

# LEKWALO LA TSHEDIMOSETO E E AMANANG LE SENO



## KOPO YA TETLA YA TSA TIKOLOGO YA THUNGELA LEPHALALE COAL BED METHANE



Sekai sa LNG Production Facility



Sekai sa CBM Well

BOIKAELELO JWA TOKUMENTE ENO:	MATSENO:
<ul style="list-style-type: none"><li>Background Information Document (BID) eno e go tlamela, o le Interested and Affected Party (I&amp;AP), ka dintlhakakaretso tsa porojeke e e tshitshintsweng.</li><li>BID e go laletsa, jaaka I&amp;AP, go tsaya karolo mo Thulaganyo ya go Nna le Seabe ga Baagi e e tlhogegang.</li><li>BID e go tlamela, jaaka I&amp;AP ka tshono ya go thusa le go nna le seabe mo go tlhamiweng ga Dipego Tsa Patlisiso le Environmental Impact Assessment (EIA).</li><li>BID gape e go tlamela, jaaka I&amp;AP tshono ya go tlamela setlhophha sa porojeke ka dikakgelo tsa gago, dilo tse di go tshwenyang le tse o kgatlhanong le tsone mo porojekeng e e tshitshintsweng.</li></ul>	<p>Thungela Resources Limited (nako e e fetileng Anglo), morago fano e bidiwa Modirakopo, e tlhomile Environmental Impact Management Services (EIMS) jaaka Environmental Assessment Practitioner (EAP) go thusa ka go dira dithulaganyo tse di tlhogegang kopo tsa tikologo, go akaretsa go dira dipego tse di tlhogegang le go dira ditherisano le malao, go thusa porojeke e e tshitshintsweng jaaka go tlhalositswe fano.</p> <p>Go lebilwe pele gore ditiro di le mmalwa tse di thathamisitseng kgotsa tse di laolwang tse di mo molaong o o latelang go ka diragala gore di bakwe ke porojeke e e tshitshintsweng:</p> <ul style="list-style-type: none"><li>Molao wa Bosetšhaba wa Tsamaiso ya Tikologo (National Environmental Management Act) - NEMA (Molao 107 wa 1998)</li><li>Molao wa Bosetšhaba wa Tsamaiso ya Tikologo (National Environmental Management Act: Air Quality Act)- NEM:AQA (Molao 39 wa 2004)</li><li>Molao wa Bosetšhaba wa Tsamaiso ya Tikologo: Molao wa Matlakala (National Environmental Management: Waste Act)- NEM:WA (Molao 59 wa 2008)</li><li>Molao wa Bosetšhaba wa Metsi – NWA (Molao 36 wa 1998)</li></ul> <p>Dipatlatfalo ka nepo tsa molao wa tikologo le ditiro di tla tlhomamisiwa ka nako ya kgato ya patlisiso ya porojeke eno.</p> <p>Thulaganyo ya Environmental Impact Assessment (EIA) e tla dirwa go dumalana le Melawana ya Kgaolo 6 ya EIA, 2014 (GNR 982) e fetotswe kafa tlase ga NEMA (jaaka e tlhabolotswe). Thulaganyo e e feletseng ya EIA e tla latelwa e e akaretsang kgato ya patlisiso e e leng 'kgonagalo' mme bogolo e le kgato ya tshekatsheko ya pego ya tikologo ya porojeke, e e latelwang ke tshekatsheko dintlha tse di oketsegileng tsa kgato ya EIA.</p> <p><u>Boikaelelo Jwa Background Information Document (BID):</u></p> <p>Boikaelelo jwa BID ke go:</p> <ul style="list-style-type: none"><li>Tlamela dintlhakakaretso tsa Tetla ya Tsa Tikologo/Dikopo Tsa Laesense mmogo le dithulaganyo tsa go nna le seabe ga baagi tse di tla dirwang go porojeke e e tshitshintsweng;</li></ul>



- |  |   |
|--|---|
|  | <ul style="list-style-type: none"><li>Letla Interested and Affected Parties (bol&amp;AP) go nna le tshono ya go tlhaloganya mo go oketsegileng porojeke e e tshitshintsweng le go kopa kgotsa go aba tshedimosetso; le</li><li>Go tlamela dintlha kafa bol&amp;AP ba ka kwadisang kgatlhego ya bone le go tsenya dikakgelo mo porojekeng. Go botlhokwa go elatlhoko gore ke bol&amp;AP ba ba ikwadisitseng fela ba tla nnang le puisano go ya pele kaga porojeke mo nakong ya thulaganyo ya EIA (sekai, taletso go sekaseka le go akgela mo Patlisong le Dipeco Tsa EIA).</li></ul> |
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## LEFELO, SEKALE, LE BOGOLO JWA POROJEKE E E TSHITSHINTSWENG:

### TLHALOSO YA POROJEKE:

Mokopi ke ene motshwari wa Tetla ya Petroleum Exploration Right (ER) mabapi le Coal Bed Methane (CBM) mo mmasepaleng wa Lephalale, Porofense ya Limpopo, Afrika -Borwa. Dipatliso tsa ditiragalo tse di dirilweng go dumelana le (ER) dibotshitse ditlamelo tsa (CBM) tse difitlhelegang go ka ntshiwa. Mokopi o ikaeleta go tsenya kopo go Petroleum Agency of South Africa (PASA) go fitlhelela tshwanelo ya tlhagiso gore a ntshe le go tlhagisa ditlamelo tsa (CBM).

Mokopi o ikaelsetse go ntsha khumo ya coal-bed methane (CBM) go tswa mo kgaolong ya PR ka kgato ka kgato. Ga jaana go sololetswe dikgato di le nne go fitlhelela ntshokuno e e feletseng ya lefelo leo le akaretsang bogolo jwa dihetketa di le 134 155 (ha). Dikarolo tsa nthla tsa ntshokuno tse di leng ka fa tlase ga kopo eno ya EA, e leng Karolo 1 le 2, di na le mesima e le 9 le mesima e le 305 ka go latelana e e tla golaganngwang ka marangrang a go kgobokanya gase go ya kwa lefelong le le tsentsweng la go dira gase. Mo godimo ga moo, didiba tse 10 tse di leng teng, tse di agilweng ka nako ya go dira patlisiso (tse di bidiwang 5 Spot ya nthla le 5 Spot ya bobedi) le tsone di tla golaganngwa le lefelo la go dira gase. **Kopo ee diriwang e akareletsa fela dikgato 1 le 2 tse go buiwang ka tsone ka fa godimo mme Di laesense kgotsa tela tse eketsegileng di tla tlhokagala mo nakong ya go simolola kgato 3 le 4.**

Gore go fitlhelelwae gase e e intsi thata, thekololo ya lefelo entse e diriwa. Thulaganyo ya godirisiwa ga gase e akareletsa kago ya lefelo la gokitanya le gofetola gore gotlhagisiwe gase ya tlholego. (LNG), ee tla tsamaisiwang ka dipangwa tsa tsela. Gotlhagisiwa ga kgato 1 le 2 go lebetswe gore go tla tsaya nako ekang di jara tsetse gotswa mo letsatsing le ka lone di laesense di tla fitlhelelwang ka lone.

### LEFELO

Tikologo ya kopo ya PR e akareletsa dikarolo tsa dipolasi tse ka nnang 244 le tikologo ya boleng bo kang dihetketa tse 134 155 ha. Tikologo ya kopo ya PR le EA e fa tlase ga Mmasepala was Lephalale le Mmasepala wa tikologo ya Waterberg, Porofense ya Limpopo. Kopo ya EA e fitlhelelwae boleng ba dikilomitara tse 14km gotswa go bokone bophirima ba toropo ya Lephalale, 5km bokone ba Marapong mme boleng bo kang 11km bokone bophirima ba Onverwacht.

- Tlhaloso ya Kgaolo
  - Mmasepala wa Tikologo: Lephalale
  - Porofense: Limpopo
- Ditoropo tse di gaufi thata kgotsa dintlha tsa kgatlhego: Lephalale (~14km bokonebophirima), Onverwacht (~11km bokonebophirima), Marapong (~5km bokone)

Tsweetswee leba mmapa wa tikologo kwa bokhutlong jwa BID eno.

### DILO TSE DI BATLEGANG GO YA KA MOLAO

Porojeke e e tshitshintsweng e tlhoka ditumelelo tse dirileng, dikamogelo, ditetla le/kgotsa dilaesense. Dipatlafalo tse di latelang di supilwe ka totobalo mo kgatong eno:

Molao o o Maleba	Ditiro tse di thathamisitsweng kgotsa dilo tse di bakang	Tlhokego ya Tumelelo, Kamogelo, Laesense, kgotsa Tetla
Kgaolo 5 ya NEMA	GNR 983 (2014, jaaka e tlhabolotswe): Ditiro 6, 8, 9, 10, 11, 12, 13, 16, 19, 21, 21C, 21D, 21F, 24, 25, 28, 34, 41, 45, 46,	Tumello ya Tikoloh (EA)



	47, 48, 50, 51, 53, 56, 57, 59, 60, 66A, le 67. GNR 984 (2014, jaaka e tlhabolotswe): Ditiro 1, 2, 4, 5, 6, 7, 15, 20, le 25. GNR 985 (2014, jaaka e tlhabolotswe): Ditiro 2; 4; 12; 13; 14; 15; 16; 22; 23; le 24.	
<b>Kgaolo 4 le 5 ya NEM:AQA</b>	GNR 893 (2013 jaaka e tlhabolotswe): Tiro e e rulagantsweng: Seka-setlhophapha 2.4 (Go Boloka le go Tshwara Dikumo Tsa Petroleum).	Atmospheric Emissions Licence (AEL)
<b>Kgaolo 4 ya NEM:WA</b>	GN921 (2013 jaaka e tlhabolotswe): Ditiro Tsa Botsamaisi Jwa Matlakala A1; A5; A6; A7; A12; A13; A14; B1; B10; B11; C1; C2; C6; le C7.	Go ya ka ditlhokego tsa Laesense ya Tsamaiso ya Matlakala (WML)
<b>Kgaolo 4 ya NWA</b>	NWA, Karolo 21 Ditiriso Tsa Metsi: 21a; 21b; 21c; 21e; 21f; 21g; 21h; 21i; le 21j	Laesense ya Tiriso ya Metsi (WUL).

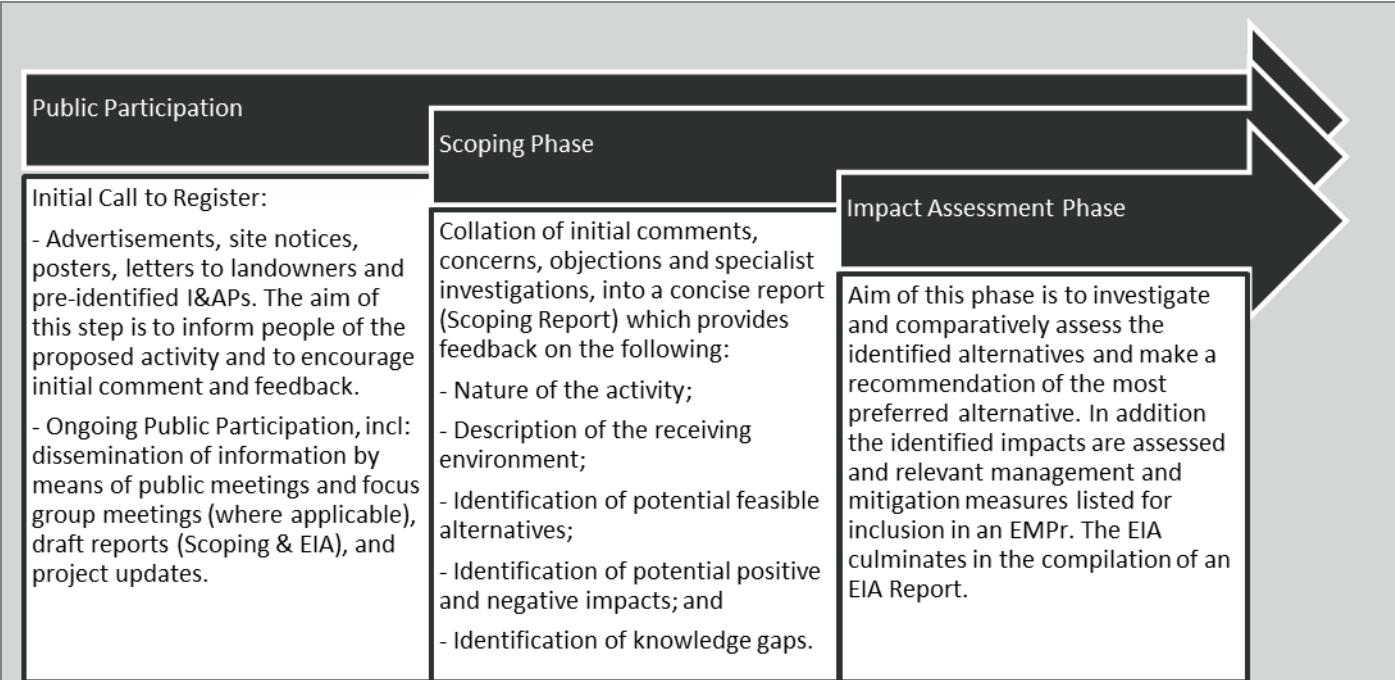
Ka nepo ditiro tse di thathamisitsweng tse di bakilweng ke porojeke eno di tla tokafadiwa ka kgato ya patlisiso. **E le phelelo ya go baka ditlamelo tse di fa godimo, go na le patlafalo ya go dira Environmental Impact Assessment Process (EIA) e e kopaneng.** EIA e tla dirwa go tsamaisana le dipatlafalo tsa melawana ya NEMA EIA (GNR982, 2014 jaaka e tlhabolotswe).

## THULAGANYO YA TSHEKATSHEKO YA KAMEGO

Thulaganyo ya EIA ke sedirisiwa sa go rulaganya le go dira ditshwetso, go tlhalosa le go sekaseka dikamego tsa lefelo, ditshedi, loago, le ikonomi tse tlhabololo e ka di nayang kgotsa porojeke e ka nnang le tsone. Go kgona go itsise thulaganyo ya go dira ditshwetso, go botlhokwa gore mathata a bathobothle le dilo tse ba amegileng ka tsone di itsiwe ka nako, go kgontsha setlhophapha sa EIA go di sekaseka.

Thulaganyo ya EIA e letla ditlamorago tsa tikologo tsa porojeke e e tshitshintsweng go supiwa e sale gale, go batlisisiwa mo go tsweleleng ga thulaganyo ya tshekatsheko ya kamego, le go akanyetswa ke bathati ba ba dirang ditshwetso. EAP le baitseanape ba ba farologaneng gape ba supa dikamego tse di sa siamang le tse di siameng tse di ka tsogang ka ntlha ya porojeke e e tshitshintsweng le go supa dikgato tse di ka dirang tsa go tlhofofatsa tse di batlegang, go tila kgotsa go fokotsa dikamego tse di sa siamang le go tokafatsa dikamego tse di siameng

Ntlhakakaretso ya boto ya thulaganyo ya EIA e tlametswe:



Fa dithulaganyo tse di maleba di wedsitswe mme go rometswe ditokumente tsa bofelo go mothati yo o tshwanelang, mothati yo o tshwanelang o sekaseka kopo mme o dira tshwetso e e nang le kitso. Bol&AP ba tla itsisiwe ka tshwetso le tshwanelo ya bone ya go tsenya boikuelo fa go direga gore ba ganelane le tshwetso.

## DIKAMEGO TSA TIKOLOGO TSA KWA TSHIMOLOGONG

Nngwe ya dilo tsa konokono tse di laolang EIA e e atlegileng ke go tlhomamisa gore dikamego tse di ka nnang gone (tse di siameng le tse di sa siamang) di supiwe le go batlisisiwa. Dikamego tse di oketsegileng di ka supiwa ka kgato ya patlisiso mme baitseanape ba ba maleba ba tla akarediwa mo setlhopheng sa EIA gore go tlhatlhobiwe ka nepo le ka tsela e e sa tseyeng letlhakore dikamego tseno tse di ka nnang gone. Bontsi jwa dikamego tsa tikologo tse di ka nnang gone tse di amanang le porojeke e e tshitshintsweng di supilwe. Dikamego tse di supilweng kwa tshimologong di tla sekasekwa mo thulaganyong eno ya EIA go akaretsa go dingwe tsa tsone:

- **Dikamego Tsa Boleng Jwa Moya le Phetoto ya Tlelaemete**
- **Dikamego Tsa Metsi a fa Godimo ga Lefatshe**
- **Dikamego Tsa Metsi a a Kafa Tlase ga Lefatshe**
- **Dikamego Tsa Tikologo**
- **Dikamego Tsa Modumo le Tebego**
- **Dikamego Tsa Loago**
- **Dikamego Tsa Ngwaoboswa le Pelentholoji**
- **Dikamego Tsa Mmu le Temothuo**
- **Dikamego Tsa Ikonomi**
- **Dikgonagalo Tsa Thoromo ya Lefatshe**
- **Kotsi ya Ditlhomo Tse Dikgolo Tse di Kotsi**

Dikamego tse di umakilweng fa godimo le dikgonagalo ga di a tshwanelo go tsewa e tsone fela dikamego tse di ka supiwang ka nako ya EIA. Go ya ka kgolagano le bathobotlhe, tsenyeletso ya moitseanape le tshekatsheko go ya pele e e nang le dintlh, dikamego tse di oketsegileng go ka direga gore di supiwe le go tlhatlhobiwa.



Dikamego tsotlhe tse di ka nnang gone di tla supiwa le go sekasekiwa go latela mokgwa o o dirisiwang wa tshekatsheko ya kamego o o kaelwang ke dipatlafalo tsa Melawana ya NEMA EIA. Tsela ya go dira dilo e e bulegileng go botlhokwa jwa go lekanya mokgwa o o dirisiwang ke go tlhomamisa phelelo ya tikologo (ER) ka go akanyetsa phelelo (C) ya kamego nngwe le nngwe (tse di nang le Tlholego, Bokgakala, Lobaka, Bogolo, le go Busetsa Dilo Morago) le go amanya seno le kgonagalo (P) ya kamego e e diregileng. Seno se tlhomamisa diphelelo tsa tikologo. Mo godimo ga moo, mabaka a mangwe go akaretsa dikamego tse di koelenang le kgonagalo ya tatlhegelo ya dikumo tse di ka se emisediweng, di dirisiwa go tlhomamisa lebaka la go baya dilo ko pele (PF) le le dirisiwang go ER go tlhomamisa botlhokwa ka kakaretso (S).

Gape, go ya ka dikamego tse di supilweng le ditlhatlhobo tsa tsone, tlhofatso le ditekanyo tsa botsamaisi di akantshtswa Modirakopo mme tseno di akarediwa go Environmental Management Programme (EMP) mo go tlhomamiseng gore dikamego dipe tse di sa siamang tse di ka se tilweng di a fokodiwa le go laolwa, mme dikamego tse di siameng di a godisiwa.

Dipatlisiso tsa moiitseanape di ka dirisiwa go kaela le go sedimosetsa tshekatsheko ya dikamego tse di ka nnang gone. Dipatlisiso tsa moiitseanape tse di tla akarediwang mo tshekatshekong eno di akaretsa:

- **Tshekatsheko ya Kamego ya Boleng jwa Moya**
- **Tshekatsheko ya Kamego ya Phetogo ya Tlelaemete**
- **Tshekatsheko ya Kamego ya Metsi a fa Godimo ga Lefatshe**
- **Tshekatsheko ya Kamego ya Metsi a a Kafa Tlase ga Lefatshe**
- **Tshekatsheko ya Kamego ya Ditshedi Tsa Tikologo**
- **Tshekatsheko ya Kamego ya Bokgoni Jwa Mmu le Lefatshe**
- **Tshekatsheko ya Kamego ya Modumo**
- **Tshekatsheko ya Kamego ya Tebego**
- **Tshekatsheko ya Kamego ya Loago**
- **Tshekatsheko ya Kamego Ikonomi**
- **Tshekatsheko ya Kamego ya Ngwaoboswa le Pelentholoji**
- **Dikgonagalo Tsa Thoromo ya Lefatshe le Tshekatsheko ya Kamego**
- **Tshekatsheko ya Kotsi ya Ditolhomoo Tse Dikgolo Tse di Kotsi**

Tlhoego ya dithuto go ya pele tsa moiitseanape go ka supiwa ka thulaganyo ya patlisiso.

## KAFA O KA NNANG LE SEABE

Fa o ka utlwa gore o ka kgatlhegela go tsena, kgotsa wa amiwa ke, porojeke eno, go botlhokwa gore o ikwadise o le Interested and Affected Party (I&AP) mo kgannyeng e mo go yone o tla nnang o itsisiwe mabapi le porojeke le go newa tshono ya go nna le seabe mo thulaganyong. Tsweetswee ela tlhoko gore ke bol&AP ba ba ikwadisitsweng fela ba tla akarediwang mo dipuisanong tsa mo isagweng mabapi le porojeke le ditlhabololo tse di amegileng. O ka ikwadisa le/kgotsa wa akgela o le I&AP ka epe ya ditsela tse di latelang:

- Tlatsa foromo ya ikwadiso ya I&AP le pampiri ya dipotso tsa patlisiso mme o e busetse go EIMS ka emeile, fekese kgotsa poso.
- Romela dikakgelo tse di kwadilweng, diikwadiso, kgotsa dikopo go EIMS ka emeile, fekese kgotso poso; le/kgotsa
- Ka go lets a mogala.

Go botlhokwa go elatlhoko gore thulaganyo ya EIA e kaelwa ka nako e e tlhalositsweng ka molao mme ka tsela eo, gore re tlhomamise go tswelela ga gago le go nna le seabe ga botlhokwa mo porojekeng, re kopa gore dikopo tsa gago tsa ikwadiso le dikakgelo dipe tsa kwa tshimologong di romelwe go EIMS (dintlha tsa go ikgolaganya fa tlase).



Tsweetswee ela tlhoko gore go oketsa mo godimo, bol&AP bootlhe ba ba ikwadisitseng ba tla itsisiwe gape ka nako e e tshwanetseng ka ditshono tsa go tsaya karolo go ya pele, mmogo le go nna gone ga Pego ya Pegelo ya Patlisiso le Pego ya Kamego ya Tikologo mo dikakgelo di tla kopiwang.

**Environmental Impact Management Services (Pty) Ltd (EIMS)**

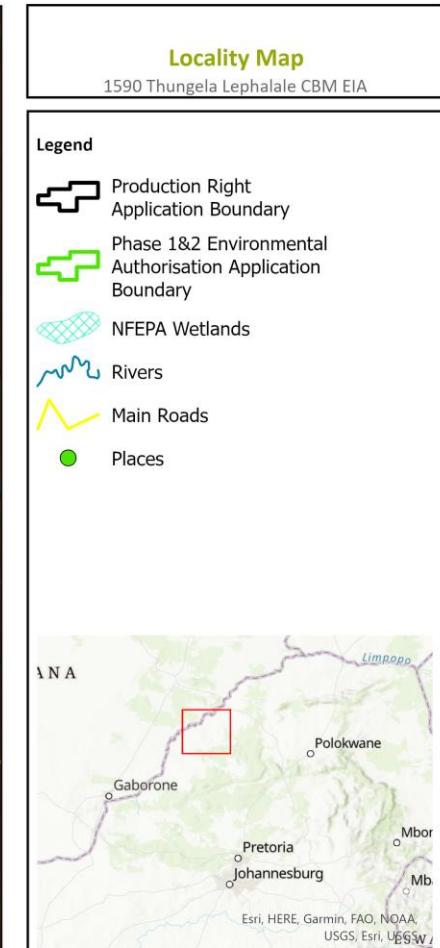
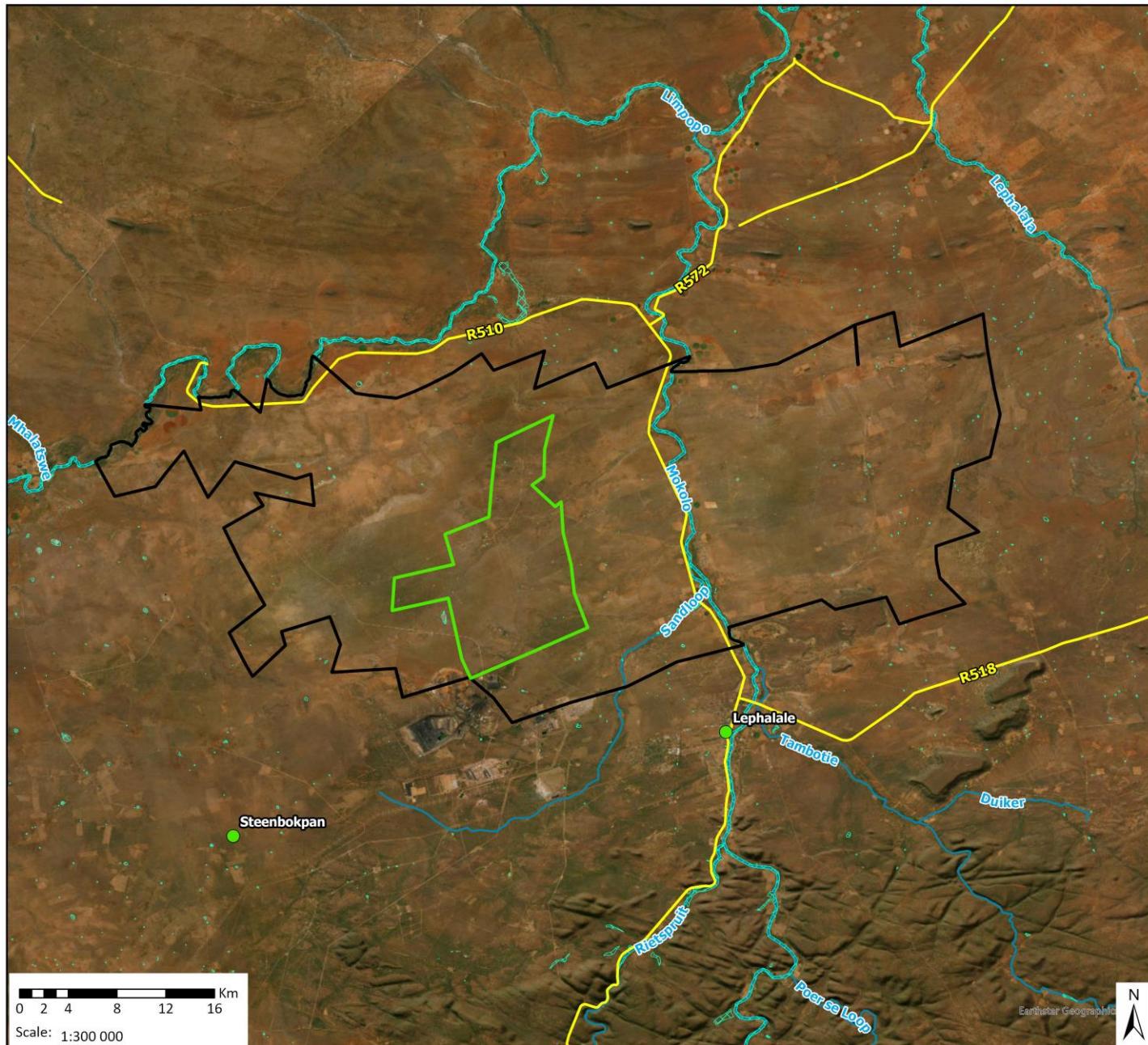
**Motho yo go ka ikgolaganngwang le ene: Lucien James**

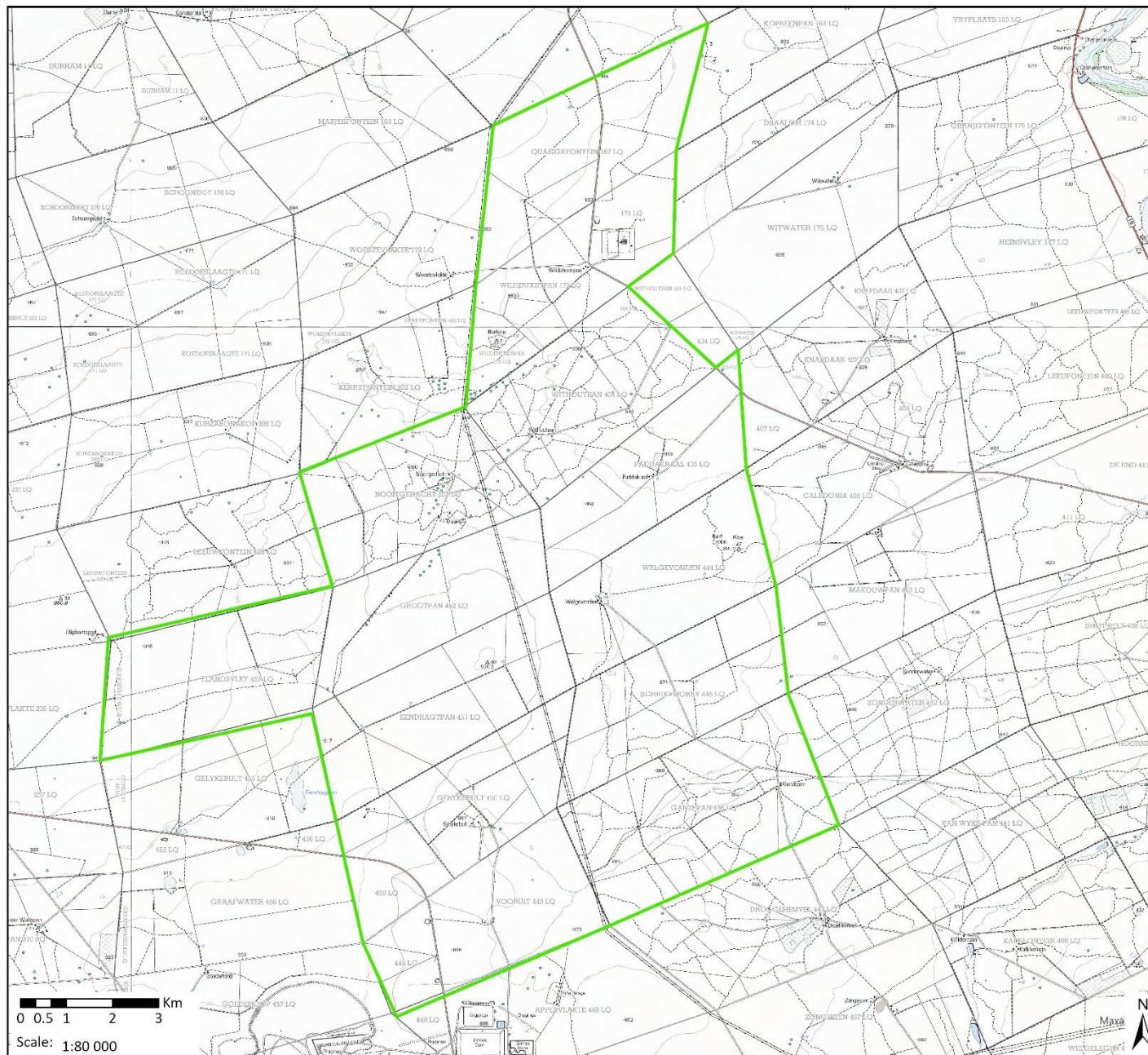
**Nomoro ya Tshupetso ya EIMS: 1590**

**Aterese ya Poso: P.O. Box 2083; Pinegowrie; 2123**

**Mogala: (011) 789 7170 / Fekese: (086) 571 9047**

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## Locality Map

1590 Thungela Lephalale CBM EIA

Legend

 Phase 1&2 Environmental  
Authorisation Application  
Boundary



## Data Sources:

CSG; ESRI; 1:50k scanned Topographical map

Coord System: GCS

Datum: WGS 1984

Units: Degree

Date: 2023/08/30

EIMS Ref: 1590

Compiled: JW

Reviewed: LW

Approved: LW

EIMS