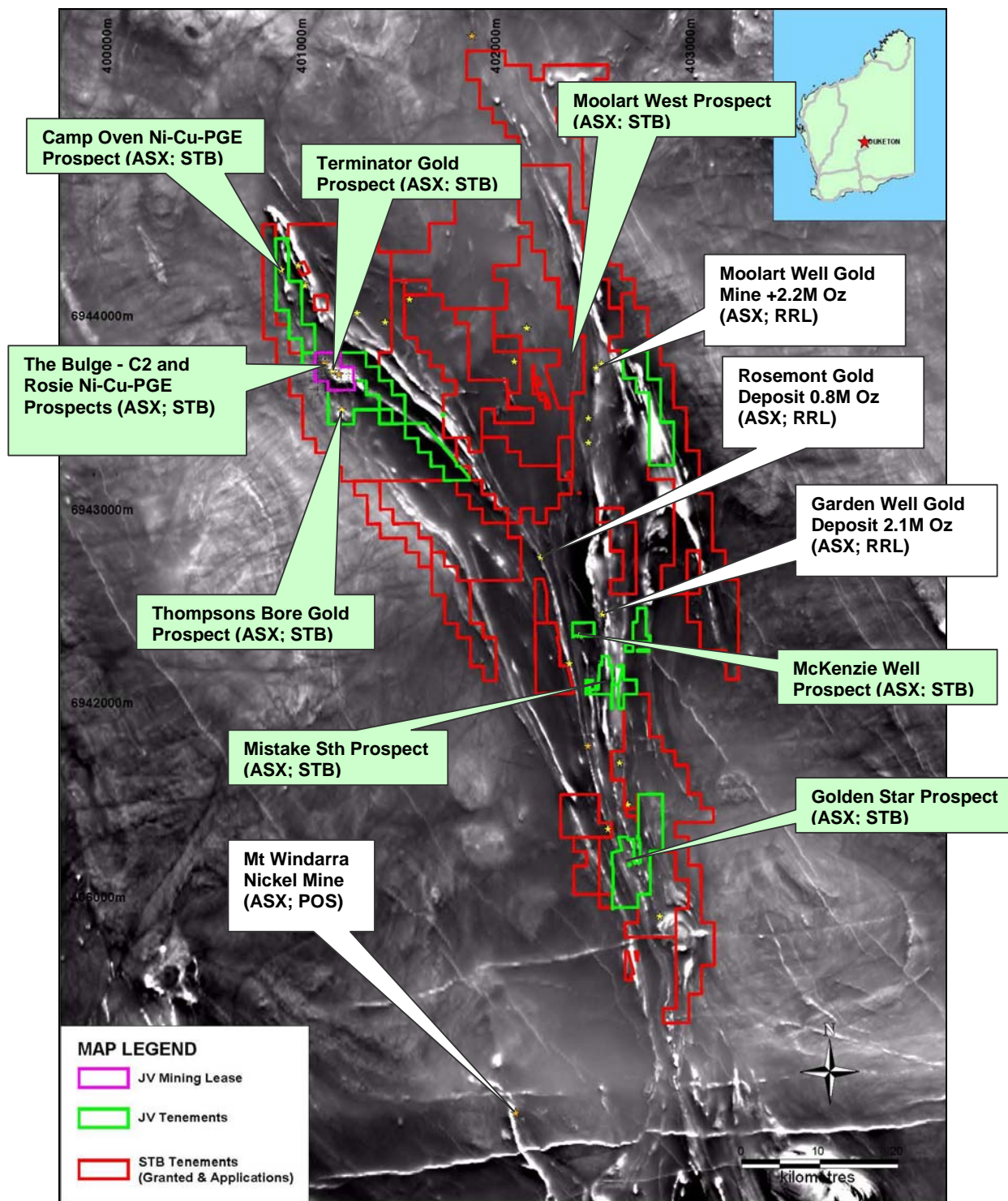
The north-eastern limb of the Eristoun Syncline is formed by a sequence of mafic volcanics informally known as the Riccaboni Mafics. These mafics underlie the Ingi-jingi Felsic Volcanic Complex, and are intruded to the north by the Mount Joanna batholith.

### **Terminator Prospect**

The Terminator Gold Prospect was discovered during a geochemical aircore drilling program on E38/1537 (now M52/1252) during September 2009. The Prospect is located approximately 1.4km south along strike of the Bulge C2 Nickel Prospect (Figure 8).

RC drilling completed in 2010 intersected high grades up to 28.60 g/t Au over 1m as well as broad intercepts of highly anomalous mineralisation.

During the period, work was focused on targeting extensions to known mineralisation and gaining a better understanding of the structural complexities of the deposit. A low level airborne geophysical survey was flown over E38/1511 comprising 986 line km. The survey was flown by UTS Aeroquest Airborne and recorded magnetic, radiometric and digital terrain data.



**Figure 8 – Duketon Project showing Duketon Nickel JV and Duketon Gold Project tenements and applications (see disclaimer).**

It is intended to conduct further RC drilling at Terminator and regional targets in a combined Duketon Regional Gold exploration program. Details of timing and approvals of the program are currently being finalised.

### Thompson's Bore Prospect

The Thompson's Bore Gold Prospect is located within E38/1537, 5km due south of the Bulge Nickel Sulphide discovery. Previous aircore intercepts include values up to 75.30g/t over 1m from 14m and 8.70g/t over 11m from 35m. The mineralisation at Thompsons is considered open in all directions and indications are that mineralised intersections are significantly depleted down to depths of ~80m. At least 2 and possibly 3 steeply dipping, parallel north - northwest striking gold zones exist within the project.

As with the Terminator Prospect a follow up drilling program is in the planning stages combined with the Duketon Regional Gold exploration program. Plans will be released to market once they are finalised and approved.

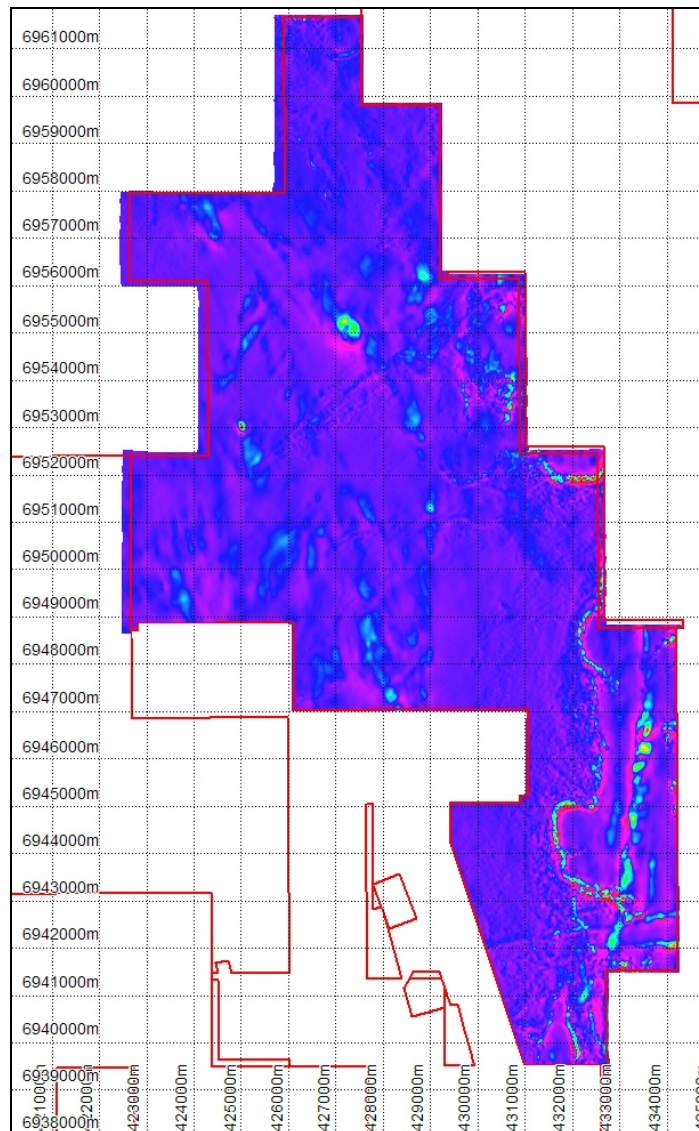
### Regional Prospects

During the period a low level airborne geophysical survey was flown over three areas at the Duketon Gold Project (Table 5). The survey was flown by UTS Aeroquest Airborne and recorded magnetics, radiometrics and digital terrain data.

Lease ID	Line Spacing	Line Direction	Tie Line Spacing	Tie Line Direction	Sensor Height	Total Line Km
E38/1511	50m	045-225	500m	135-315	50m	986
E38/1836	50m	090-270	500m	000-180	50m	3,000
E38/1535	50m	090-270	500m	000-180	50m	141
Total						4,127

**Table 5 – Duketon Gold Project regional geophysical survey details.**

The final data was received subsequent to the end of the period and is currently being re-processed to South Boulder’s standard formats. The re-processed data will be used to assist the design and planning of a 1<sup>st</sup> pass air-core drilling program to commence in the coming periods. Figure 9 shows a magnetic image over exploration license E38/1836 (Moolart West) which is immediately west of the Moolart Well Mine (ASX; RRL).



**Figure 9 – Moolart West Prospect (E38/1836) Magnetic 1<sup>st</sup> derivative image.**

For personal use only

Previous lag sampling by STB in the Moolart Well West area has delineated several gold anomalies (~20ppb). These show strong structural control, trending NNW along shears and faults. These anomalies cross the Duketon Fault along these structures. However, if mineralisation is indeed similar to Moolart Well, the majority of a deposit may have no geochemical signature at all. This prospect will be tested by extensive RAB drilling as part of the Duketon Regional Gold exploration program.

Further to this a regolith interpretation project compiled by South Boulder is nearing completion (Figure 10). This will be combined with the new magnetic survey and historic data to assist with fine tuning proposed air-core drilling programs in the coming periods. It has been South Boulder's view that much of the Duketon Belt has been ineffectively explored due to lack of understanding about the regolith and the application of ineffective exploration techniques.

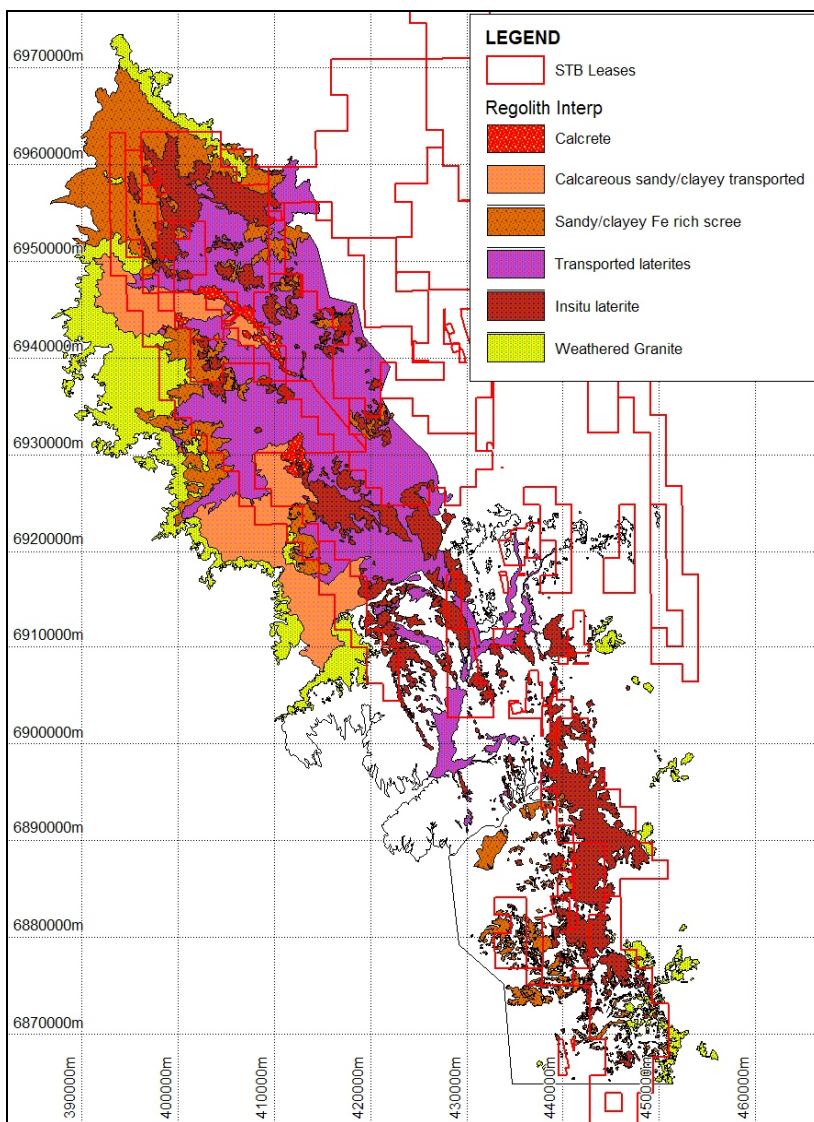


Figure 10 – Duketon Regolith Map

## PORTFOLIO DEVELOPMENT

The equity portfolio of listed exploration companies derived from divestment of non-core exploration assets is valued at ~ AUD\$4.5m (Table65). The portfolio is under regular periodic review in order to determine opportunities for divestment to add to funds for working capital. South Boulder has a policy of constantly reviewing its project and equity portfolios with a view to adding or realising value.

The board had previously resolved to divest the non-core potash and phosphate exploration portfolio comprising the Lake Disappointment Potash, The Cardabia Phosphate and the Georgina Basin Phosphate projects. Options are being reviewed on how to create value from the projects considering the Georgina Basin Project is funded by

Auvex Resources Ltd. Discussions are ongoing. South Boulder will continue to implement a policy of reviewing acquisitions both within Australia and offshore and will inform shareholders if and when an acquisition is tendered.

During the period 1,037,500 Montezuma Mining Company Ltd (ASX: MZM) 20c options were converted at a cost of \$207,500.

In addition Lithex Resources Ltd (ASX: LTX) lodged a prospectus for an initial public offering with the ASX to raise up to \$4 million. The proposed listing date is 16<sup>th</sup> of May 2011.

Company Name	Stock Exchange	No of fully paid Shares	20c/25c Options	Option Expiry Date
Montezuma Mining Company Ltd	ASX	5,012,500		
Buxton Resources Limited	ASX	1,610,000	750,000	30/06/2012
Avonlea Minerals Limited	ASX	400,000		
Uranex NL	ASX	800,000		
Continental Nickel	TSX	121,200		
Auvex Resources Ltd (25c)	Private		1,000,000	
Lithex Resources Ltd	Private	1,016,000		

**Table 6 – Current equities owned by South Boulder Mines Limited.**

### Southern Georgina Phosphate Project

The 100% owned Southern Georgina Phosphate Project is located in the central east Northern Territory, approximately 450km east north-east of Alice Springs. The tenements comprise 3 granted exploration licenses (EL26380, EL25983 and EL25982). Auvex Resources Limited (Auvex) purchased 90% of the manganese and base metal rights and 10% of the phosphate rights on the project.

Under the terms of the agreement South Boulder has a free carried 10% interest in the manganese and base metal rights up until the delivery of a Feasibility Study (FS). At that point South Boulder can elect to contribute or dilute to a \$2 per dry metric tonne (DMT) sold royalty for manganese or a 1.5% N.S.R. royalty in the case of base metals. Under the same terms, Auvex has a 10% free carry to a FS and then can either contribute or dilute to a \$2 per DMT sold royalty for phosphate sold.

### Cardabia Phosphate Project

The 100% owned Cardabia Phosphate Project is located in the northern Carnarvon Basin in Western Australia, approximately 200km north northeast from Carnarvon. The project comprises ~1,642km<sup>2</sup> (ELA08/2005, ELA08/2121 and ELA08/2151) and is prospective for nodular phosphate.

### Corporate

During the period The Board resolved to issue up to 5,000,000 South Boulder share options to directors, employees and consultants as incentive and remuneration. All the options are to have an exercise price of 150% of the volume weighted average price (VWAP) for the five (5) days prior to shareholder approval at the next General Meeting of the Company. The number of options to be issued and approved to directors are as follows;

David Lawrence Hughes (CEO/Managing Director)	-	1,000,000
Liam Raymond Cornelius (Executive Director)	-	250,000
Terrence Ronald Grammer (Chairman)	-	250,000
Employees and Consultants	-	3,500,000

The Company is highly leveraged to further exploration success and is well funded to continue the rapid advancement of its key projects. Further to this a number of options to realise better value for the key potash assets are being examined. A potential in-specie distribution of shares to all shareholders and the listing of a dedicated potash development company on an international exchange is a priority option under review.

During the period \$2.60 million was raised from the conversion of 10,340,000 South Boulder share options. The total number of shares on issue at the end of the reporting period is 86,025,688. The total number of options on issue with conversion prices of between \$0.20 - \$0.75 is 19,740,000. In addition 200,000 options priced at \$0.30 expired at the end of March.



## Investor Coverage

Recent investor relations, corporate videos and broker/media coverage on The Company's projects can be viewed on the website in the "Media Centre" and "Investor Centre" sections by following the links [www.southbouldermines.com.au](http://www.southbouldermines.com.au) and [www.abid.co](http://www.abid.co).

## About South Boulder Mines Ltd

Listed in 2003, South Boulder Mines (ASX: STB) is a diversified explorer focused on potash, nickel and gold. South Boulder has a 100% interest in the Colluli Potash Project in Eritrea and a 100% interest in the Duketon Gold Project in Western Australia.

The Colluli Potash Project has a current JORC/43-101 Compliant Measured, Indicated and Inferred Mineral Resource Estimate comprised of 33.39Mt @ 18.56% KCl of Measured Resources, 173.37Mt @ 18.57% KCl of Indicated Resources and 340.86Mt @ 18.58% KCl of Inferred Resources for a total of **547.62Mt @ 18.58% KCl (total contained potash of 101.73Mt)**; This includes higher grade material of 119.21Mt @ 23.14% KCl. There is an exploration target of **750Mt – 1.25 billion tonnes @ 18-20% KCl ##** (see disclaimer below). An engineering scoping study into open pit mining and processing to produce up to 10Mt p.a of potash is underway.

Within the Duketon Gold Project area, South Boulder entered a farm-out Joint Venture (JV) Agreement with Independence, whereby Independence can earn a 70% interest in the nickel rights on JV tenements held by South Boulder in the Duketon Project, by the completion of a Bankable Feasibility Study within 5 years of the grant of the relevant tenement.

## About the Nickel Joint Venture

The Duketon Nickel JV has had recent success at The Rosie and C2 Nickel sulphide prospects where drilling has defined intercepts of **5.20m @ 9.13% Ni, 1.09% Cu, 0.21% Co and 7.09g/t PGE's at Rosie and 50m @ 0.92% Ni including 37m @ 1.05% Ni at C2**. The deposits are located approximately 120km NNW of Laverton, W.A in the Duketon Greenstone Belt. The deposits are approximately 2km apart and the mineralisation at both prospects is considered open in most directions. A Mining Lease was granted over the Rosie and C2 deposits on the 19<sup>th</sup> of November. A resource definition and exploration drilling program and scoping study into an open pit mine at C2 and an underground mine at Rosie is underway.

## More information:

Lorry Hughes CEO/Managing Director +61 (8) 6315 1444	Kerry Rudd Executive Assistant +61 (8) 6315 1444	Liam Cornelius Executive Director +61 (8) 6315 1444	Terry Grammer Chairman +61 (8) 6315 1444
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### **## Disclaimer**

The potential quantity and grade of the Colluli exploration target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource Estimate (outside the current JORC Mineral Resource Estimate area) and it is uncertain if further exploration will result in the determination of a Mineral Resource (outside the current JORC Mineral Resource Estimate area).

This ASX release has been compiled by Lorry Hughes using information on exploration results and Mineral Resource estimates supplied by South Boulder Mines Ltd under supervision by Ercosplan. Dr Henry Rauche and Dr Sebastiaan van der Klauw are co-authors of the JORC and 43-101 compliant resource report. Lorry Hughes is a member in good standing of the Australian Institute of Mining and Metallurgy and Dr.s' Rauche and van der Klauw are members in good standing of the European Federation of Geologists (EurGeol) which is a "Recognised Overseas Professional Organisation" (ROPO). A ROPO is an accredited organization to which Competent Persons must belong for the purpose of preparing reports on Exploration Results, Mineral Resources and Ore Reserves for submission to the ASX.

Mr Hughes, Mr Rauche and Mr van der Klauw are geologists and they have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they have undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hughes, Mr Rauche and Mr van der Klauw consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

With respect to non-potash results, this ASX release has been compiled by Lorry Hughes using information on exploration results supplied by South Boulder and in the case of the Duketon Nickel JV, Independence Group who are the operator of the Duketon Nickel JV. Lorry Hughes is a member of the Australian Institute of Mining and Metallurgy. Mr Hughes is a geologist and he has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Lorry Hughes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

With respect to Western Australian tenement applications, due to the DOIR application process there is no guarantee the South Boulder applications will be granted.

### Quality Control and Quality Assurance

South Boulder Exploration programs follow standard operating and quality assurance procedures to ensure that all sampling techniques and sample results meet international reporting standards. Drill holes are located using GPS coordinates using WGS84 Datum, all mineralisation intervals are downhole and are true width intervals. Assay values are shown above a cut-off of 6% K<sub>2</sub>O. The samples are derived from HQ diamond drill core which in the case of carnallite ores are sealed in heat sealed plastic tubing immediately as it is drilled to preserve the sample. Significant sample intervals are dry quarter cut using a diamond saw and then resealed and double bagged for transport to the laboratory. Halite blanks and duplicate samples are submitted with each hole.

Chemical analyses were conducted by Kali-Umwelttechnik GmbH Sondershausen, Germany utilising flame emission spectrometry, atomic absorption spectroscopy and ion chromatography. Kali-Umwelttechnik (KUTEC) Sondershausen1 have extensive experience in analysis of salt rock and brine samples and is certified according to DIN EN ISO/IEC 17025 by the Deutsche Akkreditierungssystem Prüfwesen GmbH (DAR). The laboratory follow standard procedures for the analysis of potash salt rocks • chemical analysis (K<sup>+</sup>, Na<sup>+</sup>, Mg<sup>2+</sup>, Ca<sup>2+</sup>, Cl<sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, H<sub>2</sub>O) and • X-ray diffraction (XRD) analysis of the same samples as for chemical analysis to determine a qualitative mineral composition, which combined with the chemical analysis gives a quantitative mineral composition.