

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit¹ number: EPPR00759113

Environmental authority takes effect 31 August 2016.

The anniversary date of this environmental authority is **31 July**. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Endocoal Ltd	Level 1, 37 Brandl Street EIGHT MILE PLAINS QLD 4113

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
ERA 9 – a mining activity involving drilling, costeaning, pitting or carrying out geological surveys causing significant disturbance.	EPC1514 MDL3022

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.


Signature


Date

Gillian Naylor
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- General environmental duty (section 319);
- Duty to notify environmental harm (section 320-320G);
- Offence of causing serious or material environmental harm (sections 437-439);
- Offence of causing environmental nuisance (section 440);
- Offence of depositing prescribed water contaminants in waters and related matters (section 440ZG); and
- Offence to place contaminant where environmental harm or nuisance may be caused (section 443).

Conditions of environmental authority

With the exception of any variations, the conditions of approval for this environmental authority include standard conditions contained within the attached document(s) entitled:

- Eligibility criteria and standard conditions for exploration and mineral development projects (ESR/2016/1985).

The environmentally relevant activity conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
A1	Provide financial assurance in the amount and form required by the administering authority prior to the commencement of activities proposed under this environmental authority.
A2	The financial assurance is to remain in force until the administering authority is satisfied that no claim on the assurance is likely.
A3	For exploration activities the environmental authority holder must comply with each of the standard environmental conditions contained in the document 'Eligibility criteria and standard conditions for exploration and mineral development projects' except Condition A1 , Condition A2 and Condition A13 , which is replaced by the conditions of this authority.
A4	If there is any inconsistency between a standard environmental condition and an additional condition in this environmental authority, the additional condition prevails to the extent of any inconsistency.
A5	The conditions of this environmental authority are in force until surrender of the authority is accepted pursuant to the <i>Environmental Protection Act 1994</i> (EP Act). The conditions apply unless an amendment is approved pursuant to the EP Act.

A6	Words and phrases used throughout this environmental authority are defined in the Definitions section of this authority. Where a definition for a term used in this environmental authority is sought and the term is not defined within this environmental authority, the definitions in the document 'Eligibility criteria and standard conditions for exploration and mineral development projects' (ESR/2016/1985) and the definitions in the EP Act, its regulations and policies must be used.
Agency interest: Land	
Condition number	Condition
B1	Drilling In carrying out mining activities on EPC1514 and MDL3022 all reasonable and practicable measures must be taken to prevent or minimise the likelihood of environmental harm being caused to any Category B Environmentally Sensitive Area (ESA) .
B2	The environmental authority holder is authorised to drill no more than 160 drill sites on EPC1514 and MDL3022.
B3	The disturbance area for each drill site must not exceed 2000m² .
B4	Campsites are not to be located in or within the 500m buffer zone of Category B ESA on EPC1514 and MDL3022.
B5	The holder of this environmental authority is authorised to only undertake rehabilitation processes in, or within 500m of, a Category B Environmentally Sensitive Area, on the drill sites referenced in Table 1: All Drill Sites within the ERE and Buffer areas of EPC1514 and MDL3022 and as per the locations identified in Figures 1 and 2 .
B6	Other Land Disturbance Activities must not include costeaning or bulk sampling.

END OF CONDITIONS

Definitions

“administering authority” means:

- a) for a matter, the administration and enforcement of which has been devolved to a local government under section 514 of the *Environmental Protection Act 1994*; or
- b) for all other matters – the Chief Executive of the Department of Environment and Heritage Protection; or
- c) another State Government Department, Authority, Storage Operator, Board or Trust, who's role is to administer provisions under other enacted legislation

“Approved form” means a form approved by the administering authority.

“Campsite”: The area encompassing any dwelling, amenities (e.g. toilet block, power generator), sewage or general waste disposal facility and includes the office area and vehicle parking areas associated with a temporary or permanent mining camp.

“Contaminant”: The *Environmental Protection Act 1994* defines, under Section 11, a contaminant as:

- (a) a gas, liquid or solid; or
- (b) an odour; or
- (c) an organism (whether alive or dead), including a virus; or
- (d) energy, including noise, heat, radioactivity and electromagnetic radiation; or
- (e) a combination of contaminants.

“Contamination”: Section 10 of the *Environmental Protection Act 1994* defines contamination of the environment is the release (whether by act or omission) of a contaminant into the environment.

“Costeaning”: The digging of a trench or pit across the seam or ore body for exposing, sampling and mapping of the ore body.

“Disturbed”: Any area that has had its natural state altered by the action or interference of carrying out an activity associated with the exploration project.

“Environment”: Section 8 of the *Environmental Protection Act 1994* defines the environment as:

- (a) ecosystems and their constituent parts, including people and communities; and
- (b) all natural and physical resources; and
- (c) the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and
- (d) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).

“Environmental authority”: Means a licence or approval issued by the administering authority under the *Environmental Protection Act 1994*.

“Environmental nuisance”: Section 15 of the *Environmental Protection Act 1994* defines environmental



nuisance as "unreasonable interference or likely interference with an environmental value" caused by:

- (a) aerosols, fumes, light, noise, odour, particles or smoke ; or
- (b) an unhealthy, offensive or unsightly condition because of contamination; or
- (c) another way prescribed by regulation. (e.g. unreasonable noise or dust emissions)"

"Environmental protection policy": Means an environmental protection policy approved under chapter 2 of the *Environmental Protection Act 1994*.

"Environmental relevant activity": Means an activity prescribed by regulation as an environmental relevant activity.

"Environmentally sensitive areas": Refers to locations, however large or small, that have environmental values that contribute to maintaining biological diversity and integrity, have intrinsic or attributed scientific, historical or cultural heritage value, or are important in providing amenity, harmony or sense of community. Refer to Appendix 3.

"Environmental value": Section 9 of the *Environmental Protection Act 1994* defines an environmental value as:

- (a) a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- (b) another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation (e.g. water suitable for swimming in or drinking).

"Financial assurance": Means a security deposit, either cash or a bank guarantee, that is held by the administering authority to cover the potential:

- (a) costs to rehabilitate areas disturbed by mining activities; and
- (b) costs to restore property improvements disturbed by mining activities; and
- (c) failure of the tenure holder to pay rents and royalties.

"Hazardous contaminant": Schedule 4 of the *Environmental Protection Act 1994* defines a hazardous contaminant as "a contaminant that, if improperly treated, stored, disposed of or otherwise managed, is likely to cause serious or material environmental harm because of:

- (a) its quantity, concentration, acute or chronic toxic effects, carcinogenicity, teratogenicity, mutagenicity, corrosiveness, explosiveness, radioactivity, flammability; or
- (b) its physical, chemical or infectious characteristics (e.g.: spills of mercury, cyanide, petrol, diesel or oil)".

"Infrastructure": Project infrastructure includes roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, pipelines, powerlines, airstrips, helipads etc., which are constructed or installed specifically for the project.

"Lake": A natural or artificial body of water, either permanent or intermittent.



“Mine”: Section 6A of the *Mineral Resources Act 1989*, defines mining as –

- (1) “Mine” means to carry on an operation with a view to, or for the purpose of
 - (a) winning mineral from a place where it occurs; or
 - (b) extracting mineral from its natural state; or
 - (c) disposing of mineral in connection with, or waste substances resulting from, the winning or extraction.
- (2) For subsection (1), extracting includes the physical, chemical, electrical, magnetic or other way of separation of a mineral.
- (3) Extracting includes, for example, crushing, grinding, concentrating, screening, washing, jigging, tabling, electro winning, solvent extraction electro winning (SX-EW), heap leaching, flotation, fluidised bedding, carbon-in-leach (CIL) and carbon-in-pulp (CIP) processing.
- (4) However, extracting does not include
 - (a) a process in a smelter, refinery or anywhere else by which mineral is changed to another substance; or
 - (b) testing or assaying small quantities of mineral in teaching institutions or laboratories, other than laboratories situated on a mining lease; or
 - (c) an activity, prescribed under a regulation, that is not directly associated with winning mineral from a place where it occurs.
- (5) For subsection (1), includes the disposal of tailings and waste rock.

A regulation under subsection (4)(c) may prescribe an activity by reference to the quantities of minerals extracted or to any other specified circumstances.

“Native vegetation”: Vegetation that occurs naturally in a certain area.

“Notifiable activity”: Means an activity in schedule 3 of the *Environmental Protection Act 1994*.

“Regulated waste”: Section 65 of the *Environmental Protection Regulation 2008*, defines mining as –

- 1) Regulated waste is waste that—
 - (a) is commercial or industrial waste, whether or not it has been immobilised or treated; and
 - (b) is of a type, or contains a constituent of a type, mentioned in schedule 7, part 1.
- 2) Waste prescribed under subsection (1) includes—
 - (a) for an element—any chemical compound containing the element; and
 - (b) anything that contains residues of the waste.
- 3) However, waste is not regulated waste if it is mentioned in schedule 7, part 2.

“Rehabilitation processes” means the measures and actions taken to achieve rehabilitation outcomes, including any or all of the following:

- (a) removing all unwanted infrastructure;
- (b) backfilling mine excavations (e.g. pits) and capping drill holes;
- (c) reshaping the land surface to a stable landform similar to that of surrounding undisturbed areas;



- (d) spreading of topsoil;
- (e) spreading seed or planting seedlings to promote revegetation;
- (f) benching ridge cuts and removing any overhanging material.

For the purposes of **Condition B5**, 'rehabilitation processes' also includes:

- a. The measures and actions taken to achieve rehabilitation outcomes, including any or all of the following:
- b. removing all unwanted infrastructure;
- c. backfilling mine excavations (e.g. pits) and capping drill holes;
- d. reshaping the land surface to a stable landform similar to that of surrounding undisturbed areas;
- e. spreading of topsoil;
- f. spreading seed or planting seedlings to promote revegetation; and
- g. benching ridge cuts and removing any overhanging material.

"Serious environmental harm": Section 17 of the *Environmental Protection Act 1994* defines serious environmental harm as

- 1) serious environmental harm (other than environmental nuisance)
 - (a) that is irreversible, of a high impact or widespread; or
 - (b) caused to –
 - i. an area of high conservation value;
 - ii. an area of special significance, such as the Great Barrier Reef World Heritage Area;
 - (c) that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount; or
 - (d) that results in costs of more than the threshold amount being incurred in taking appropriate action to—
 - (i) prevent or minimise the harm; and
 - (j) rehabilitate or restore the environment to its condition before the harm.
- 2) In this section - "Threshold amount" means \$50 000 or, if a greater amount is prescribed by regulation, the greater amount.

"Significantly disturbed land": Land is significantly disturbed if –

- (a) it is contaminated land; or
- (b) it has been disturbed and human intervention is needed to rehabilitate it.

Significantly disturbed land includes:

- areas where soil has been compacted, removed, covered, exposed or stockpiled;
- areas where vegetation has been removed or destroyed to an extent where the land has been made susceptible to erosion; (vegetation & topsoil)
- areas where land use suitability or capability has been diminished;
- areas within a watercourse, waterway, wetland or lake where mining project activities occur;



- areas submerged by tailings or hazardous contaminant storage and dam walls in all cases;
- areas under temporary infrastructure. Temporary infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc.) which is to be removed after mining has ceased; or
- areas where land has been contaminated.

However, the following areas are not included:

- areas off lease (e.g. roads or tracks which provide access to the mining lease);
- areas previously significantly disturbed which have achieved the rehabilitation outcomes;
- by agreement with the EPA, areas previously significantly disturbed which have not achieved the rehabilitation objectives due to circumstances beyond the control of the mine operator (such as climatic conditions);
- areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dams, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc.) which is to be left by agreement with the landowner. The agreement to leave permanent infrastructure must be recorded in the Landowner Agreement and lodged with the Department of Environment and Heritage Protection;
- disturbances that pre-existed the grant of the tenure unless those areas are disturbed during the term of the tenure.

“Standard environmental conditions”: For an environmental authority, means the standard environmental conditions approved for the authority under Chapter 5A Part 1 of the *Environmental Protection Act 1994*.

“Standard mining activity”: Means a mining activity decided to be a standard activity under section 151 of the *Environmental Protection Act 1994*.

“Technical guidelines”: Guidelines that indicate best practice environmental management.

“Watercourse”: Means a river, creek or stream in which water flows permanently or intermittently in a visibly defined channel (natural, artificial or artificially improved) with clear bed and banks and evidence of biological dependence.

“Waterway”: A naturally occurring feature where surface water runoff normally collects, such as a clearly defined swale or gully, but only flows in response to a local rainfall event.

“Wetland”: Are areas of permanent or periodic/intermittent inundation, whether natural or artificial, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6m. Wetlands typically include areas such as lakes, swamps, marshes, estuaries or mudflats.

END OF ENVIRONMENTAL AUTHORITY

Figure 1: Drill holes in ERE and buffer on EPC1514

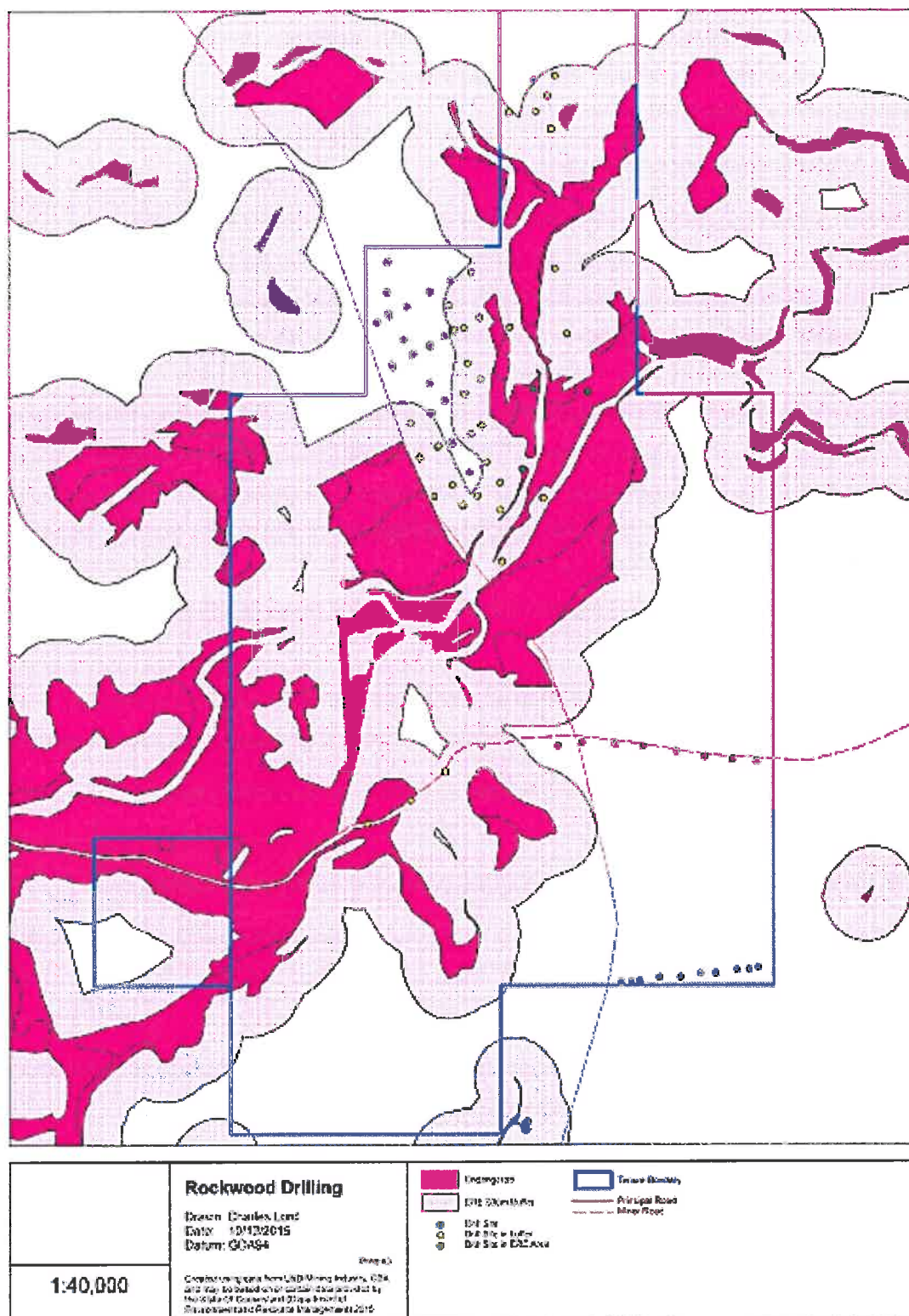


Figure 1 Note: Yellow dots show the location of the drill sites in or within 500m of a Category B Environmentally Sensitive Area. Blue dots represent drill sites outside the area on EPC1514.

Figure 2: Drill holes in ERE and buffer on MDL3022

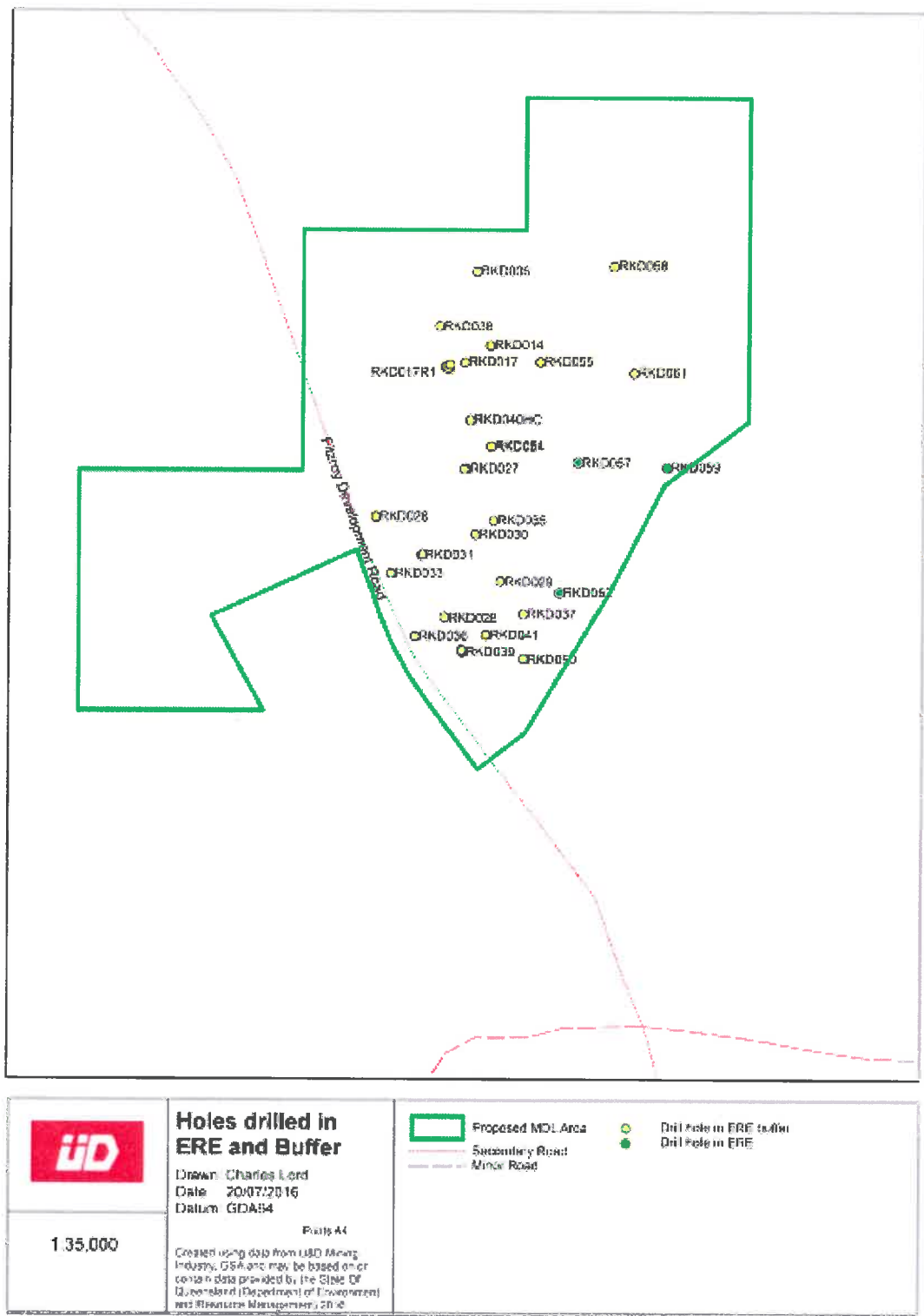


Figure 2 Note: Yellow dots represent drill sites in or within 500m of a Category B Environmentally Sensitive Area on MDL3022.

Table 1: All drill sites within ERE and buffer areas of EPC1514 and MDL3022

Hole ID	Map Zone	MGA Easting	MGA Northing	Elevation	Start	Complete	HSz	ERE	Tenure
RKD006	55K	674753.5	7523609.95	135.56	22/10/2009	23/10/2009	100	BUFFER	MDL
RKD014	55K	674854.2	7523041.56	135.45	14/11/2010	15/11/2010	99	BUFFER	MDL
RKD017	55K	674537.7	7522896.88	137.3	20/05/2011	22/05/2011	99	BUFFER	MDL
RD017R1	55K	674537.65	7522896.88	N/A	N/A	N/A	N/A	N/A	MDL
RKD026	55K	673959.9	7521734.33	149.21	26/05/2011	28/05/2011	99	BUFFER	MDL
RKD027	55K	674646.5	7522093.84	140.96	16/06/2011	27/06/2011	96	BUFFER	MDL
RKD028	55K	674485.5	7520956.44	141.85	20/06/2011	30/06/2011	96	BUFFER	MDL
RKD029	55K	674918.4	7521229.67	139.26	1/07/2011	3/07/2011	99	BUFFER	MDL
RKD030	55K	674727.1	7521591.52	139.43	17/07/2011	20/07/2011	99	BUFFER	MDL
RKD031	55K	674323.1	7521444.58	144.99	23/07/2011	25/07/2011	99	BUFFER	MDL
RKD032	55K	673885.2	7522776.39	141.91	25/07/2011	8/08/2011	96	BUFFER	EPC
RKD033	55K	674074.6	7521299.31	141.91	26/07/2011	30/07/2011	99	BUFFER	MDL
RKD035	55K	674869.1	7521695.46	136.98	30/07/2011	7/08/2011	99	BUFFER	MDL
RKD036	55K	674257.6	7520813.85	145.33	1/08/2011	4/08/2011	99	BUFFER	MDL
RKD037	55K	675093.7	7520976.76	143.91	8/08/2011	11/08/2011	99	BUFFER	MDL
RKD038	55K	674464.9	7523194.56	137.86	10/08/2011	22/08/2011	96	BUFFER	MDL
RKD039	55K	674614.8	7520702.76	143.6	22/09/2011	2/10/2011	96	BUFFER	MDL
RKD040	55K	674694.9	7522469.44	138.83	13/08/2011	21/08/2011	96	BUFFER	MDL
RKD041	55K	674799.2	7520817.69	140.28	18/08/2011	26/08/2011	100	BUFFER	MDL
RKD043	55K	675837.8	7526043.88	149.61	24/08/2011	29/08/2011	99	BUFFER	EPC
RKD044	55K	675744	7525793.81	148.01	26/08/2011	16/10/2011	99	BUFFER	EPC
RKD046	55K	675259.8	7525589.93	143.31	1/09/2011	8/09/2011	99	BUFFER	EPC
RKD047	55K	675595.2	7525600.17	147.13	2/09/2011	6/09/2011	99	BUFFER	EPC
RKD049	55K	675783	7525383.89	143.49	6/09/2011	10/09/2011	99	BUFFER	EPC
RKD050	55K	675093.1	7520632.29	140.3	9/09/2011	17/09/2011	99	BUFFER	MDL
RKD051	55K	674854.3	7522268.31	137.84	11/09/2011	18/09/2011	100	BUFFER	MDL
RKD052	55K	675622.9	7520781.9	138.64	17/09/2011	2/10/2011	99	BUFFER	EPC
RKD053	55K	675107.7	7519993.15	139.16	21/09/2011	25/09/2011	96	BUFFER	EPC
RKD054	55K	675154.4	7523409.82	136.16	29/09/2011	14/10/2011	96	BUFFER	MDL
RKD055	55K	675237.1	7522911.22	135.89	7/10/2011	20/10/2011	96	BUFFER	MDL
RKD056	55K	676388.8	7523355.91	134.71	7/10/2011	9/10/2011	99	BUFFER	EPC
RKD057	55K	675520.7	7522137.7	136.59	8/10/2011	18/10/2011	96	BUFFER	MDL
RKD058	55K	675809.8	7523640.08	134.92	12/10/2011	18/10/2011	99	BUFFER	MDL
RKD059	55K	676201.4	7522091.57	136.01	19/10/2011	21/10/2011	99	BUFFER	MDL
RKD061	55K	675954.5	7522821.33	135.58	23/10/2011	23/10/2011	99	BUFFER	MDL
RKD062	55K	675371.8	7521136.4	139.01	23/10/2011	31/10/2011	99	BUFFER	MDL
RKD068	55K	674814.1	7517698.63	140.33	23/04/2012	26/04/2012	99	BUFFER	EPC
RKD069	55K	673906.8	7517020.95	139.81	5/06/2012	7/06/2012	99	BUFFER	EPC

Gr

Hole ID	Map Zone	MGA Easting	MGA Northing	Elevation	Start	Complete	HSz	ERE	Tenure
RKD070	55K	674355.7	7517377.49	141.08	7/05/2012	12/05/2012	99	BUFFER	EPC
RKD071	55K	673351.6	7516730.81	140.21	14/05/2012	17/05/2012	99	BUFFER	EPC

Note: Reference to 'MDL' means MDL3022, and reference to 'EPC' means EPC1514.

END OF PERMIT



