NORTHERN STAR RESOURCES LIMITED

ASX ANNOUNCEMENT
16 MAY 2013

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Issued Capital
Shares 424M
Options 5.1M
Current Share Price $0.75
Market Capitalisation
$318 million
Cash/Bullion and Investments
31 Mar 13 - $66.5 million

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NORTHERN STAR HITS 184GPT 100M BELOW KNOWN MINERALISATION

Overall intersection of 9.8m at 17.3gpt in Paulsens' key Voyager 1 lode points to more resources and mine life

Northern Star Resources Limited (ASX: NST) is pleased to advise that drilling has returned high-grade gold intersections 100m below the previously known limits of mineralisation at the Paulsens mine in WA.

The intersection of **9.8m at 17.3gpt**, **including 0.4m at 184gpt**, was made 100m vertically below the deepest mineralisation previously recorded at Paulsens' key Voyager 1 lode (*refer Figure 1 on page 2*).

Other significant results from at or around the same depth include:

- **10.0m at 31.9gpt**
- **12.8m at 25.4gpt**
- **8.3m at 40.3gpt**
- **25.2m at 9.8gpt**
- **9.8m at 17.3gpt**

These results are all located more than 200m below the current production level at Paulsens. Given that mining at Paulsens is progressing at the vertical rate of 40-50m per year, generating about 2,000oz per vertical metre, the latest result provides more strong evidence that Paulsens will continue to enjoy increases in resources and mine life.

Northern Star Managing Director Bill Beament said the latest high-grade intersection at depth in Voyager 1 provided more evidence that there was a substantial amount of gold still to be discovered and mined at Paulsens.

"We are hitting high-grade gold in virtually every direction we drill," Mr Beament said. "It is becoming increasingly clear that Paulsens not only has a long, outstanding future but that after 10 years, its best days may still be in front of it."

The result follows last week's announcement by Northern Star that it had generated results of up to 379gpt from drilling within the Gabbro host rock, which sits either side of the one million-ounce Paulsens orebody and was previously considered to be unmineralised.

Last week's results confirmed the presence of additional structures that may supplement or even replicate the existing Paulsens mineralisation. The combination of last week's results and those announced today have potentially far-reaching benefits for Paulsens' resources and mine life.

In addition to both the Gabbro drilling and the latest deep drilling at Voyager 1, Northern Star recently announced a 156% increase in resources in the Upper Levels at Paulsens, taking them to 92,000oz at 10.2gpt. This arose from a review of the shallow levels at Paulsens where large portions of the orebody were left unmined by previous owners due to their gold price hedging, mine scheduling and a lack of surplus funds for exploration and extensional drilling.

These areas also have strong potential to boost Paulsens' mine life as well as the Company's cashflow and production for the next five to seven years. Some areas in the Upper Levels remain open along strike, offering further potential for additional mineralisation which will further increase the resources.

Another potential source of increased mine life is the Apollo Zone. This sits on the northern side of the Northern Gabbro rock unit and is the only mineralised lode that has been mined outside the bounding Gabbro structures.

The Apollo Zone produced 23,000oz at a reconciled grade of 7.3gpt and at the time provided a reliable source of supplementary feed for the Paulsens processing plant.

Mining of the Apollo Zone was abandoned by previous owners because it delayed mining of the main ore body. Recently reported exploration holes designed to test down plunge from the previously mined Apollo Zone intersected the quartz structure 200m down plunge with assays including 1.9m at 6.3gpt and 1.6m at 4.3gpt.

Further announcements will be released regarding the ongoing underground diamond drilling as results become available.

Assay results from underground diamond drilling are listed in the attached tables.

Yours faithfully

Bill Beament

BILL BEAMENT
Managing Director
Northern Star Resources Limited

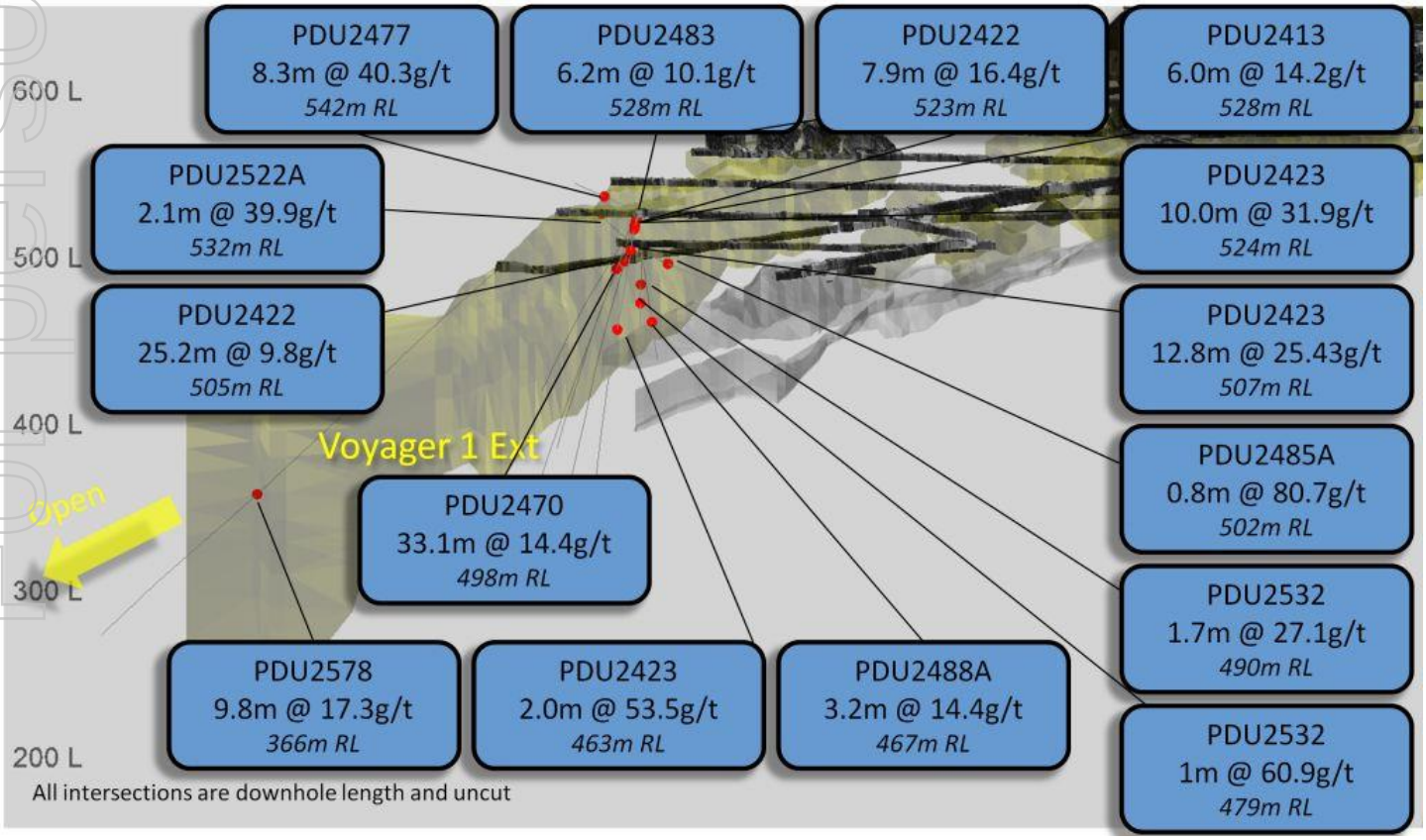

Figure 1: Voyager 1 Drilling

PAULSENS RESOURCE DEFINITION DRILLING VOYAGER 1

Drill Hole #	Easting (Mine Grid)	Northing (Mine Grid)	Drill hole collar RL (Mine Grid)	Dip (degrees)	Azimuth (degrees, Mine Grid)	End of hole depth (m)	Downhole From (m)	Downhole To (m)	Downhole Intersection (m)	Au (gpt) uncut	Est True Thickness (m)
PDU2422	8791	50407	530	-62	327	191	4	11.92	7.92	16.4	2.0
PDU2422	8791	50407	530	-62	327	191	14.81	40	25.19	9.8	3.6
PDU2578	8706	50482	498	-39	251	329	192.4	202.16	9.80	17.3	2.5
PDU2578	8706	50482	498	-39	251	329	213	214	2.00	2.6	1.5

PAULSENS GRADE CONTROL DRILLING VOYAGER 1

Drill Hole #	Easting (Mine Grid)	Northing (Mine Grid)	Drill hole collar RL (Mine Grid)	Dip (degrees)	Azimuth (degrees, Mine Grid)	End of hole depth (m)	Downhole From (m)	Downhole To (m)	Downhole Intersection (m)	Au (gpt) uncut	Est True Thickness (m)
PDU2370	8924	50372	532	8	307	83	67.77	69.8	2.03	5.2	1.7
PDU2370	8924	50372	532	8	307	83	73.45	74.4	0.95	2.2	0.6
PDU2413	8791	50407	530	-52	327	182	0	6	6.00	14.2	0.9
PDU2413	8791	50407	530	-52	327	182	9.85	11	1.15	38.6	0.3
PDU2413	8791	50407	530	-52	327	182	13.43	21	7.57	11.8	0.8
PDU2423	8791	50406	531	-72	327	199	2	4.21	2.21	108.5	1.0
PDU2423	8791	50406	531	-72	327	199	2	12	10.00	31.9	1.2
PDU2423	8791	50406	531	-72	327	199	17.5	30.27	12.77	25.4	2.1
PDU2423	8791	50406	531	-72	327	199	70.3	72.28	1.98	53.5	0.6
PDU2423	8791	50406	531	-72	327	199	76.38	77.5	1.12	4.1	0.3
PDU2423	8791	50406	531	-72	327	199	92	93.82	1.82	6.5	0.4
PDU2423	8791	50406	531	-72	327	199	108.45	110	1.55	6.0	0.3
PDU2470	8791	50407	530	-61	313	204	8	11.07	3.07	12.5	0.8
PDU2470	8791	50407	530	-61	313	204	18.53	51.67	33.14	14.4	2.9
PDU2472	8767	50394	533	25	210	112	1.91	2.7	0.79	10.6	0.3
PDU2472	8767	50394	533	25	210	112	12.2	13	1.80	22.4	0.6
PDU2472	8767	50394	533	25	210	112	37.95	38.77	0.82	21.8	0.3
PDU2472	8767	50394	533	25	210	112	40.38	43.45	3.07	2.8	0.8
PDU2473	8767	50394	532	1	210	35	3.3	4.4	1.10	8.7	0.3
PDU2476	7892	50394	535	41	248	22			NSI		
PDU2477	8792	50394	533	21	242	47	1.4	3	1.60	3.6	0.7
PDU2477	8792	50394	533	21	242	47	21.74	30	8.26	40.3	3.5
PDU2478	8792	50395	532	7	244	50			NSI		
PDU2481	8791	50407	530	-23	327	164	0	3	3.00	7.8	0.5
PDU2483	8791	50407	530	-44	323	168	0	6.17	6.17	10.1	2.6
PDU2485A	8798	50456	507	-7	162	146	36	37.82	0.79	80.7	0.8
PDU2485A	8798	50456	507	-7	162	146	39.72	42	2.28	4.2	2.3
PDU2485A	8798	50456	507	-7	162	146	60.43	62.42	1.99	5.7	0.5
PDU2487	8794	50455	507	-32	170	59	51	51.96	0.96	7.0	1.0
PDU2488A	8794	50455	506	-52	170	80	40.44	42	1.56	4.4	1.3
PDU2488A	8794	50455	506	-52	170	80	48.2	51.4	3.20	14.4	2.9
PDU2522A	8794	50455	509	23	209	63	61.13	63.22	2.09	39.9	0.8
PDU2529	8795	50454	510	34	191	80			NSI		
PDU2532	8794	50455	509	-35	182	80	33.37	35.1	1.73	27.1	1.7
PDU2532	8794	50455	509	-35	182	80	37.47	39	1.53	3.5	1.5
PDU2532	8794	50455	509	-35	182	80	42.64	43.33	0.69	11.8	0.7
PDU2532	8794	50455	509	-35	182	80	53	54	1.00	60.9	0.9

Competent Person's Statements

The information in this announcement that relates to Paulsens and Ashburton mineral resource estimations, exploration results, data quality, geological interpretations, potential for eventual economic extraction and estimates of exploration potential, is based on information compiled by or under the supervision of Brook Ekers, who is an AIG member who is a full-time employee of Northern Star Resources Limited. Mr Ekers 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Ekers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

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JORC Table 1	
Sampling Techniques and Data	
Sampling techniques	▪ *DD - Resource Definition: Core is half cut using an Almonté Diamond Core-saw. The right half is sampled (preferentially) to sample intervals defined by the Logging Geologist along geological boundaries. The left half is archived. Where possible, sample intervals are 0.30m to 1.20m in length, and the total weight of each sample does not exceed 5kg.* ▪ *DD - Grade Control: Core is whole core sampled along geological boundaries established by the Logging Geologist. Where possible, sample intervals are 0.30m to 1.20m in length, and the total weight of each sample does not exceed 5kg.* ▪ *All defined orezones are sampled, plus visibly barren material associated with orezones, >5m of hangingwall/footwall, plus >0.3m quartz veins that are encountered outside the orezone and ±1m on either side.*
Drilling techniques	▪ *DD – Diamond drilling is carried out using NQ2 (standard tube) and LTK60 (conventional) techniques. In most instances, Grade Control holes are drilled using LTK60 and Resource Definition holes are drilled using NQ2.*
Drill sample recovery	▪ *DD – Recovery is not estimated, although core-loss and cavities are recorded by the Logging Geologist. Overall Paulsens core recovery is very good.*
Logging	▪ *Core Logging is carried out by the Logging Geologist, who delineates intervals on geological, structural, alteration and/or mineralogical boundaries. All core is photographed.*
Sub-sampling techniques and sample preparation	▪ *DD - Core is half cut with Almonté diamond core saw and half core sampled, or whole core sampled. Samples are oven-dried overnight (<82.5°C), jaw crushed to <6mm, and split to <3kg in a static riffle splitter. The coarse reject is then discarded. The remainder is pulverised in an LM5 to >80% passing 75µm (Tyler 200 mesh) and bagged. The analytical sample is further reduced to a 50gm charge weight using a spatula, and the pulp packet is stored awaiting collection by NSR.*
Quality of assay data and laboratory tests	▪ *DD - For all drill samples the total gold is determined by fire assay using the lead collection technique with a 30 gram sample charge weight. An AAS finish is used.* ▪ *The QAQC protocols used include the following for all drill samples:* *Site sourced coarse blanks are inserted at an incidence of 1 in 40 samples,* *Commercially prepared certified reference materials are inserted at an incidence of 1 in 40 samples. The CRM used is not identifiable to the laboratory,* ▪ *NSR's Blanks and Standards data is assessed on import to the database and reported monthly and yearly.* ▪ *The laboratory QAQC protocols used include the following for all drill samples:* *Screen tests (percentage of pulverised sample passing a 75µm mesh) are undertaken on 1 in 100 samples* ▪ *The laboratory reports its own QAQC data on a monthly basis.* ▪ *Failed standards are followed up by re-assaying a second 30g pulp sample of the failed standard ± 10 samples either side by the same method at the primary laboratory.*
Verification of sampling and assaying	▪ *Significant intersections are collated and reviewed by senior staff and reviewed by corporate geologist.* ▪ *Twinned holes are not used.*
Location of data points	▪ *Drill holes are surveyed every 30m downhole, collars are picked up post drilling by mine surveyors.*
Data spacing and distribution	▪ *Data spacing varies due to the nature of drilling radiating fans but will be on the order of 10 to 20m for Grade control, 20m to 100m for resource definition.*
Orientation of data in relation to geological structure	▪ *It is not thought that drilling orientation would have a biased effect on this resource though restricted drill access has led to some less than optimal drill intersection angles.*
Audits or reviews	▪ *Sampling and QAQC protocols along with the QAQC data are assessed by a consultant on a quarterly basis as part of an ongoing series of QAQC meetings.*
Reporting of Exploration Results	
Mineral tenement and land tenure status	▪ *M08/196 and M08/99 are wholly owned by NSR and in good standing. Currently contains the operating Paulsens Gold Mine*
Exploration done by other parties	▪ *All relevant work at these depths has been drilled by NSR*
Geology	▪ *Paulsens is a high grade, quartz hosted, mesothermal gold deposit within metasediments*
Data aggregation methods	▪ *Grades are uncut.*
Relationship between mineralisation widths and intercept lengths	▪ *Due to complex mineralisation geometry and varying intercept angles the true thickness is manually estimated on a hole by hole basis Both true width and downhole length are reported*
Diagrams	▪ *Diagrams and tables included*
Balanced reporting	▪ *All Exploration Results are reported for this period and this area (Voyager 1 Extension)*
Further work	▪ *Drilling will continue down plunge and as grade control in line with the mine plan.*