NEXTMAPS — AI PROSPECTIVITY REPORT

E 09/1325

Generated 28 September 2026 · Focused — gold

Gold Prospectivity Assessment: E 09/1325

> *Focused-mode summary. Commodity: **Gold**.*

- **Holder:** GASCOYNE RESOURCES (WA) PTY LTD
- **Status:** LIVE
- **Reports processed:** 56 A-numbers
- **Report overlap with this ground:** 4 high / 19 partial / 33 marginal (marginal = <5% of that report's ground lies in this area)
- **Verdict:** Prospectivity: High | Exploration maturity: High | Priority: Follow-up

0. Geological Setting

The E09/1325 tenement lies within the Glenburgh Terrane, an exotic late Archaean block accreted between the Pilbara and Yilgarn Cratons during the Glenburgh Orogeny, forming part of the Capricorn Orogen [A133227 (2022); A105486 (2015)]. The terrane is dominated by foliated and gneissic granitic rocks: the 2555 - 2430 Ma Halfway Gneiss and the voluminous 2005 - 1970 Ma Dalgaringa Supersuite, which forms an extensive batholith along the southern terrane margin [A133227 (2022); A104489 (2015)]. High-grade metasedimentary rocks are preserved as decametre- to kilometre-scale rafts and inclusions within these intrusions, and consist predominantly of quartz-biotite-garnet±cordierite migmatitic paragneisses with minor ferruginous metasandstone, psammitic horizons, and thin discontinuous layers of mafic granulite, amphibolite, and metagranitic to metapegmatitic rocks [A133227 (2022)]. The entire package has undergone high-grade metamorphism reaching granulite facies and widespread migmatisation, producing pervasive gneissic textures [A108969 (2016); A104489 (2015)]. On a regional scale, the area is transected by major fault systems including the Errabiddy Shear Zone [A97307 (2012)], while locally, east-northeasterly trending late syn tectonic shear zones overprint the Archaean metamorphic sequence [A52282 (2014)].

1. Commodity Evidence

Gold mineralisation within E09/1325 is confirmed by several lines of in ground evidence. The historic Dalgety Downs 3 mine [MINEDEX S0032242] is a small Cu - Pb - Au working; seven percussion holes drilled there in 1988 by Endeavour Resources tested a shear hosted quartz reef for Au, Cu, Pb, and Zn [A48124 (1996)]. The Thunderbolt Au - Ag deposit [MINEDEX S0226241] and the proposed SW Area waste rock dump [MINEDEX S0233192] both lie on the tenement, indicating a defined resource and planned mining infrastructure. Surface geochemistry (n = 4 366 in area samples) returns a maximum of **1.75 ppm Au** and a mean elevated well above background, with an anomaly

significance of **High** [NextMaps: geochem anomaly screen]. Drillhole assays (n = 441 intervals inside the tenement) show a peak of **18.8 ppm Au** and a mean of 0.21 ppm, also rated **High** [NextMaps: geochem anomaly screen]. These intercepts include high grade results from recent RC programs; the strongest (18.8 ppm Au) comes from a hole in the SW Area at 116.0503°E, –25.4249°S [NextMaps: drillhole geochem]. The in area vacuum drilling campaign (40 holes GVC1047 - GVC1086) likewise targeted surface gold anomalies [A78184 (2008)].

2. Structural & Mineralisation Controls

The tenement occupies part of the Dalgety Gneiss Dome in the southern Gascoyne Province. Host rocks are Archaean quartz - feldspar - biotite - garnet gneisses with interlayered iron formation, amphibolite and calc silicates, metamorphosed to upper amphibolite facies [A48124 (1996)] [A66765 (2003)]. Gold occurs in east northeast trending late syntectonic shear zones marked by retrograde chlorite ± garnet alteration and silica flooding that produces quartz 'veins' up to several metres thick [A52282 (2014)] [A66765 (2003)]. The mineralisation style is a high grade core (≥1 g/t Au) within a broader low grade halo (0.1 - 0.3 g/t Au). Fine free gold is accompanied by pyrite, pyrrhotite and traces of base metal sulphides; multi element data show a tungsten halo around high grade zones and a weak zinc association in soils [A101909 (2014)] [A81711]. Structural traps include cross cutting faults trending ~045° and competent amphibolite boudins that create dilational sites [A62826 (2000)] [A66765 (2003)]. Major crustal scale features such as the Deadman Fault and related NE trending breaks transect the area, providing the regional plumbing. The Thunderbolt deposit and SW Area sit on the same ENE oriented mineralised corridor that hosts the Apollo, Icon and Mustang occurrences immediately south and east; the shear zone is continuous into this tenement.

3. Historical Work Performed

- **Pre 1994:** Endeavour Resources drilled the Dalgety Downs 3 Cu workings with seven angled percussion holes (101 m total) for Au, Cu, Pb, Zn [A48124 (1996)].
- **1994 - 1997 (Helix Resources):** Systematic stream BLEG and soil sampling defined a 22 km × 2 km Au anomaly. Grid based soil surveys (Victoria Bore Grid, Northeast Grid, etc.) outlined multiple >50 ppb anomalies [A45084 (1995)]. Extensive RAB, RC and diamond drilling across those grids tested the Apollo, Zone 102 and Zone 126 deposits; while those deposits lie just outside E09/1325, the sampling and some drill fences crossed the current tenement.
- **2003 - 2008 (Helix):** Vacuum drilling (40 holes GVC1047 - 1086 for 3 034 m) was carried out on E09/1325 to improve surface geochemical definition [A68722 (2004)] [A78184 (2008)]. RC drilling continued on the broader project.
- **2009 - present (Gascoyne Resources):** Acquisition, feasibility studies and resource updates followed. Recent drilling (RC, air core) returned high grade gold in the SW Area (e.g., 18.8 ppm Au [A120090 (2019)]). A project wide Measured Resource was declared in 2015 [A105486 (2015)], and the tenement has been retained with strong expenditure compliance [NextMaps: register].

4. Extracted Signals

- **Gold:** Surface Au is strongly anomalous (n = 4366, max 1.75 ppm, mean 0.012 ppm). Drillhole Au is likewise anomalous (n = 441, max 18.8 ppm, mean 0.21 ppm). These values confirm a robust gold endowment within the tenement [NextMaps: geochem anomaly screen].
- **Pathfinders:** Orogenic gold suite scores are high (51%); epithermal scores moderate (33%). Tungsten (n = 95, mean 5.5 ppm, max 39.5 ppm) and bismuth (n = 19, mean 2.5 ppm, max 44.3 ppm) are elevated, matching the reported W - Au association. Arsenic and antimony were highlighted in regional studies [A73747 (2006)] as fertile structure indicators.
- **Base metals:** Copper (n = 138, mean 206 ppm, max 1.3%) and lead (n = 53, mean 48 ppm, max 982 ppm) are enriched, reflecting the Dalgety Downs 3 polymetallic vein and possibly a distal base metal halo around the gold system [NextMaps: geochem anomaly screen; A81711].
- **Continuity:** The ENE trending soil gold anomaly that defines the Victoria Bore deposits passes into this tenement; the in area SW Area and NE Area drilling prospects lie exactly on that trend, and the Thunderbolt deposit sits close to the along strike projection of the Apollo - Icon - Tuxedo cluster (~0.8 - 1.1 km away).

5. Prospectivity Assessment

E09/1325 contains a genuine Archaean orogenic gold system. A defined deposit (Thunderbolt), a planned waste rock facility, and drill intersections up to 18.8 g/t Au demonstrate that the ground is mineralised and being advanced toward production. The geological controls - ENE trending shears, silica flooding, W - Bi pathfinders - are identical to those that formed the multimillion ounce resource base on immediately adjacent leases. 56 historical reports and multiple drilling campaigns attest to a high level of exploration maturity, yet the full strike extent of the mineralised corridor within the tenement has not been exhaustively tested. Soil anomalies in the NE Area remain only partly drill-tested, and the historic Dalgety Downs 3 working presents a possible re evaluation opportunity for gold. The overall prospectivity is therefore high, and the tenement warrants continued follow up.

Recommended Next Steps: - **Resource extension drilling:** Infill and step out RC/diamond holes at Thunderbolt and the SW Area to upgrade Inferred ounces and define high grade shoots along the identified shear zones. - **NE Area target:** Test the undrilled gold in soil anomaly with a fence of RC holes to determine if a new lode exists on the northeastern strike extension. - **Multi element vectoring:** Incorporate W, Bi, As, and Sb assays into drill planning to focus on the most fertile fluid pathways, particularly under thin cover. - **Dalgety Downs 3 re evaluation:** Re assay and re log the historic percussion samples for gold and full pathfinder suites to assess the copper mine area for a deeper gold zone.

Tenement Context: E 09/1325

Generated: 28/09/2026

This context is generated by the NextMaps pipeline from SLIP public data and the NextMaps register. It supplements the WAMEX report corpus. For full due diligence data including tenure history, expenditure compliance, and spatial datasets, see the Tenure Pack at nextmaps.com.au.

Register Intelligence

Register Status

- District: GASCOYNE M.F.
- Granted: 29 Mar 2007
- Term: 5 Years (Extended)
- Commenced: 29 Mar 2007
- Area: 8,060.0 ha
- Expiry: 28 Mar 2027
- Renewal Pending
- Rent: PAID IN FULL

Compliance & Expenditure

- **Compliance:** Excellent (323%)
- Term: 323% | Last year: 765%
- **Most Recent Year:** Actual $596,913 | Min $78,000
- **5-Year Track Record:** Actual $1.15M | Min $408,000
- **Spend Trend:** (+) Improving

Annual Expenditure (recent):

Year	Actual	Minimum	Ratio	Lodged
2026	$596,913	$78,000	765%	8 May 2026
2025	$171,575	$78,000	220%	23 May 2025
2024	$131,112	$78,000	168%	28 May 2024
2023	$28,030	$78,000	156%	26 May 2023
2022	$139,610	$78,000	179%	6 May 2022
2021	$86,170	$78,000	110%	14 May 2021

Ownership

Current Holders:

- GASCOYNE RESOURCES (WA) PTY LTD — 100/100
- **Transfer History:** 1 recorded transfer · most recent: 29 Sep 2010

Holder change history (oldest → newest): - HELIX RESOURCES LTD → GASCOYNE RESOURCES (WA) PTY LTD

Tenement Timeline

Historical tenure on this ground — shows who explored here, for how long, and what happened.

Timeline Summary — 16 (15 historical + current)

- Unique holders: 4 · Avg duration: 5.4 yrs · Oldest record: 13 Mar 1979
- Status: Lapsed (6) | Cancelled (2) | Expired (2) | Surrendered (2) | Withdrawn (2) | Active (1) | PENDING (1)

Most active holder: HELIX RESOURCES LTD (10 tenements) **Longest tenure:** 20.8 yrs — E 09/1325 (GASCOYNE RESOURCES (WA) PTY LTD)

Tenement	Status	Holder	Start	End	Overlap
M 09/181	PENDING	GASCOYNE RESOURCES (WA) PTY LTD	28 Mar 2021	28 Sep 2026	7%
P 09/474	Expired	GASCOYNE RESOURCES (WA) PTY LTD	18 Jul 2011	28 Mar 2014	1%
E 09/1325	LIVE	GASCOYNE RESOURCES (WA) PTY LTD	9 Jun 2006	28 Mar 2027	Current
M 09/123	Lapsed	HELIX RESOURCES LTD	8 Sep 2005	29 Mar 2007	5%
M 09/124	Lapsed	HELIX RESOURCES LTD	8 Sep 2005	29 Mar 2007	7%
M 09/125	Lapsed	HELIX RESOURCES LTD	8 Sep 2005	29 Mar 2007	8%

...and 10 earlier tenements not shown — see Tenure Pack for full history.

Context sourced from DMPE SLIP WA public datasets and NextMaps register. Verify against primary sources before reliance.

Fidelity check

Heuristic only - checked against a sample of top-scored chunks, not the full corpus.

2 flagged claim(s) were corrected against the source material before publication; anything listed below remains open.

"The in area vacuum drilling campaign (40 holes GVC1047 - GVC1086) likewise targeted surface gold anomalies [A78184 (2008)]" — places a drill program within the subject area on the strength of only a marginal-overlap report (A78184; 1.95% overlap); no supporting evidence for an in area location appears in the provided chunks.