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Threatened Species Assessment of Areas Adjacent to TGP

A targeted search for threatened species was undertaken for AngloGold Ashanti Australia by one botanist from Mattiske Consulting and two Environmental Officers from AngloGold Ashanti Australia between 5th – 8th May 2009 and 16th – 20th June 2009. The aim of the search was to locate additional populations of:

- *Grevillea secunda* (P2);
- *Acacia eremophila* var. *variabilis* (P3);
- *Acacia eremophila* numerous-nerved variant (P3);
- *Dicrastylis cundeeleensis* (P3);
- *Eucalyptus pimpiniana* (P3);
- *Comesperma viscidulum* (P4); and
- *Daviesia purpurascens* (P4)

outside of the Tropicana Gold Project operational area.

Upon finding a new population of the targeted species, the following parameters were noted:

- GPS location;
- Population size;
- Soil type and colour;
- Topography; and
- Equivalent Vegetation Mapping Code from Flora and Vegetation Survey – Pinjin Infrastructure Corridor L31/57, L39/185, Tropicana Gold Project (Mattiske Consulting, 2009).

Findings

Targeted Species were recorded from the following locations (Table 1):

The following additional Rare and Priority Species were recorded during the search from the following locations (Table 2):

- *Conospermum toddii* (R)
- *Baeckea* sp. Great Victoria Desert (A.S. Weston 14813) (P2)
- *Dicrastylis nicholasii* (P2)
- *Malleostemon* sp. Officer Basin (D. Pearson 350) (P2)
- *Olearia arida* (P2)
- *Microcorys macredieana* (P3)
- *Micromyrtus stenocalyx* (P3)
- *Lepidobolus deserti* (P4)

Table 1: Targeted Threatened Species located outside of the Tropicana Gold Project Operational Areas, May & June 2009

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
1	<i>Grevillea secunda</i>	585	672	6-10	E12	Orange Sandy Loam	Flat
2	<i>Grevillea secunda</i>	586	672	10-25	S8	Orange Yellow	Mid Slope
3	<i>Grevillea secunda</i>	586	672	6-10	S8	Orange Yellow	Mid Slope
4	<i>Grevillea secunda</i>	587	672	6-10	E12	Light orange	Mid Slope
5	<i>Grevillea secunda</i>	589	673	6-10	S9	Orange Yellow Sandy Loam	Mid Slope
6	<i>Grevillea secunda</i>	590	673	2-5	E4	Orange Yellow	Flat
7	<i>Grevillea secunda</i>	591	673	100-200	S8	Orange Yellow Sandy Loam	Flat
8	<i>Grevillea secunda</i>	591	673	11-25	S9	Orange Yellow Sandy Loam	Flat
9	<i>Grevillea secunda</i>	598	673	50-100	S8	Orange Yellow Sandy Loam	Flat
10	<i>Grevillea secunda</i>	629	672	11-25	S9	Orange yellow	Undulating
11	<i>Grevillea secunda</i>	629	672	6-10	S8	Yellow orange	Undulating
12	<i>Grevillea secunda</i>	629	672	11-25	S8	Orange yellow Sandy Loam	Undulating
13	<i>Grevillea secunda</i>	629	672	11-25	S8	Orange yellow sand	Undulating
14	<i>Grevillea secunda</i>	629	672	6-10	S8	Orange yellow Sandy Loam	Undulating
15	<i>Grevillea secunda</i>	629	672	11-25	S8	Orange yellow Sandy Loam	Undulating
16	<i>Grevillea secunda</i>	630	672	25-50	S8	Orange yellow Sand	Undulating
17	<i>Grevillea secunda</i>	630	672	2-5	S8	Yellow sand	Undulating
18	<i>Grevillea secunda</i>	630	672	2-5	S8	orange yellow Sandy Loam	Undulating
19	<i>Grevillea secunda</i>	630	672	25-50	S8	Orange yellow Sandy Loam	Undulating
20	<i>Grevillea secunda</i>	630	672	11-25	S8	Orange yellow Sandy Loam	Undulating
21	<i>Grevillea secunda</i>	630	672	25-50	S9	Yellow Sand	Undulating
22	<i>Grevillea secunda</i>	631	674	6-10	S9	Red orange	Mid slope
23	<i>Grevillea secunda</i>	631	672	6-10	S9	Orange Yellow Sand	Flat
24	<i>Grevillea secunda</i>	646	673	11-25	S8	Orange Sandy Loam	Flat
25	<i>Grevillea secunda</i>	647	673	25-50	S8	Orange yellow Sand	Undulating
26	<i>Grevillea secunda</i>	647	673	11-25	S8	Yellow Orange Sand	Undulating
27	<i>Grevillea secunda</i>	647	673	2-5	S8	Yellow Orange Sand	Undulating
28	<i>Grevillea secunda</i>	647	673	11-25	S8	Yellow Orange Sand	Undulating

Table 1: Targeted Threatened Species located outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
1	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	500	6588	50-100	N/A	Red Sandy Loam	Flat
2	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	501	6588	25-50	N/A	Red Sandy Loam	Flat
3	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	502	6588	10-25	N/A	Red Sandy Loam	Flat
4	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	502	6588	25-50	N/A	Red Sandy Loam	Flat
5	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	502	6589	10-25	N/A	Red Sandy Loam	Flat
6	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	502	6588	10-25	N/A	Red Sandy Loam	Flat
7	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	502	6590	25-50	N/A	Red Sandy Loam	Flat
8	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	503	6590	25-50	N/A	Red Sandy Loam	Flat
9	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	503	6590	10-25	N/A	Red Sandy Loam	Flat
10	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	503	6590	25-50	N/A	Red Sandy Loam	Flat
11	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	503	6589	25-50	N/A	Red Sandy Loam	Flat
12	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	503	6589	6-10	N/A	Red Sandy Loam	Flat
13	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	503	6589	10-25	N/A	Red Sandy Loam	Flat
14	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	503	6590	10-25	N/A	Red Sandy Loam	Flat
15	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	504	6590	10-25	N/A	Red Sandy Loam	Flat
16	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	504	6590	10-25	N/A	Red Sandy Loam	Flat
17	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	506	6590	6-10	N/A	Red Sandy Loam	Flat
18	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	506	6590	6-10	N/A	Red Sandy Loam	Flat
19	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	506	6590	6-10	N/A	Red Sandy Loam	Flat
20	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	507	6590	6-10	N/A	Red Sandy Loam	Flat
21	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	507	6590	10-25	N/A	Red Sandy Loam	Flat
22	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	507	6590	10-25	N/A	Red Sandy Loam	Flat
23	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	507	6590	10-25	N/A	Red Sandy Loam	Flat
24	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	507	6590	25-50	N/A	Red Sandy Loam	Flat
25	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	507	6590	25-50	N/A	Red Sandy Loam	Flat
26	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	692	6722	50-100	N/A	Red Sandy Loam	Flat
27	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	692	6722	50-100	N/A	Red Sandy Loam	Flat
28	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	692	6722	11-25	N/A	Red Sandy Loam	Flat

Table 1: Targeted Threatened Species located outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
29	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	694	6722	6-10	N/A	Red Sandy Loam	Flat
30	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	694	6722	25-50	N/A	Red Sandy Loam	Flat
31	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	694	6722	25-50	N/A	Red Sandy Loam	Flat
32	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	695	6722	11-25	N/A	Red Sandy Loam	Flat
33	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	695	6722	2-5	N/A	Red Sandy Loam	Flat
34	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	695	6722	50-100	N/A	Red Sandy Loam	Flat
35	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	695	6722	6-10	N/A	Red Sandy Loam	Flat
36	<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	695	6723	11-25	N/A	Red Sandy Loam	Flat
1	<i>Acacia eremophila</i> var. <i>variabilis</i>	503	6590	25-50	N/A	Red Sandy Loam	Flat
2	<i>Acacia eremophila</i> var. <i>variabilis</i>	503	6588	5-10	N/A	Red Sandy Loam	Flat
3	<i>Acacia eremophila</i> var. <i>variabilis</i>	503	6589	25-50	N/A	Red Sandy Loam	Flat
4	<i>Acacia eremophila</i> var. <i>variabilis</i>	506	6590	10-25	N/A	Red Sandy Loam	Flat
5	<i>Acacia eremophila</i> var. <i>variabilis</i>	508	6593	10-25	N/A	Red Sandy Loam	Flat
6	<i>Acacia eremophila</i> var. <i>variabilis</i>	509	6593	5-10	N/A	Red Sandy Loam	Flat
7	<i>Acacia eremophila</i> var. <i>variabilis</i>	509	6593	10-25	N/A	Red Sandy Loam	Flat
1	<i>Dicrastylis cundeeleensis</i>	502	6673	200-500	N/A	Red orange Sandy Loam	Flat
2	<i>Dicrastylis cundeeleensis</i>	631	6744	25-50	A2	Red orange Sandy Loam	Flat
3	<i>Dicrastylis cundeeleensis</i>	635	6744	11-25	A2	Red orange Sandy Loam	Flat
4	<i>Dicrastylis cundeeleensis</i>	636	6744	11-25	E3	Red orange Sandy Loam	Flat
5	<i>Dicrastylis cundeeleensis</i>	647	6787	500+	N/A	Orange Sandy Loam	Low Dune
6	<i>Dicrastylis cundeeleensis</i>	664	6729	100-200	E4	Orange yellow Sandy Loam	Swale
7	<i>Dicrastylis cundeeleensis</i>	666	6729	100-200	N/A	Orange red Sandy Loam	Swale
8	<i>Dicrastylis cundeeleensis</i>	699	6742	50-100	N/A	Orange Sandy Loam	Flat
1	<i>Eucalyptus pimpiniana</i>	585	6721	11-25	E12	Orange Sandy Loam	Flat
2	<i>Eucalyptus pimpiniana</i>	585	6720	25-50	E12	Orange Sandy Loam	Flat

Table 1: Targeted Threatened Species located outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
3	<i>Eucalyptus pampiniana</i>	586	672	6-10	E12	Light orange Sandy Loam	Flat
4	<i>Eucalyptus pampiniana</i>	586	672	25-50	E12	Light orange Sandy Loam	Lower Slope
1	<i>Comesperma viscidulum</i>	583	6719	1 plant	E12	Orange Sandy Loam	Flat
2	<i>Comesperma viscidulum</i>	583	6720	1 plant	E14	Orange Yellow Sand	Flat
3	<i>Comesperma viscidulum</i>	583	6721	11-25	E12	Orange Sandy Loam	Mid Slope
4	<i>Comesperma viscidulum</i>	583	6720	2-5	E12	Orange Sandy Loam	Flat
5	<i>Comesperma viscidulum</i>	586	6721	2-5	E12	Orange Sandy Loam	Mid Slope
6	<i>Comesperma viscidulum</i>	586	6722	2-5	E12	Orange Sandy Loam	Mid Slope
7	<i>Comesperma viscidulum</i>	586	6722	2-5	E12	Orange Sandy Loam	Mid Slope
8	<i>Comesperma viscidulum</i>	586	6721	1 plant	E12	Orange Yellow Sandy Loam	Mid Slope
9	<i>Comesperma viscidulum</i>	586	6722	6-10	E12	Orange Sandy Loam	Mid Slope
10	<i>Comesperma viscidulum</i>	601	6729	1 plant	E4	Orange Yellow Sandy Loam	Flat
11	<i>Comesperma viscidulum</i>	607	6728	6-10	E4	Yellow orange Sandy Loam	Flat
12	<i>Comesperma viscidulum</i>	607	6729	11-25	E4	Yellow orange Sand	Undulating
13	<i>Comesperma viscidulum</i>	608	6729	6-10	E4	Orange yellow Sandy Loam	Flat
14	<i>Comesperma viscidulum</i>	609	6728	50-100	E4	Yellow orange Sandy Loam	Undulating
15	<i>Comesperma viscidulum</i>	611	6728	25-50	E4	Orange yellow Sandy Loam	Flat
16	<i>Comesperma viscidulum</i>	616	6728	1 plant	E4	Orange yellow Sandy Loam	Mid Slope
17	<i>Comesperma viscidulum</i>	616	6727	1 plant	E4	Orange Sandy Loam	Mid Slope
18	<i>Comesperma viscidulum</i>	618	6727	2-5	E4	Orange Yellow Sand	Undulating
19	<i>Comesperma viscidulum</i>	619	6728	2-5	E4	Orange Yellow Sand	Flat
20	<i>Comesperma viscidulum</i>	619	6729	2-5	E4	Orange Yellow Sand	Flat
1	<i>Daviesia purpurascens</i>	583	6721	6-10	E12	Orange Sandy Loam	Mid Slope
2	<i>Daviesia purpurascens</i>	583	6720	2-5	E14	Orange Yellow Sand	Flat
3	<i>Daviesia purpurascens</i>	583	6720	2-5	E12	Orange Sandy Loam	Flat
4	<i>Daviesia purpurascens</i>	586	6721	10-25	E12	Orange Sandy Loam	Mid Slope

Table 1: Targeted Threatened Species located outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
5	<i>Daviesia purpurascens</i>	586	6722	6-10	E12	Orange Sandy Loam	Mid Slope
6	<i>Daviesia purpurascens</i>	586	6721	2-5	E12	Orange yellow Sandy Loam	Mid Slope
7	<i>Daviesia purpurascens</i>	586	6722	6-10	E12	Orange Sandy Loam	Mid Slope
8	<i>Daviesia purpurascens</i>	587	6723	2-5	E12	Orange Sandy Loam	Flat
9	<i>Daviesia purpurascens</i>	591	6732	2-5	S9	Orange Yellow Sandy Loam	Flat
10	<i>Daviesia purpurascens</i>	598	6730	2-5	S8	Orange Yellow Sandy Loam	Flat
11	<i>Daviesia purpurascens</i>	601	6729	2-5	E4	Orange Yellow Sandy Loam	Flat
12	<i>Daviesia purpurascens</i>	607	6728	11-25	E4	Yellow orange Sandy Loam	Flat
13	<i>Daviesia purpurascens</i>	607	6729	1 plant	E4	Yellow orange Sand	Und
14	<i>Daviesia purpurascens</i>	608	6728	2-5	E4	Orange yellow Sandy Loam	Flat
15	<i>Daviesia purpurascens</i>	608	6728	6-10	E4	Orange yellow Sandy Loam	Flat
16	<i>Daviesia purpurascens</i>	609	6728	6-10	E4	Yellow orange Sandy Loam	Undulating
17	<i>Daviesia purpurascens</i>	610	6728	11-25	E4	Orange yellow Sandy Loam	Mid Slope
18	<i>Daviesia purpurascens</i>	611	6728	2-5	E4	Orange Sandy Loam	Flat
19	<i>Daviesia purpurascens</i>	613	6728	2-5	E4	Orange Sandy Loam	Flat
20	<i>Daviesia purpurascens</i>	630	6745	11-25	E3	Red Sandy Loam	Flat

Table 2: Additional Rare and Priority Species Located Outside of the Tropicana Gold Project Operational Areas, May & June 2009.

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
1	<i>Conospermum toddii</i>	648	6736	100-200	S11	Yellow sand	Dune
2	<i>Conospermum toddii</i>	648	6736	100-200	S11	Yellow Orange Sand	Dune
1	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	587	6723	11-25	E12	Orange Sandy Loam	Flat
2	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	598	6730	50-100	S8	Orange Yellow Sandy Loam	Flat
3	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	617	6727	6-10	E4	Orange Sandy Loam	Mid slope
4	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	629	6727	100-200	S8	Orange yellow Sand	Undulating
5	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	629	6727	25-50	S8	Yellow orange Sand	Undulating
6	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	629	6727	25-50	S8	Orange yellow Sandy Loam	Undulating
7	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	629	6727	25-50	S8	Orange yellow Sandy Loam	Undulating
8	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	630	6727	11-25	S9	Orange yellow Sandy Loam	Undulating
9	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	630	6726	11-25	S8	Yellow sand	Undulating
10	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	630	6727	11-25	S9	Orange yellow Sandy Loam	Undulating
11	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	630	6727	11-25	S9	Orange yellow Sandy Loam	Undulating
12	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	642	6739	6-10	A2/E4	Orange Sand	Flat
13	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	646	6739	6-10	S8	Orange Sandy Loam	Flat
14	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	646	6739	2-5	S8	Orange Sandy Loam	Flat
15	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	646	6739	6-10	S8	Orange Sandy Loam	Flat
16	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	647	6739	11-25	S8	Orange Sandy Loam	Flat
17	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	648	6739	25-50	E4	Orange Sandy Loam	Mid slope
18	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	648	6740	11-25	E4	Red orange Sandy Loam	Mid slope
19	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	648	6736	50-100	A2/E4	Orange Sandy Loam	Flat
20	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	652	6736	6-10	A5	Red orange Sandy Loam	Flat
21	<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	661	6729	100-200	S8	Yellow orange Sandy Loam	Flat
1	<i>Dicrastylis nicholasii</i>	631	6744	25-50	E3	Red Sandy Loam	Flat
2	<i>Dicrastylis nicholasii</i>	631	6744	100-200	A2	Red orange Sandy Loam	Flat
3	<i>Dicrastylis nicholasii</i>	631	6744	25-50	A5	Red orange Sandy Loam	Flat

Table 2: Additional Rare and Priority Species Located Outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
4	<i>Dicrastyliis nicholasii</i>	632	6744	25-50	A2	Red orange Sandy Loam	Flat
5	<i>Dicrastyliis nicholasii</i>	632	6736	100-200	A5	Red Sandy Loam	Flat
6	<i>Dicrastyliis nicholasii</i>	632	6750	50-100	A2	Red Sandy Loam	Flat
7	<i>Dicrastyliis nicholasii</i>	634	6736	6-10	A2	Red Sandy Loam	Flat
8	<i>Dicrastyliis nicholasii</i>	635	6744	25-50	A2	Red Sandy Loam	Flat
9	<i>Dicrastyliis nicholasii</i>	636	6744	25-50	E3	Orange Red Sandy Loam	Flat
10	<i>Dicrastyliis nicholasii</i>	638	6744	11-25	E3	Orange Red Sandy Loam	Flat
11	<i>Dicrastyliis nicholasii</i>	638	6735	6-10	A2	Orange Red Sandy Loam	Flat
12	<i>Dicrastyliis nicholasii</i>	648	6743	25-50	E3	Red Sandy Loam	Flat
13	<i>Dicrastyliis nicholasii</i>	648	6741	2-5	A2	Orange Sandy Loam (laterite)	Flat
14	<i>Dicrastyliis nicholasii</i>	648	6741	11-25	A2	Orange Sandy Loam (laterite)	Flat
15	<i>Dicrastyliis nicholasii</i>	666	6729	25-50	N/A	Orange red Sandy Loam	Swale
16	<i>Dicrastyliis nicholasii</i>	676	6755	100-200	A5	Orange Sandy Loam	Flat
17	<i>Dicrastyliis nicholasii</i>	680	6754	50-100	A5	Orange Sandy Loam	Flat
18	<i>Dicrastyliis nicholasii</i>	682	6752	100-200	E3	Orange red Sandy Loam	Flat
19	<i>Dicrastyliis nicholasii</i>	683	6742	100-200	N/A	Orange red Sandy Loam	Flat
20	<i>Dicrastyliis nicholasii</i>	685	6736	50-100	A5	Orange red Sandy Loam	Flat
21	<i>Dicrastyliis nicholasii</i>	689	6733	200-500	A2	Red orange Sandy Loam	Flat
22	<i>Dicrastyliis nicholasii</i>	692	6722	100-200	N/A	Red Sandy Loam	Flat
23	<i>Dicrastyliis nicholasii</i>	692	6722	50-100	N/A	Red Sandy Loam	Flat
24	<i>Dicrastyliis nicholasii</i>	694	6721	50-100	N/A	Red Sandy Loam	Flat
25	<i>Dicrastyliis nicholasii</i>	694	6722	100-200	N/A	Red Sandy Loam	Flat
26	<i>Dicrastyliis nicholasii</i>	694	6722	11-25	N/A	Red Sandy Loam	Flat
27	<i>Dicrastyliis nicholasii</i>	695	6722	2-5	N/A	Red Sandy Loam	Flat
28	<i>Dicrastyliis nicholasii</i>	695	6723	2-5	N/A	Red Sandy Loam	Flat
29	<i>Dicrastyliis nicholasii</i>	695	6739	100-200	N/A	Orange Sandy Loam	Flat
1	<i>Malleostemon</i> sp. Officer Basin	659	6736	1 plant	S11	Yellow sand	Dune

Table 2: Additional Rare and Priority Species Located Outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
2	<i>Malleostemon</i> sp. Officer Basin	659	6736	2-5	S11	Yellow sand	Dune
1	<i>Olearia arida</i>	588	6729	11-25	E4	Orange Yellow Sandy Loam	Flat
2	<i>Olearia arida</i>	600	6730	11-25	E4	Orange Yellow Sandy Loam	Flat between
3	<i>Olearia arida</i>	600	6730	11-25	E4	Orange Yellow Sandy Loam	Flat
4	<i>Olearia arida</i>	600	6730	11-25	E4	Sandy Loam	Flat
5	<i>Olearia arida</i>	601	6729	25-50	E4	Orange Yellow Sandy Loam	Flat between
6	<i>Olearia arida</i>	602	6729	50-100	E4	Orange Sandy Loam	Flat
7	<i>Olearia arida</i>	603	6729	6-10	E4	Orange Sandy Loam	Flat
8	<i>Olearia arida</i>	613	6728	6-10	E4	Orange Sandy Loam	Lower Slope
9	<i>Olearia arida</i>	640	6743	25-50	E4	Red Sandy Loam	Mid Slope
10	<i>Olearia arida</i>	642	6739	2-5	A2 / E4	Orange Sandy Loam	Flat
11	<i>Olearia arida</i>	642	6739	6-10	A2 / E4	Orange Sand	Flat
1	<i>Microcorys macredieana</i>	590	6731	25-50	E4	Orange yellow Sandy Loam	Flat
2	<i>Microcorys macredieana</i>	607	6729	2-5	E4	Yellow orange Sand	Und
3	<i>Microcorys macredieana</i>	608	6729	2-5	E4	Orange yellow Sandy Loam	Flat
4	<i>Microcorys macredieana</i>	608	6728	2-5	E4	Orange yellow Sandy Loam	Flat
5	<i>Microcorys macredieana</i>	609	6728	6-10	E4	Yellow orange Sandy Loam	Undulating
6	<i>Microcorys macredieana</i>	615	6728	2-5	E4	Orange Sandy Loam	Mid Slope
7	<i>Microcorys macredieana</i>	629	6726	2-5	S8	Orange Yellow Sand	Undulating
8	<i>Microcorys macredieana</i>	640	6742	25-50	E15	Yellow orange Sand	Midslope
9	<i>Microcorys macredieana</i>	640	6742	25-50	E15	Yellow orange Sand	Midslope
10	<i>Microcorys macredieana</i>	645	6736	11-25	S11	Yellow sand	Dune
11	<i>Microcorys macredieana</i>	645	6736	50-100	S11	Yellow sand	Dune
12	<i>Microcorys macredieana</i>	647	6736	11-25	S8	Orange yellow Sand	Undulating
13	<i>Microcorys macredieana</i>	647	6736	11-25	S8	Yellow orange Sand	Undulating

Table 2: Additional Rare and Priority Species Located Outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
14	<i>Microcorys macredieana</i>	647	6736	6-10	S8	Yellow orange Sand	Undulating
15	<i>Microcorys macredieana</i>	648	6736	25-50	S11	Yellow sand	Dune
16	<i>Microcorys macredieana</i>	648	6736	6-10	S11	Yellow orange Sand	Dune
17	<i>Microcorys macredieana</i>	649	6735	2-5	S11	Yellow sand	Dune
18	<i>Microcorys macredieana</i>	650	6736	6-10	S11	Yellow sand	Dune
19	<i>Microcorys macredieana</i>	664	6729	2-5	E4	Sandy Loam	Swale
1	<i>Micromyrtus stenocalyx</i>	615	6727	50-100	S11	Yellow Orange Sand	Dune
2	<i>Micromyrtus stenocalyx</i>	629	6727	6-10	S8	Yellow Orange Sand	Undulating
3	<i>Micromyrtus stenocalyx</i>	645	6739	6-10	S11	Orange Sandy Loam	Dune
4	<i>Micromyrtus stenocalyx</i>	647	6736	25-50	S8	Yellow Orange Sand	Undulating
5	<i>Micromyrtus stenocalyx</i>	647	6736	25-50	S8	Yellow Orange Sand	Undulating
6	<i>Micromyrtus stenocalyx</i>	648	6736	100-200	S11	Yellow Orange Sand	Dune
7	<i>Micromyrtus stenocalyx</i>	648	6736	6-10	S11	Yellow sand	Dune
8	<i>Micromyrtus stenocalyx</i>	648	6740	25-50	S11	Orange Red Sandy Loam	Dune
9	<i>Micromyrtus stenocalyx</i>	648	6739	11-25	E4	Orange Sandy Loam	Mid Slope
10	<i>Micromyrtus stenocalyx</i>	649	6735	2-5	S11	Yellow sand	Dune
11	<i>Micromyrtus stenocalyx</i>	650	6736	11-25	S11	Yellow sand	Dune
12	<i>Micromyrtus stenocalyx</i>	657	6735	11-25	S11	Yellow sand	Dune
13	<i>Micromyrtus stenocalyx</i>	659	6736	11-25	S11	Yellow sand	Dune
14	<i>Micromyrtus stenocalyx</i>	659	6736	100-200	S11	Yellow sand	Dune
15	<i>Micromyrtus stenocalyx</i>	659	6736	11-25	S11	Yellow sand	Dune
1	<i>Lepidobolus deserti</i>	586	6722	50-100	E12	Orange Sandy Loam	Mid Slope
2	<i>Lepidobolus deserti</i>	586	6722	100-200	E12	Orange Sandy Loam	Mid Slope
3	<i>Lepidobolus deserti</i>	586	6722	11-25	E12	Orange Sandy Loam	Mid Slope
4	<i>Lepidobolus deserti</i>	607	6728	2-5	E4	Yellow orange Sandy Loam	Flat
5	<i>Lepidobolus deserti</i>	607	6729	100-200	E4	Yellow orange Sandy Loam	Undulating

Table 2: Additional Rare and Priority Species Located Outside of the Tropicana Gold Project Operational Areas, May & June 2009 (Continued)

No	Species	Eastings	Northings	Size of Population	Equivalent Vegetation Community	Soil Type	Topography
		(MGA94 51J)					
6	<i>Lepidobolus deserti</i>	608	6729	50-100	E4	Orange yellow Sandy Loam	Flat
7	<i>Lepidobolus deserti</i>	629	6727	25-50	S8	Yellow orange Sandy Loam	Undulating
8	<i>Lepidobolus deserti</i>	629	6726	11-25	S8	Orange yellow Sandy Loam	Undulating
9	<i>Lepidobolus deserti</i>	647	6736	200-500	S8	Yellow Orange Sand	Undulating
10	<i>Lepidobolus deserti</i>	647	6736	100-200	S8	Yellow Orange Sand	Undulating
11	<i>Lepidobolus deserti</i>	648	6736	100-200	S11	Yellow Sand	Dune
12	<i>Lepidobolus deserti</i>	648	6736	25-50	S11	Yellow Orange Sand	Dune
13	<i>Lepidobolus deserti</i>	648	6736	50-100	S11	Yellow Sand	Dune
14	<i>Lepidobolus deserti</i>	648	6740	100-200	S11	Orange Red Sandy Loam	Dune
15	<i>Lepidobolus deserti</i>	648	6736	50-100	A2/E4	Orange Sandy Loam	Flat
16	<i>Lepidobolus deserti</i>	649	6735	2-5	S11	Yellow Sand	Dune

Applicable Vegetation Codes from Mattiske Consulting (2009) include:

- E3** – Low Woodland of *Eucalyptus trivalva* and *Eucalyptus concinna* over mixed shrubs over *Triodia* spp. This community occurs on red sandy loam on flats.
- E4** – Low Woodland to Low Open Woodland of *Eucalyptus gongylocarpa* with *Callitris preissii* and *Eucalyptus* spp. over mixed shrubs over *Triodia* spp. This community occurs on orange, red-orange, yellow-orange and yellow sandy loams on mixed topographies.
- E12** – Open Shrub Mallee to Very Open Shrub Mallee of *Eucalyptus platycorys*, *Eucalyptus oleosa*, *Eucalyptus horistes* and other *Eucalyptus* spp. over *Westringia cephalantha*, *Acacia sibina*, *Acacia hemiteles* over *Triodia* spp. This community occurs on orange sandy loam on flats.
- E14** – Very Open Shrub Mallee of *Eucalyptus rosacea* with *Callitris preissii* over *Acacia sibina*, *Phebalium laevigatum* and low Myrtaceous shrubs over *Triodia* spp. This community occurs on orange sandy loams on flats.
- E15** – Very Open Shrub Mallee of *Eucalyptus youngiana* and mixed *Eucalyptus* spp. over *Acacia desertorum* var. *desertorum*, *Bertya dimerostigma*, *Westringia cephalantha*, *Cryptandra distigma* with mixed shrubs over *Triodia desertorum*. This community occurs on orange sandy loams on lower slopes.
- A2** – Low Woodland to Tall Shrubland of *Acacia ayersiana* and *Acacia aneura* var. *aneura* with *Acacia aneura* var. *argentea* over *Eremophila* spp., *Aluta maisonneuvei* subsp. *auriculata* and *Prostanthera* spp. This community occurs on orange sandy loam with a covering of gravel on lower slopes or flats.
- A5** – Tall Shrubland of *Acacia ayersiana* and *Acacia aneura* var. *aneura* with *Eucalyptus trivalva* over mixed shrubs over *Triodia* spp. with *Eragrostis eriopoda*. This community occurs on red sandy loams on flats.
- S8** – Low Shrubland of *Acacia desertorum* var. *desertorum* with *Grevillea junceifolia*, low Myrtaceous shrubs and mixed low shrubs with occasional emergent *Eucalyptus youngiana* and *Eucalyptus* spp. This community occurs on pale orange sandy loams on flats and lower slopes.
- S9** – Low Shrubland of *Leptosema chambersii*, *Baeckea* sp. Great Victoria Desert, *Homalocalyx thryptomenoides*, *Enekbatus eremaeus*, *Cryptandra distigma* with mixed low shrubs and occasional emergent *Eucalyptus* spp. This community occurs on yellow-orange sandy loams on lower and mid slopes.
- S11** – Low Open Shrubland of *Thryptomene biseriata*, *Lomandra leucocephala*, *Pityrodia lepidota*, *Scaevola basedowii*, *Chrysocephalum puteale* with mixed low shrub over *Triodia* spp. and *Lepidobolus deserti* with occasional emergent *Eucalyptus* spp. This community occurs on yellow or yellow-orange sand dunes

For some records, equivalent vegetation communities were not applicable, as Mattiske (2009) vegetation communities did not match the surrounding vegetation. This was notable for *Acacia eremophila* numerous-nerved variant (A.S. George 11924) and *Acacia eremophila* var. *variabilis*, as all populations were recorded large distances away from the Mattiske (2009) survey area.

Vegetation records for *Acacia eremophila* numerous-nerved variant (A.S. George 11924) include Open Shrub Mallee of *Eucalyptus concinna* over *Triodia basedowii* and low shrubs, Low Open Woodland of *Eucalyptus gongylocarpa* over *Eucalyptus concinna* over *Triodia basedowii* and low shrubs, Low Open Woodland of *Eucalyptus hypolaena* with *Eucalyptus gongylocarpa* over *Eucalyptus concinna* over *Triodia basedowii* and low shrubs.

Vegetation records for *Acacia eremophila* var. *variabilis* include Open Shrub Mallee of *Eucalyptus* spp. over *Triodia* spp. and low shrubs.

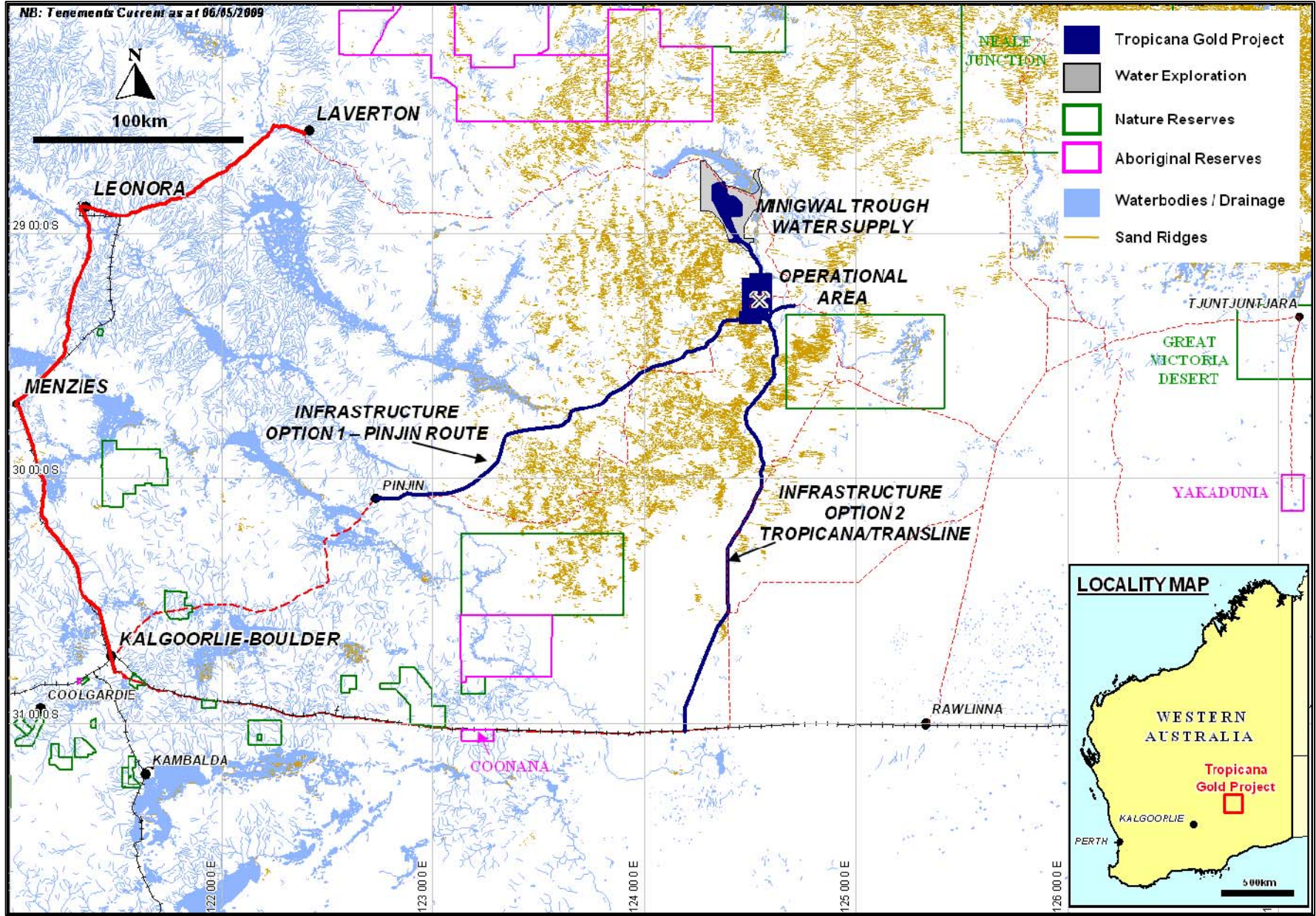
The total number of records for each species is presented in Table 3 (below).

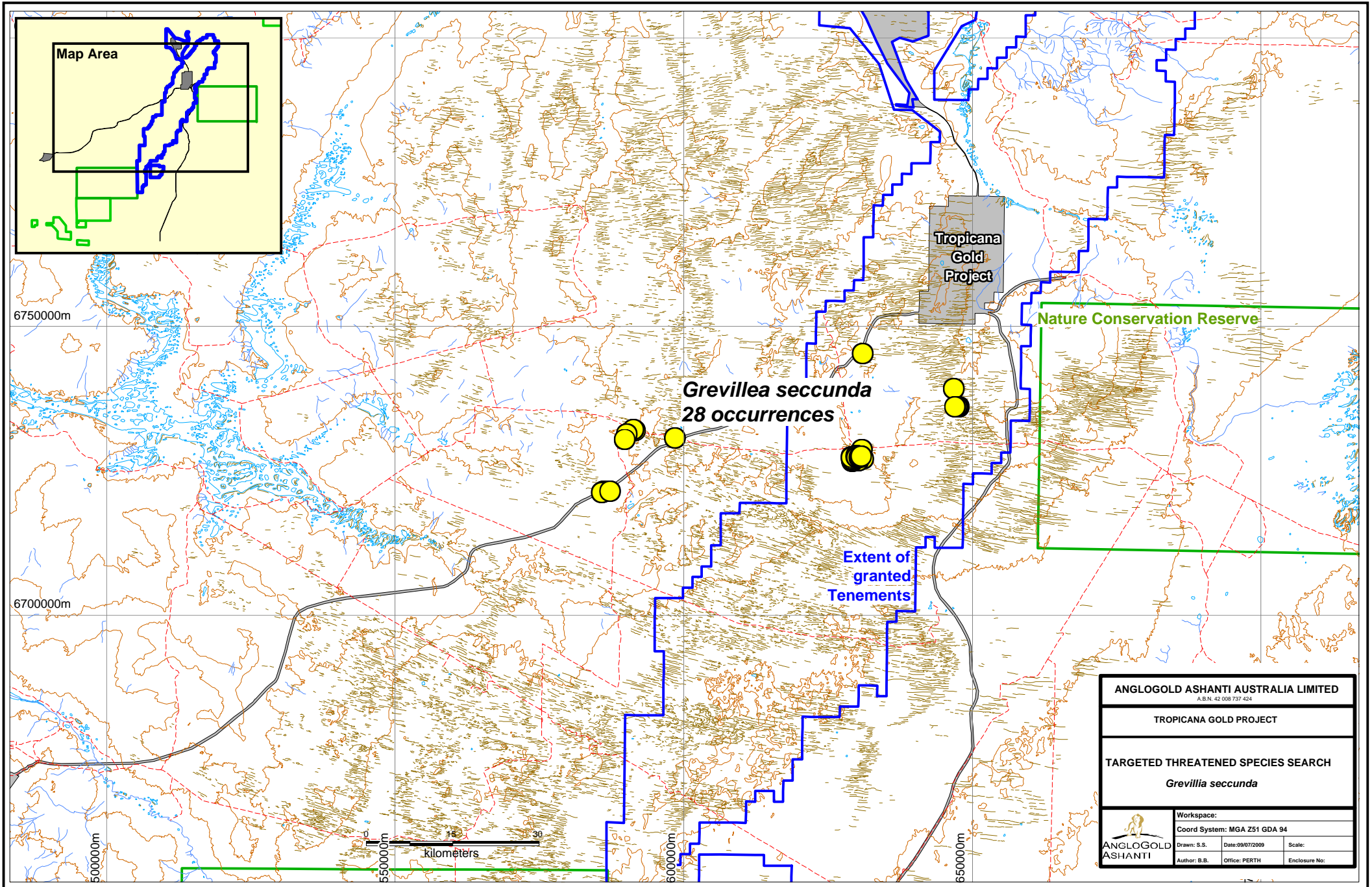
Species	Total Records from Survey
<i>Grevillea secunda</i>	627 ± 223
<i>Acacia eremophila</i> numerous-nerved variant (A.S. George 11924)	978 ± 347
<i>Acacia eremophila</i> var. <i>variabilis</i>	143 ± 52
<i>Dicrastylis cundeeleensis</i>	1298 ± 302
<i>Eucalyptus pimpiniana</i>	100 ± 35
<i>Comesperma viscidulum</i>	201 ± 100
<i>Daviesia purpurascens</i>	145 ± 55
<i>Conospermum toddii</i>	300 ± 100
<i>Baeckea</i> sp. Great Victoria Desert (A.S. Weston 14813)	765 ± 265
<i>Dicrastylis nicholasii</i>	2263 ± 796
<i>Malleostemon</i> sp. Officer Basin	5 ± 1.5
<i>Olearia arida</i>	247 ± 88
<i>Microcorys macredieana</i>	331 ± 118.5
<i>Micromyrtus stenocalyx</i>	602 ± 208
<i>Lepidobolus deserti</i>	1517 ± 543

Fourteen of the twenty-nine *Dicrastylis nicholasii* records and three of the eight *Dicrastylis cundeeleensis* records were recorded from sites regenerating from past fire.

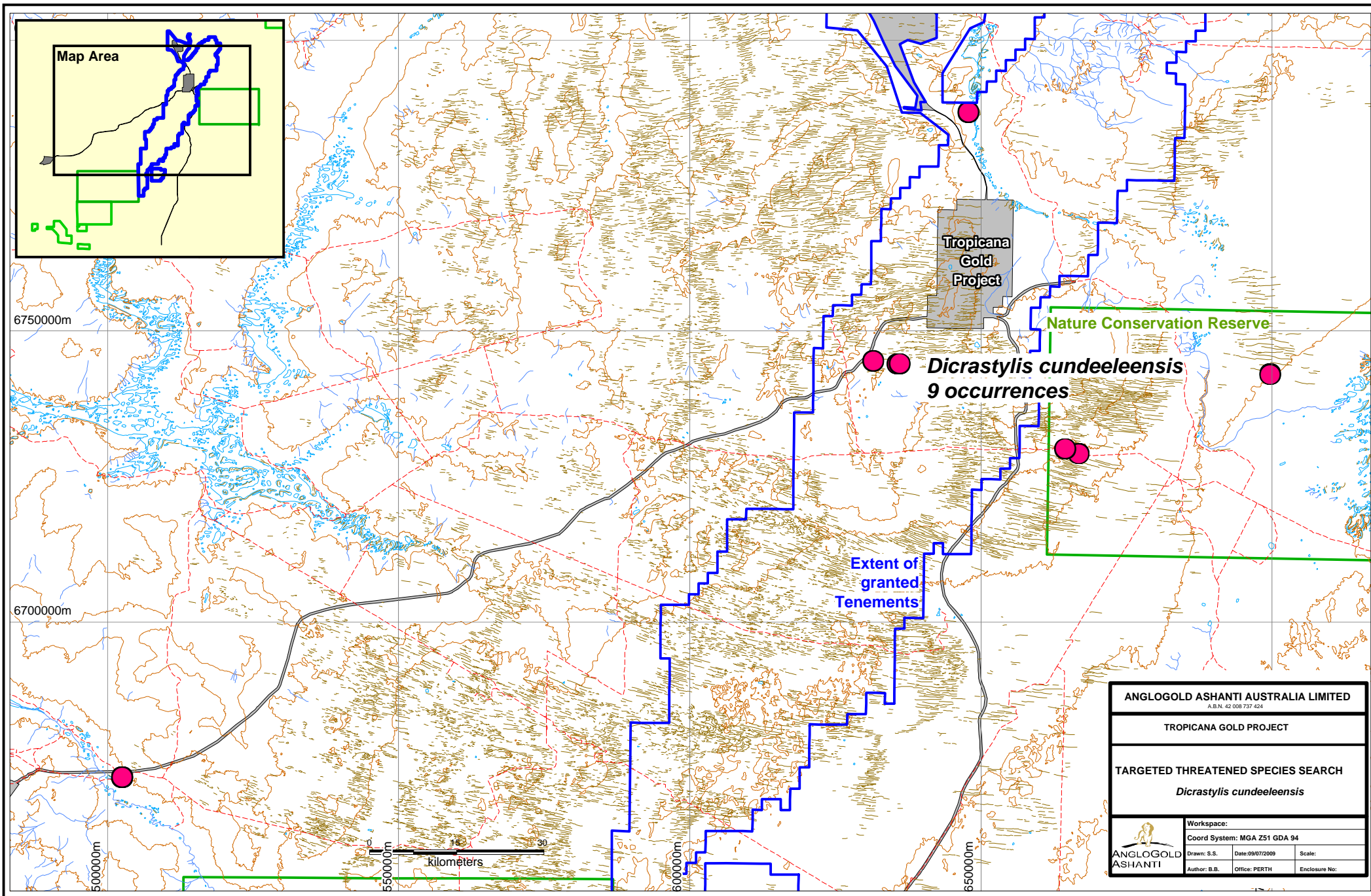
All Declared Rare Flora forms will be submitted to the Department of Environment and Conservation and plant specimens collected will be lodged with the Western Australian Herbarium.

NB: Tenements Current as at 06/05/2009

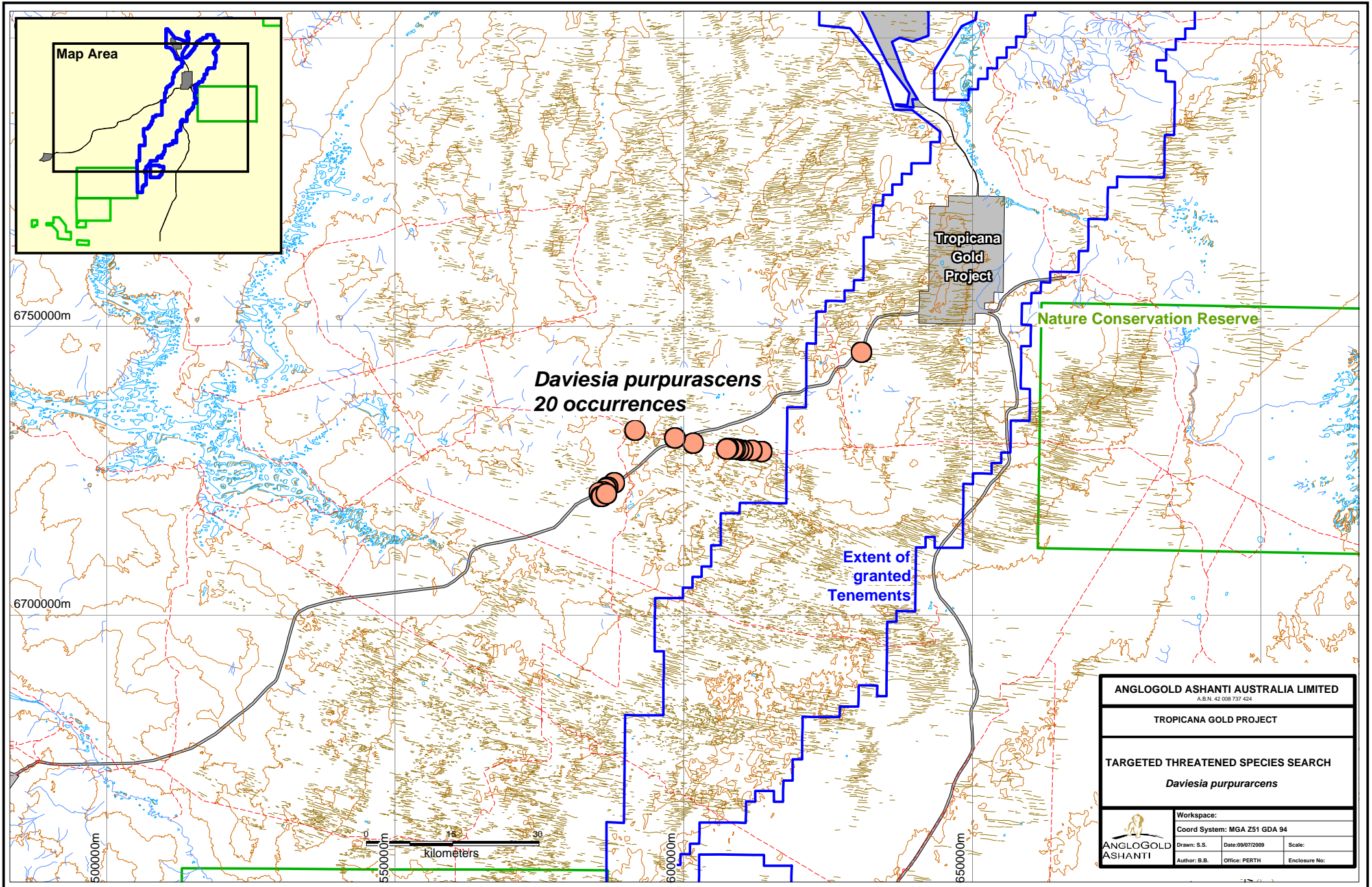




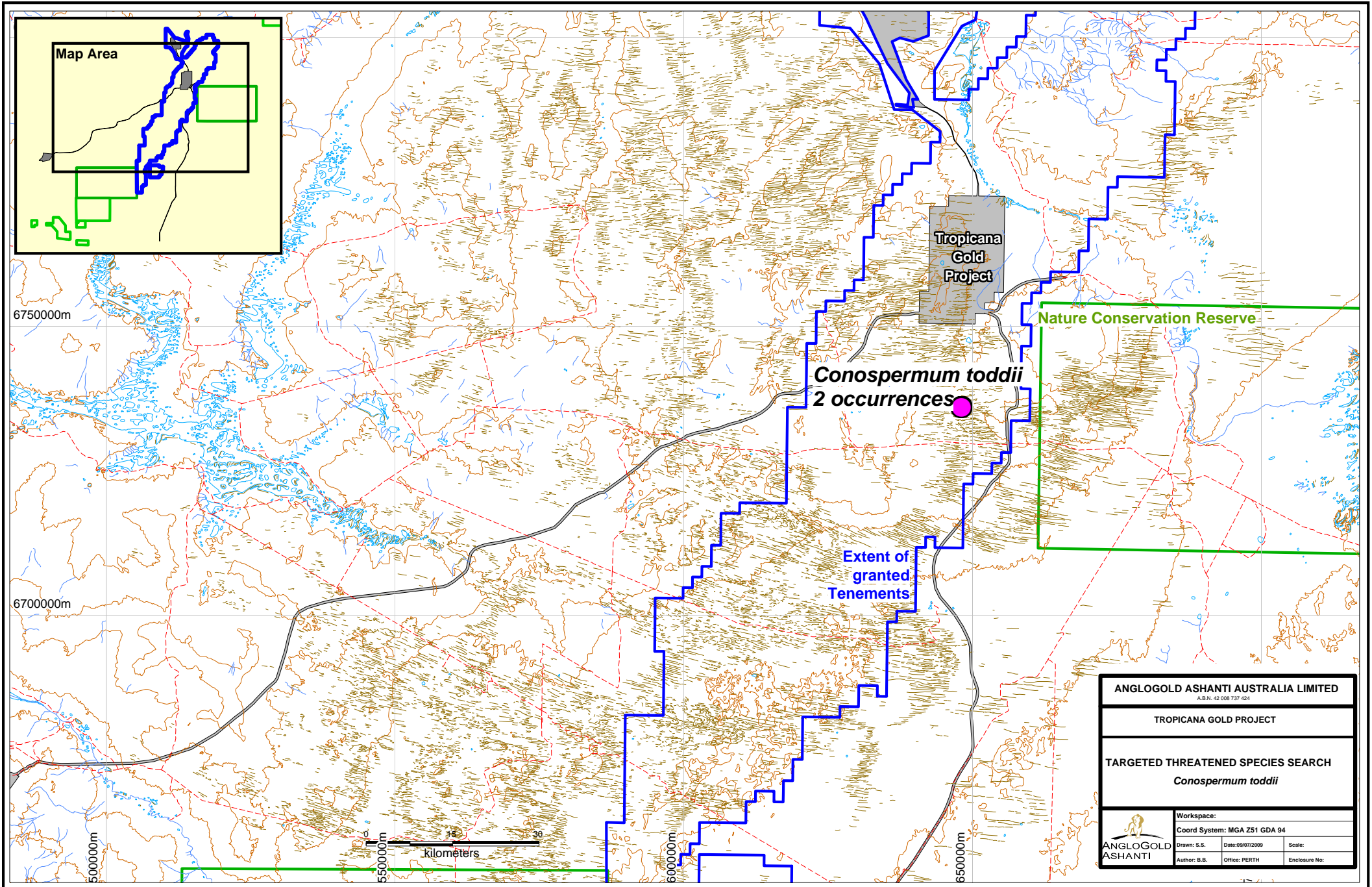
ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>		
TROPICANA GOLD PROJECT		
TARGETED THREATENED SPECIES SEARCH <i>Grevillea secunda</i>		
ANGLOGOLD ASHANTI		
Workspace: Coord System: MGA Z51 GDA 94		
Drawn: S.S.	Date: 09/07/2009	Scale:
Author: B.B.	Office: PERTH	Enclosure No:



ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>		
TROPICANA GOLD PROJECT		
TARGETED THREATENED SPECIES SEARCH <i>Dicrasyllis cundeeleensis</i>		
ANGLOGOLD ASHANTI		
Workspace: Coord System: MGA Z51 GDA 94		
Drawn: S.S.	Date: 09/07/2009	Scale:
Author: B.B.	Office: PERTH	Enclosure No:

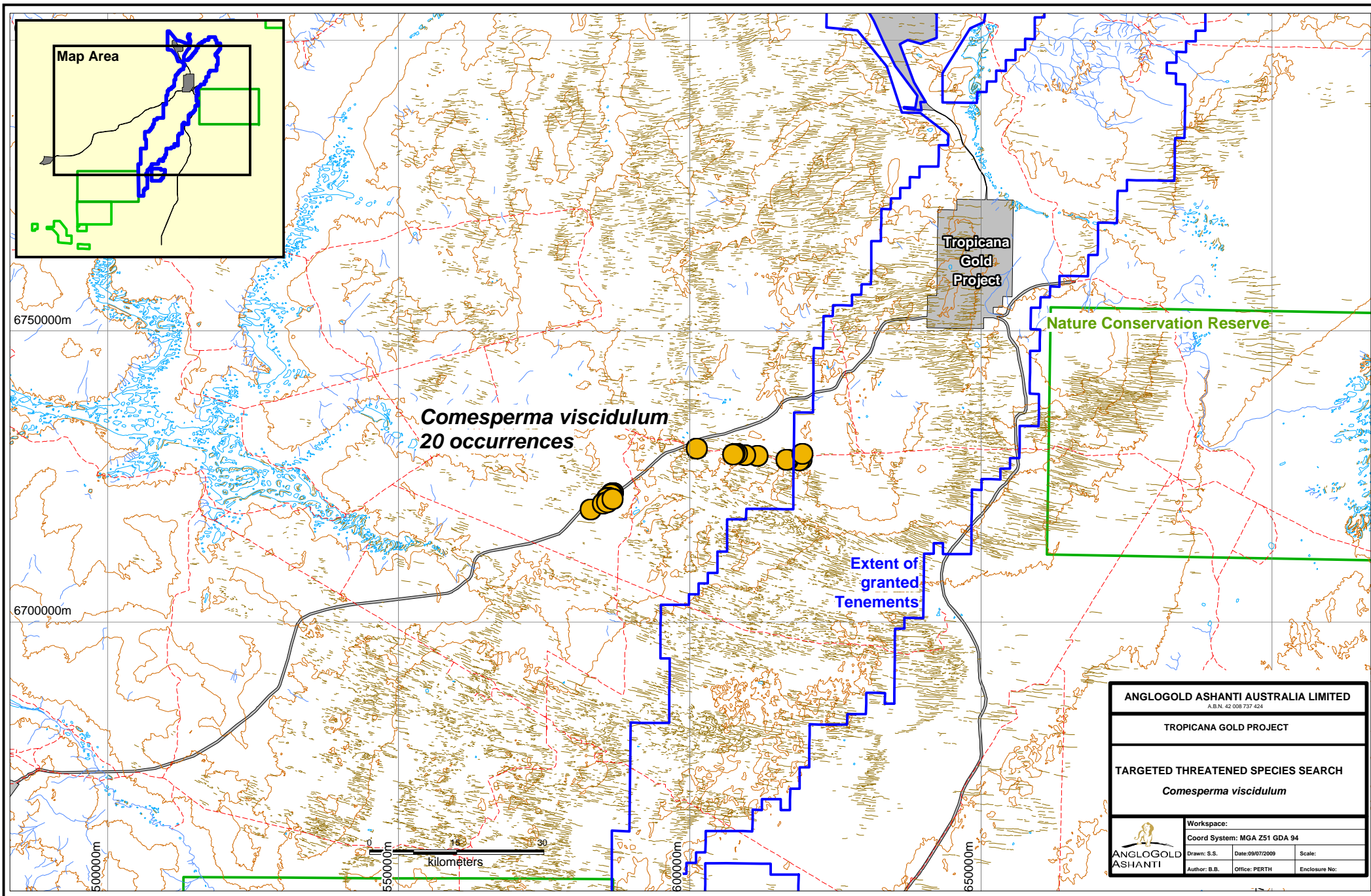


ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>		
TROPICANA GOLD PROJECT		
TARGETED THREATENED SPECIES SEARCH <i>Daviesia purpurascens</i>		
ANGLOGOLD ASHANTI		
Workspace:		
Coord System: MGA Z51 GDA 94		
Drawn: S.S.	Date: 09/07/2009	Scale:
Author: B.B.	Office: PERTH	Enclosure No:

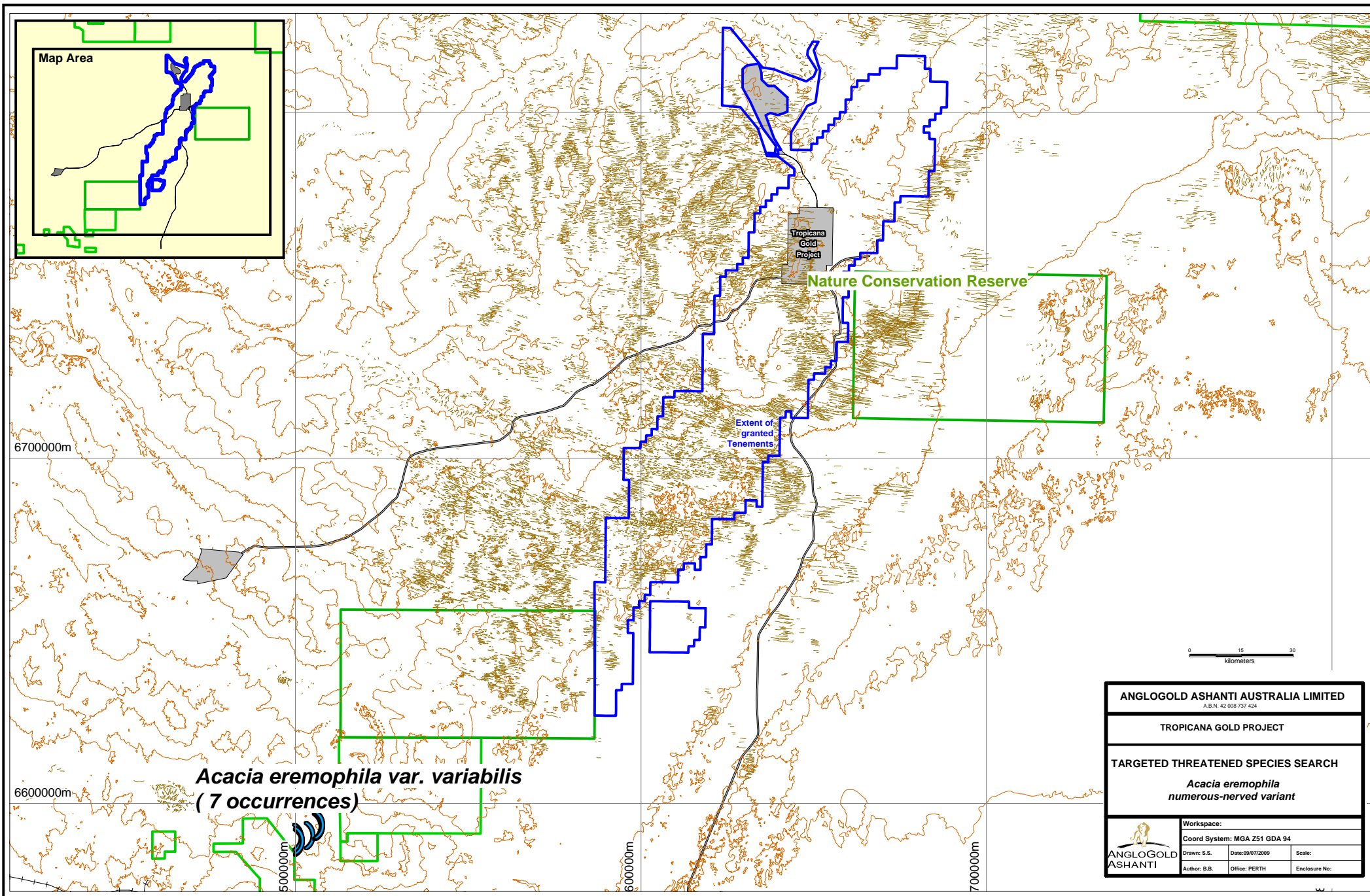


ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>		
TROPICANA GOLD PROJECT		
TARGETED THREATENED SPECIES SEARCH <i>Conospermum toddii</i>		
<small>Workspace:</small>		
<small>Coord System: MGA Z51 GDA 94</small>		
<small>Drawn: S.S.</small>	<small>Date: 09/07/2009</small>	<small>Scale:</small>
<small>Author: B.B.</small>	<small>Office: PERTH</small>	<small>Enclosure No:</small>

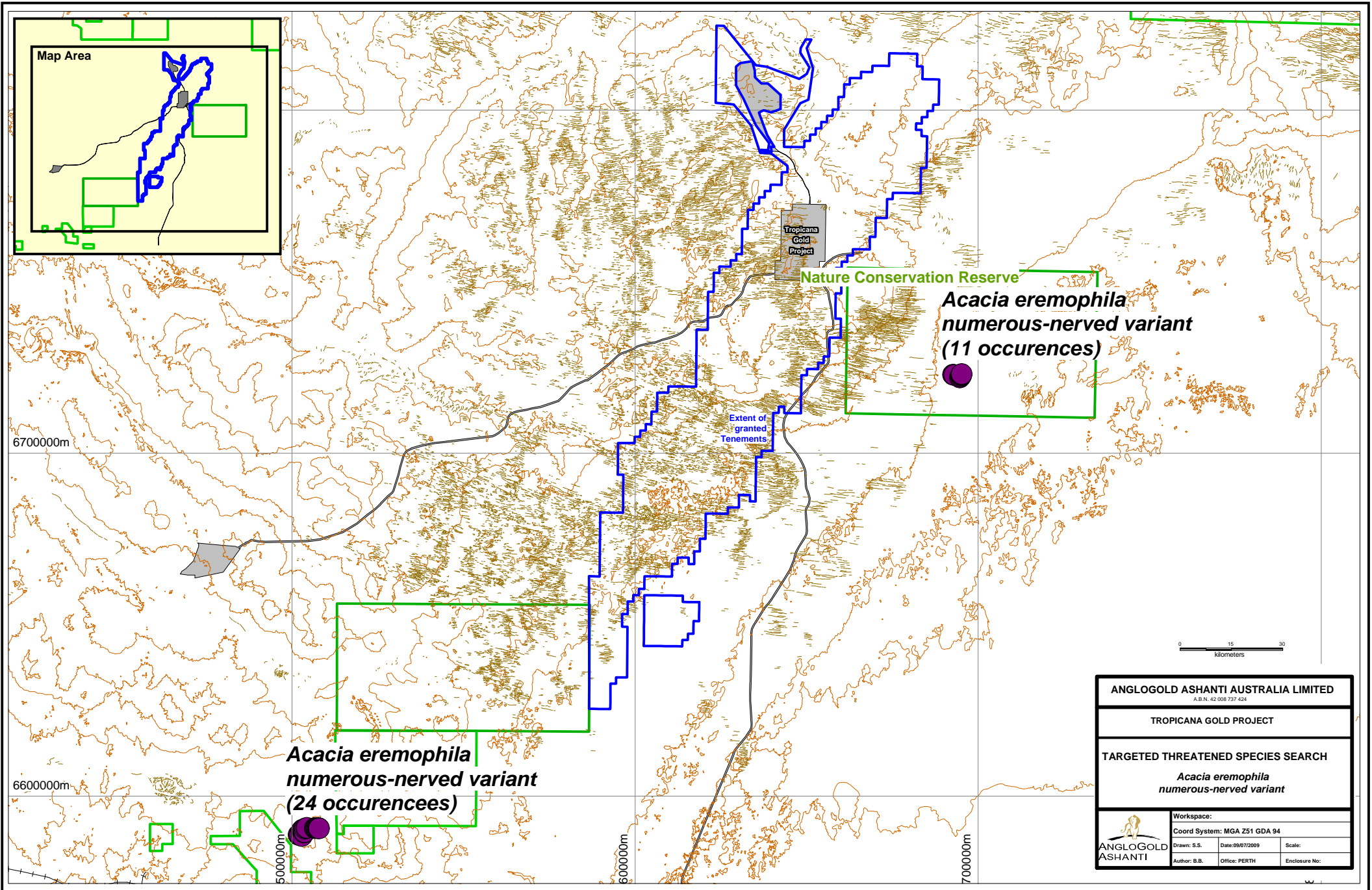




ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>		
TROPICANA GOLD PROJECT		
TARGETED THREATENED SPECIES SEARCH <i>Comesperma viscidulum</i>		
ANGLOGOLD ASHANTI		
Workspace: Coord System: MGA Z51 GDA 94		
Drawn: S.S.	Date: 09/07/2009	Scale:
Author: B.B.	Office: PERTH	Enclosure No:



ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>		
TROPICANA GOLD PROJECT		
TARGETED THREATENED SPECIES SEARCH <i>Acacia eremophila</i> <i>numerous-nerved variant</i>		
<small>Workspace:</small>		
<small>Coord System: MGA Z51 GDA 94</small>		
<small>Drawn: S.S.</small>	<small>Date: 09/07/2009</small>	<small>Scale:</small>
<small>Author: B.B.</small>	<small>Office: PERTH</small>	<small>Enclosure No:</small>



Map Area

Tropicana Gold Project

Nature Conservation Reserve

Acacia eremophila
 numerous-nerved variant
 (11 occurrences)

Extent of granted Tenements

6700000m

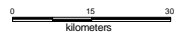
6600000m

Acacia eremophila
 numerous-nerved variant
 (24 occurrences)

500000m

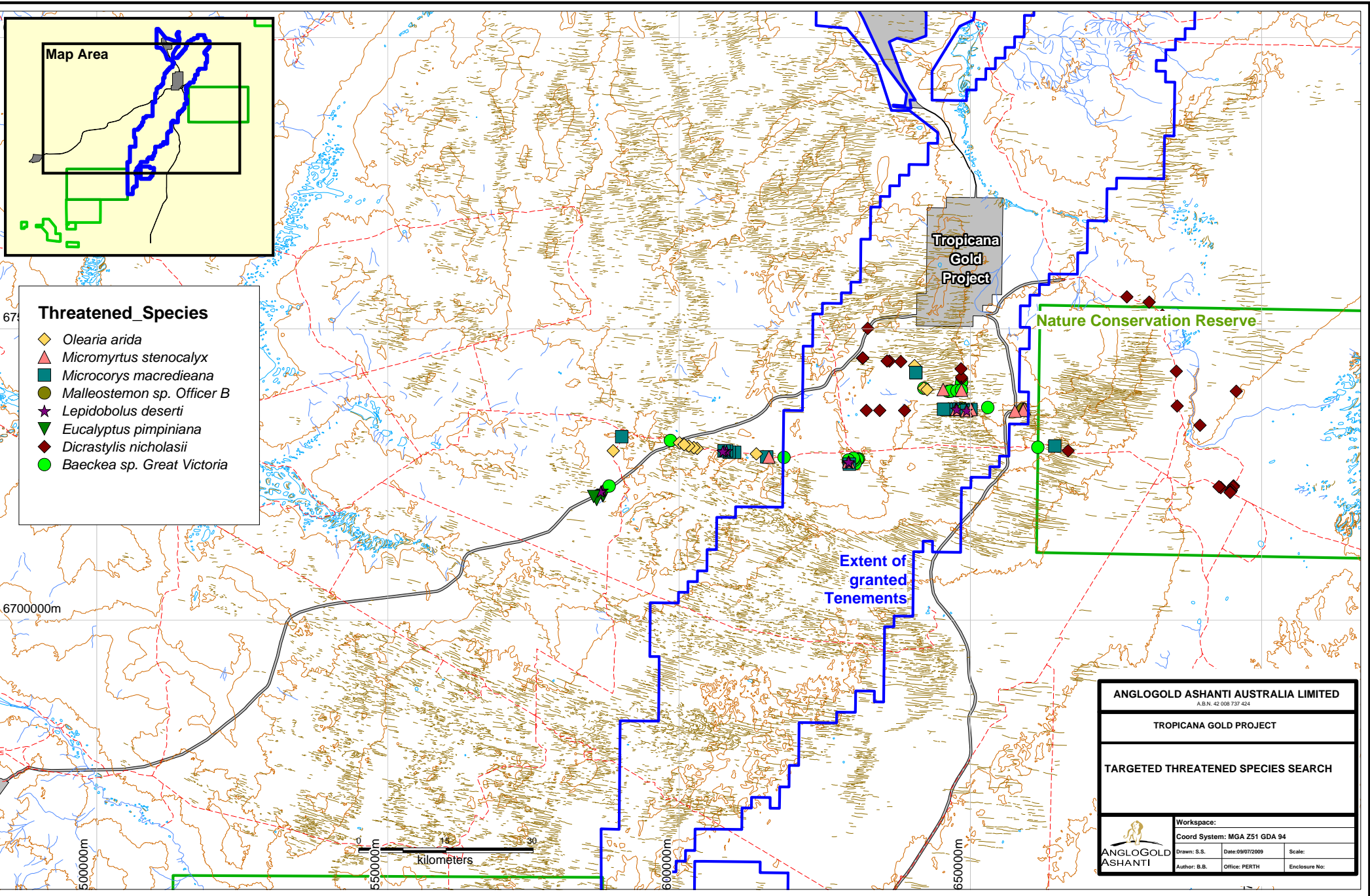
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700000m



ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>			
TROPICANA GOLD PROJECT			
TARGETED THREATENED SPECIES SEARCH <i>Acacia eremophila</i> numerous-nerved variant			
Workspace:			
Coord System: MGA Z51 GDA 94			
Drawn: S.S.	Date: 09/07/2009	Scale:	
Author: B.B.	Office: PERTH	Enclosure No:	





Map Area

Threatened_Species

- ◆ *Olearia arida*
- ▲ *Micromyrtus stenocalyx*
- *Microcorys macrediana*
- *Malleostemon* sp. Officer B
- ★ *Lepidobolus deserti*
- ▼ *Eucalyptus pimpiniana*
- ◆ *Dicrasyllis nicholasii*
- *Baeckea* sp. Great Victoria

Tropicana Gold Project

Nature Conservation Reserve

Extent of granted Tenements

ANGLOGOLD ASHANTI AUSTRALIA LIMITED <small>A.B.N. 42 008 737 424</small>			
TROPICANA GOLD PROJECT			
TARGETED THREATENED SPECIES SEARCH			
<small>Workspace:</small>			
<small>Coord System: MGA Z51 GDA 94</small>			
<small>Drawn: S.S.</small>	<small>Date: 09/07/2009</small>	<small>Scale:</small>	
<small>Author: B.B.</small>	<small>Office: PERTH</small>	<small>Enclosure No:</small>	



67

6700000m

500000m

550000m

600000m

650000m