ASX RELEASE

21 November 2011

RARE EARTHS MINERALISATION OPEN AT DEPTH ACROSS NOLANS BORE

HIGHLIGHTS:

- **South Zone drilling at Nolans Bore confirms rare earths mineralisation is open at depth across large parts of the resource;**
- **The best South Zone drill intercepts include:**
  - **130.0 metres @ 2.1% REO, 10.3% P_2O_5 and 0.35 lb/t U_3O_8 from 46.0 metres in NBRD1028**
  - **124.1 metres @ 3.1% REO, 16.0% P_2O_5 and 0.39 lb/t U_3O_8 from 30.0 metres in NBRD365**
  - **96.0 metres @ 1.8% REO, 8.1% P_2O_5 and 0.24 lb/t U_3O_8 from 5.0 metres in NBRD882**
  - **79.3 metres @ 4.0% REO, 20.0% P_2O_5 and 0.60 lb/t U_3O_8 from 46.6 metres in NBDH879**
  - **70.6 metres @ 3.8% REO, 20.2% P_2O_5 and 0.55 lb/t U_3O_8 from 179.6 metres in NBRD891**
  - **65.0 metres @ 2.8% REO, 13.9% P_2O_5 and 0.39 lb/t U_3O_8 from 178.6 metres in NBRD328**
  - **57.5 metres @ 4.0% REO, 17.6% P_2O_5 and 0.54 lb/t U_3O_8 from 110.5 metres in NBRD269**
  - **52.0 metres @ 3.3% REO, 15.8% P_2O_5 and 0.64 lb/t U_3O_8 from 122.0 metres in NBDH1099**
  - **51.5 metres @ 3.6% REO, 16.9% P_2O_5 and 0.59 lb/t U_3O_8 from 128.9 metres in NBRD869**
  - **34.5 metres @ 4.5% REO, 23.1% P_2O_5 and 0.98 lb/t U_3O_8 from 177.5 metres in NBRD1006**
  - **21.0 metres @ 6.1% REO, 25.3% P_2O_5 and 1.06 lb/t U_3O_8 from 141.0 metres in NBRC866**
  - **15.6 metres @ 5.5% REO, 26.4% P_2O_5 and 0.64 lb/t U_3O_8 from 152.0 metres in NBRD257.**

Australian rare earths company **Arafura Resources Limited** (**ASX: ARU**) (**Arafura** or **the Company**) today reports the discovery of significant intercepts of rare earths mineralisation in deep diamond core drilling beneath the southern part of its 100 per cent-owned Nolans Bore deposit in the Northern Territory.

Prior to the 2011 drilling campaign, the southern part of the Nolans Bore deposit (ASX: ARU 11/11/08 – Figure 1 "South Zone Resource") was sparsely drilled to a nominal

depth of about 90 metres, with few holes exceeding 100 metres, and a maximum drilled depth of about 138 metres. Systematic infill reverse circulation (RC) drilling to 120-150 metres and deeper diamond core to a nominal maximum depth of about 250 metres now demonstrates widespread thick intervals of rare earths mineralisation at depth across the South Zone of the Nolans Bore deposit.

Table 1 provides a summary of assay results from substantial deep drill intercepts across the South Zone, with the distribution of these holes shown on Figure 1. Only intercepts of rare earths mineralisation exceeding 10 metres in width and passing through, or entirely below, 100 metres down-hole are reported here. Importantly, several of the holes terminated in mineralisation (NBRD340, NBRC848, NBRC866, NBRD868-870, NBRC882, NBRD891 and NBRD896).

Arafura recently reported the discovery of a substantial north-south zone of strong rare earths mineralisation in the central part of Nolans Bore (ASX: ARU 28/07/11 and 22/08/11). Several of the holes in Table 1 intersected this new zone (NBRD328, NBRD365, NBRD891, NBDH879, NBDH880, NBDH1071, NBDH1076, NBDH1078 and NBDH1099, amongst others). Assays are pending from a number of east-west oriented holes that encountered wide intervals of rare earths mineralisation from within the new zone.

One of the main objectives of the 2011 drilling program was to investigate the depth extent of the Nolans Bore resource for assessment of future expansion capacity. The deeper diamond core component of the program has shown that rare earths mineralisation remains open at depth across large parts of the deposit, including the South Zone. Virtually all of the mineralised intercepts reported here are very likely to constitute new resources that were not included in the most recent Statement of Identified Mineral Resources for Nolans Bore in 2008 (ASX: ARU 11/11/08).

Arafura's Managing Director and CEO, Dr Steve Ward, said, "The 2011 drilling program is proving to be a resounding success and a great credit to our exploration team. The new results, and those published previously, emphasise the scale and world-class nature of Nolans Bore. This strategic resource will form the foundation of Arafura's activities well into the future as the Company seeks to become the recognised leading producer of rare earths for users worldwide.

We now look forward to an updated resource statement which is targeted to be completed by the end of the year."

- ENDS -

For further information contact:

Dr Steve Ward
Managing Director & CEO
Arafura Resources Ltd
T: +61 8 6210 7666

Competent Person's Statement

The information in this release that relates to exploration results and geological interpretation has been compiled by Mr Kelvin Hussey BSc (Hons) MAIG.

Mr Hussey is a Member of the Australian Institute of Geoscientists and he has sufficient experience with the style of mineralisation being reported to qualify as a Competent Person as defined in the *Australasian Code for Reporting of Mineral Resources and Ore Reserves* (JORC Code) for reporting these exploration results. Mr Hussey is a full-time employee of Arafura Resources Limited. He consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

Table 1: 2011 Drilling Results, Nolans Bore

HOLE NO.	FROM metres	TO metres	INTERVAL metres	TOTAL REO** %	P_2O_5** %	U_3O_8** lb/t***
NBRD 009	169.6	182.6	13.0	1.9	8.1	0.21
NBRD 012	95.0	116.4	21.4	2.9	14.5	0.36
NBRD 077	131.3	143.0	11.7	1.1	4.5	0.14
and	229.4	241.5	12.1	3.1	16.4	0.58
NBRD 078	168.0	188.0	20.0	2.0	9.4	0.31
and	212.0	225.0	13.0	2.0	8.9	0.32
NBRD 084	206.5	234.0	27.5	1.5	6.1	0.18
NBRD 087	190.1	226.1	36.0	2.8	13.5	0.31
NBRD 097	166.1	198.6	32.5	1.1	4.6	0.13
NBRD 194	211.9	230.7	18.9	3.4	16.6	0.37
NBRD 196	160.4	197.0	36.6	1.5	7.1	0.25
NBRD 198	98.7	111.9	13.2	3.6	19.4	0.60
and	121.9	164.5	42.6	1.4	7.8	0.26
and	202.8	221.7	19.0	2.9	14.0	0.46
NBRD 257	152.0	167.6	15.6	5.5	26.4	0.64
NBRD 264	148.4	167.4	19.0	3.2	15.2	0.57
and	176.7	188.8	12.2	1.1	6.1	0.20
NBRD 269	110.5	168.0	57.5	4.0	17.6	0.54
NBRD 328	178.6	243.6	65.0	2.8	13.9	0.39
NBRD 334	99.7	130.5	30.7	1.4	7.4	0.13
and	146.2	169.4	23.2	1.7	8.7	0.21
NBRD 338	131.6	149.3	17.6	1.3	6.4	0.19
NBRD 340	132.6	144.7	12.2	1.0	4.0	0.11
and	188.2	207.6	19.4	1.9	9.0	0.31
and	228.3	249.4	21.1	1.6	7.8	0.23
NBRD 365	30.0	154.1	124.1	3.1	16.0	0.39
NBRC 848	136.0	150.0	14.0	1.5	8.3	0.21
NBRC 853	140.0	150.0	10.0	3.5	17.4	0.58
NBRD 854	86.0	119.0	33.0	1.7	7.7	0.21
and	191.6	215.5	23.9	2.5	13.4	0.45
NBRD 855	173.9	189.7	15.9	2.8	14.2	0.49
NBRC 860	126.0	148.0	22.0	0.9	3.8	0.14
NBRC 865	105.0	129.0	24.0	1.8	6.3	0.27
NBRC 866	141.0	162.0	21.0	6.1	25.3	1.06
NBRD 867	102.0	131.4	29.4	2.3	10.4	0.37
NBRD 868	97.0	133.6	36.6	3.4	16.9	0.55
and	158.6	180.6	22.0	1.9	9.9	0.33
NBRD 869	128.9	180.4	51.5	3.6	16.9	0.59
NBRD 870	151.6	180.6	29.0	2.1	9.6	0.27
NBDH 878	87.8	112.4	24.6	2.2	11.0	0.36
and	185.3	195.8	10.5	1.4	7.2	0.26
NBDH 879	46.6	125.9	79.3	4.0	20.0	0.60
and	203.0	219.2	16.2	1.6	5.8	0.20
and	229.5	245.5	16.0	1.3	5.0	0.20
NBDH 880	155.3	167.9	12.6	2.9	15.3	0.44
NBRC 881	88.0	122.0	34.0	1.3	6.2	0.24
NBRC 882	5.0	101.0	96.0	1.8	8.1	0.24
and	119.0	150.0	31.0	1.7	7.4	0.25
NBRD 883	104.0	144.3	40.3	2.3	10.5	0.26
and	167.4	177.7	10.3	4.9	24.4	0.74
NBRC 884	100.0	136.0	36.0	2.4	10.0	0.28
NBRD 887	139.0	149.0	10.0	2.0	6.1	0.20
NBRD 888	99.0	111.0	12.0	2.1	8.0	0.28
NBRD 891	179.6	250.1	70.6	3.8	20.2	0.55
NBRD 896	234.7	252.5	17.8	2.0	8.1	0.32
NBRC 928	89.0	106.0	17.0	1.0	4.1	0.19
NBRD 934	168.0	180.0	12.0	1.2	4.9	0.14
NBRC 940	91.0	106.0	15.0	2.7	12.4	0.43

NBRC 957	100.0	126.0	26.0	1.0	3.7	0.14
NBRD 958	114.0	124.6	10.6	2.2	9.8	0.33
and	146.3	157.5	11.1	1.7	8.6	0.22
NBRD 1006	112.0	124.0	12.0	1.0	3.3	0.09
and	177.5	212.0	34.5	4.5	23.1	0.98
NBRC 1007	93.0	106.0	13.0	1.8	7.7	0.27
NBRD 1028	46.0	176.0	130.0	2.1	10.3	0.35
NBRD 1036	146.5	157.0	10.5	2.7	13.2	0.43
NBDH 1071	72.9	108.0	35.2	2.2	10.0	0.34
NBDH 1076	118.0	135.8	17.8	3.8	19.0	0.43
NBDH 1078	90.8	127.8	37.0	3.2	16.1	0.41
NBDH 1086	94.0	112.9	18.9	1.2	6.6	0.13
NBDH 1099	122.0	174.0	52.0	3.3	15.8	0.64

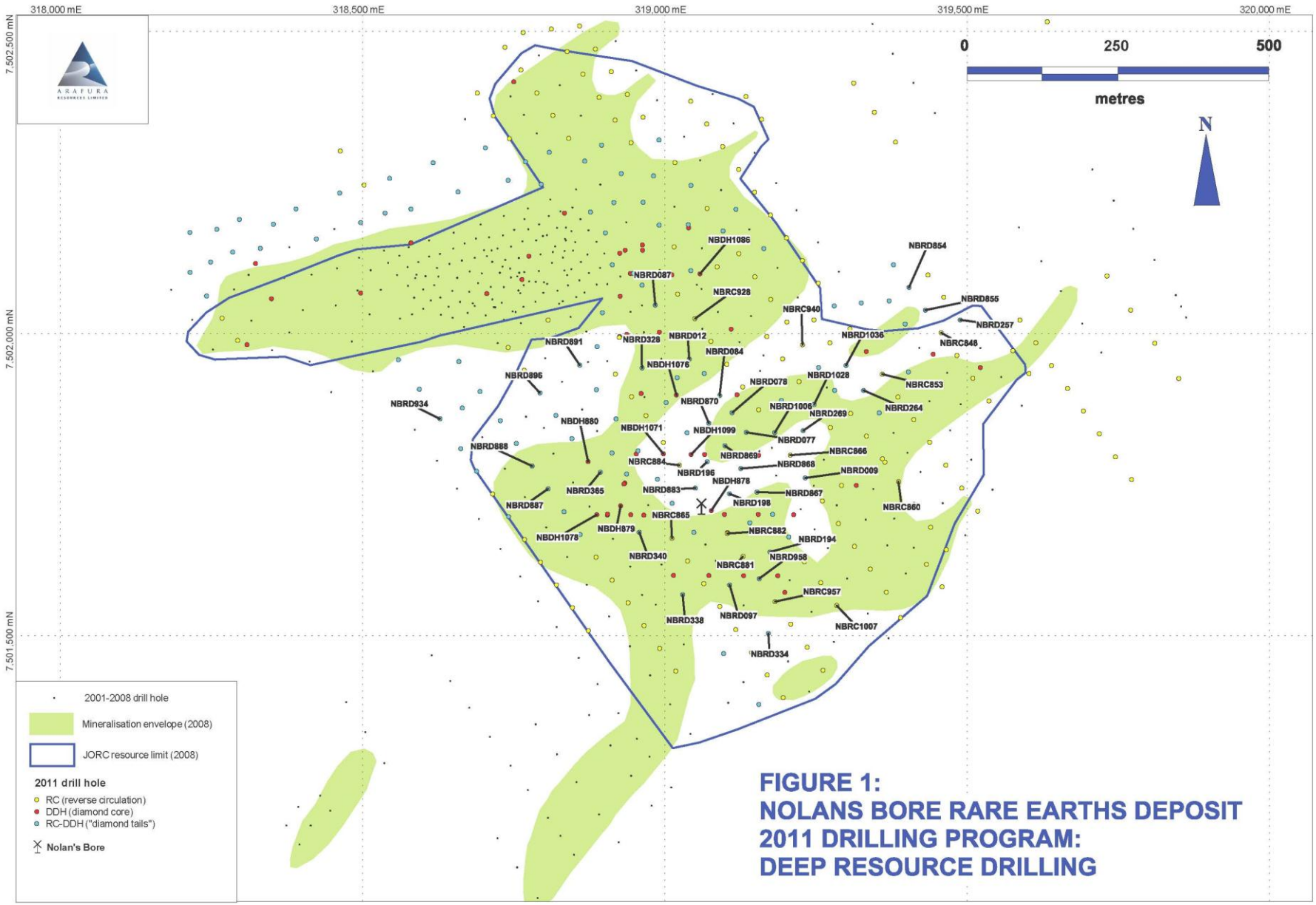
HOLE NO.	EAST metres	NORTH metres	RL metres	INCLINATION °	AZIMUTH °	TOTAL DEPTH metres
NBRD 009	**319232.12**	**7501761.11**	**659.43**	**-60**	**131**	**200**
NBRD 012	**319040.38**	**7501957.93**	**657.68**	**-60**	**149**	**249.5**
NBRD 077	**319134.60**	**7501836.60**	**659.20**	**-60**	**145**	**249.7**
NBRD 078	**319111.02**	**7501869.02**	**659.25**	**-60**	**145**	**246.62**
NBRD 084	**319090.57**	**7501897.76**	**658.38**	**-60**	**145**	**249.5**
NBRD 087	**318984.19**	**7502047.43**	**656.92**	**-60**	**145**	**249.4**
NBRD 097	**319107.13**	**7501584.22**	**658.60**	**-60**	**145**	**250**
NBRD 194	**319173.74**	**7501638.78**	**659.18**	**-60**	**145**	**249.9**
NBRD 196	**319069.99**	**7501787.87**	**658.76**	**-60**	**145**	**250**
NBRD 198	**319106.67**	**7501735.09**	**659.24**	**-60**	**145**	**249.9**
NBRD 257	**319488.60**	**7502022.99**	**659.27**	**-60**	**145**	**200**
NBRD 264	**319328.70**	**7501906.37**	**659.38**	**-60**	**145**	**189.8**
NBRD 269	**319228.67**	**7501839.37**	**659.36**	**-60**	**145**	**195.6**
NBRD 328	**318962.19**	**7501943.26**	**657.26**	**-60**	**145**	**249.7**
NBRD 334	**319171.12**	**7501503.91**	**659.22**	**-60**	**145**	**251.7**
NBRD 338	**319029.28**	**7501568.22**	**658.17**	**-60**	**145**	**250**
NBRD 340	**318957.59**	**7501671.29**	**658.04**	**-60**	**145**	**249.4**
NBRD 365	**318893.46**	**7501770.73**	**657.95**	**-60**	**145**	**249.7**
NBRC 848	**319456.89**	**7502001.69**	**659.66**	**-60**	**145**	**150**
NBRC 853	**319359.62**	**7501933.03**	**659.74**	**-60**	**145**	**156**
NBRD 854	**319403.83**	**7502076.68**	**659.21**	**-60**	**145**	**250**
NBRD 855	**319430.80**	**7502038.95**	**659.52**	**-60**	**145**	**219.8**
NBRC 860	**319386.38**	**7501755.11**	**660.83**	**-60**	**145**	**156**
NBRC 865	**319011.63**	**7501661.40**	**657.70**	**-60**	**145**	**150**
NBRC 866	**319207.52**	**7501799.01**	**659.31**	**-60**	**145**	**162**
NBRD 867	**319152.34**	**7501737.56**	**658.99**	**-60**	**145**	**198.66**
NBRD 868	**319125.54**	**7501776.88**	**659.16**	**-60**	**145**	**180.6**
NBRD 869	**319099.12**	**7501814.53**	**659.01**	**-60**	**145**	**180.4**
NBRD 870	**319072.66**	**7501852.05**	**658.22**	**-60**	**145**	**180.6**
NBDH 878	**319076.70**	**7501707.23**	**658.66**	**-60**	**145**	**219.6**
NBDH 879	**318926.92**	**7501715.12**	**657.86**	**-60**	**145**	**249.3**
NBDH 880	**318872.91**	**7501788.48**	**658.09**	**-60**	**145**	**251.9**
NBRC 881	**319129.30**	**7501631.49**	**658.57**	**-60**	**145**	**150**
NBRC 882	**319103.24**	**7501669.23**	**658.49**	**-60**	**145**	**150**
NBRD 883	**319050.43**	**7501744.55**	**658.34**	**-60**	**145**	**180.4**
NBRC 884	**319023.97**	**7501782.49**	**658.03**	**-60**	**145**	**150**
NBRD 887	**318806.84**	**7501743.19**	**658.48**	**-60**	**145**	**249.5**
NBRD 888	**318780.54**	**7501780.92**	**658.28**	**-60**	**145**	**248.9**
NBRD 891	**318859.07**	**7501947.94**	**657.77**	**-60**	**145**	**250.1**
NBRD 896	**318793.24**	**7501902.14**	**657.75**	**-60**	**145**	**252.5**
NBRC 928	**319049.72**	**7502024.84**	**657.10**	**-60**	**145**	**150**
NBRD 934	**318628.11**	**7501859.05**	**658.05**	**-60**	**145**	**249.7**
NBRC 940	**319227.57**	**7501981.78**	**658.81**	**-60**	**145**	**150**
NBRC 957	**319182.09**	**7501556.57**	**659.54**	**-60**	**145**	**150**

NBRD 958	**319155.87**	**7501594.44**	**659.34**	**-60**	**145**	**179.8**
NBRD 1006	**319181.58**	**7501836.14**	**659.30**	**-60**	**145**	**249.7**
NBRC 1007	**319284.03**	**7501550.31**	**660.51**	**-60**	**145**	**150**
NBRD 1028	**319246.98**	**7501882.79**	**659.48**	**-60**	**145**	**201.5**
NBRD 1036	**319299.43**	**7501947.41**	**658.96**	**-60**	**145**	**219.8**
NBDH 1071	**318997.38**	**7501801.28**	**657.34**	**-60**	**270**	**265**
NBDH 1076	**319019.13**	**7501898.58**	**657.42**	**-60**	**270**	**159**
NBDH 1078	**318887.26**	**7501700.38**	**657.96**	**-60**	**90**	**210.7**
NBDH 1086	**319058.02**	**7502099.11**	**657.65**	**-60**	**270**	**182.5**
NBDH 1099	**319043.29**	**7501800.12**	**658.60**	**-60**	**145**	**246.7**

Notes:

- The intercepts listed above encompass the full width of the mineralised lodes and have been selected to demonstrate the continuity and scale of mineralisation. A cut-off grade of 0.5% REE has been applied to define the outer limits of the mineralisation. Some intercepts include zones of internal waste within the lode. Broader zones of internal waste will be excluded from later estimates of identified resources. This should lead to an increase in grade of the resources above those listed in the table. Zero grade has been applied to all intervals of core loss within the lode;
- Total REO assays do not include Yttrium Oxide (Y_2O_3);
- Assay samples were selected on the bases of geological and radiometric logging and are representative of the various rock types and mineralisation styles intersected. RC assay samples range from 1 metre to 2 metres. Drill core assay intervals are rounded to the nearest 0.1 metres and are representative half-core samples of HQ3 and NQ2 core ranging in length from about 0.25 to 2 metres. Sample intervals rarely exceed 2.5 metres and only in unmineralised intervals. Samples were prepared and analysed using the same procedures and analytical techniques (3-acid digest, ICP-OES/MS) that were used in all previous drill programs at Nolans Bore;
- Drill hole collar coordinates are in MGA94 Zone 53.

** Analytical data subject to confirmation by inter-laboratory analyses.
*** 1 lb/t U_3O_8 equals 0.0454% U_3O_8


318,000 mE
318,500 mE
319,000 mE
319,500 mE
320,000 mE
7,502,500 mN
7,502,000 mN
7,501,500 mN
0
250
500
metres
N
NBDH1086
NBRD087
NBRC928
NBRD854
NBRD855
NBRD257
NBRC940
NBRD1036
NBRC848
NBRD328
NBRD012
NBRD084
NBRD891
NBDH1076
NBRD896
NBRD078
NBRD1028
NBRC853
NBRD834
NBRD870
NBRD1006
NBRD264
NBRD269
NBDH880
NBDH1071
NBDH1099
NBRD077
NBRD888
NBRD869
NBRC866
NBRC884
NBRD868
NBRD196
NBRD009
NBDH878
NBRD365
NBRD883
NBRD867
NBRD887
NBRD198
NBRC860
NBRC865
NBDH879
NBRC882
NBDH1078
NBRD194
NBRD340
NBRD958
NBRC881
NBRC957
NBRD338
NBRD097
NBRC1007
NBRD334
2001-2008 drill hole
Mineralisation envelope (2008)
JORC resource limit (2008)
2011 drill hole
RC (reverse circulation)
DDH (diamond core)
RC-DDH ("diamond tails")
Nolan's Bore
FIGURE 1:
NOLANS BORE RARE EARTHS DEPOSIT
2011 DRILLING PROGRAM:
DEEP RESOURCE DRILLING