mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

NAME OF APPLICANT: MIDDEN MINING (PTY) LTD

REFERENCE NUMBER:

PROSPECTING WORK PROGRAMME

SUBMITTED FOR A PROSPECTING RIGHT APPLICATION WITHOUT BULK SAMPLING

AS REQUIRED IN TERMS OF SECTION 16 READ TOGETHER WITH REGULATION 7(1) OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT (ACT 28 of 2002)

STANDARD DIRECTIVE

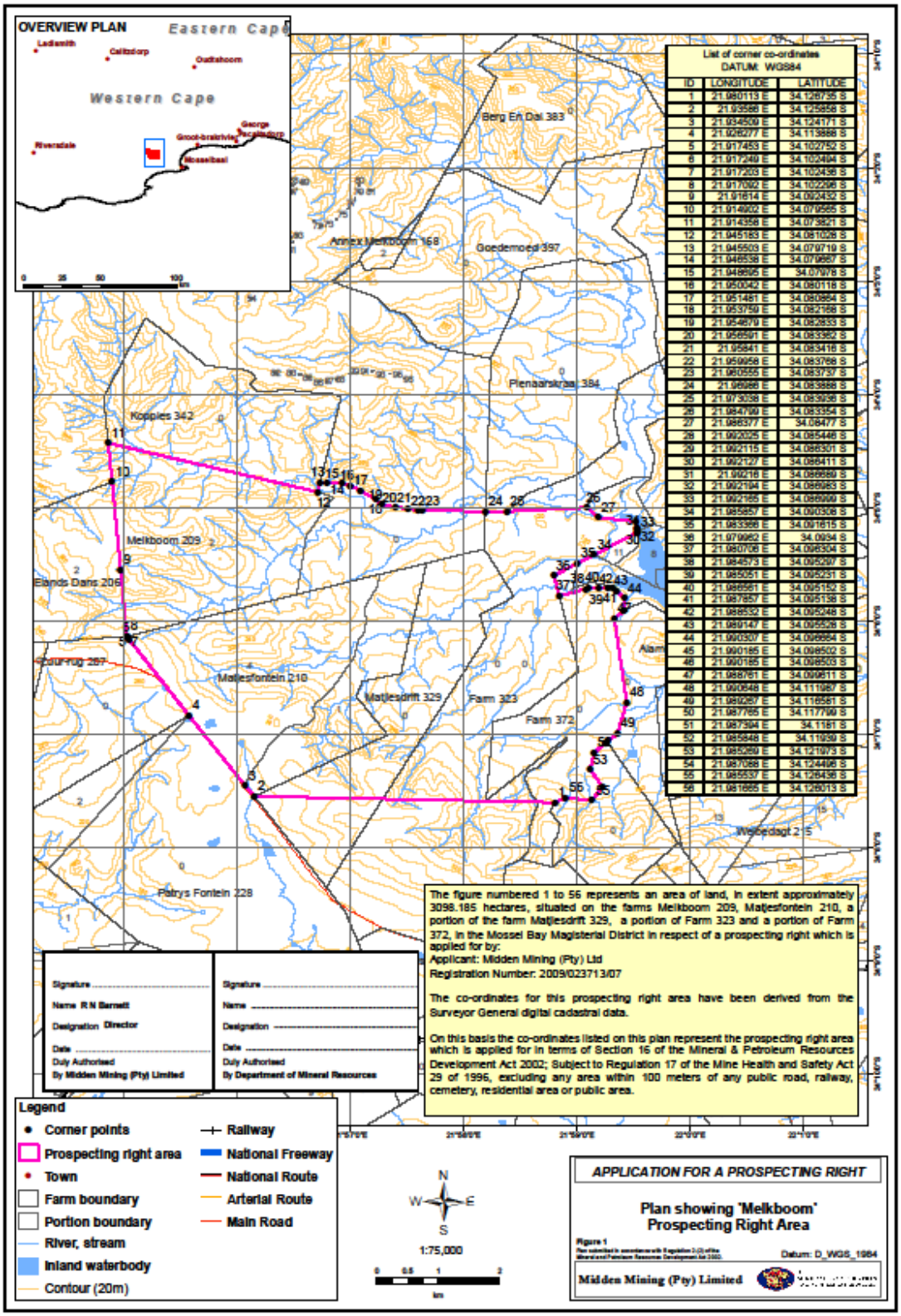
All applicants for mining rights are herewith, in terms of the provisions of Section 16 and in terms of Regulation 7(1) of the Mineral and Petroleum Resources Development Act, directed to submit a Prospecting Work Programme, strictly under the following headings and in the following format together with the application for a prospecting right.

1. **REGULATION 7.1.(a): FULL PARTICULARS OF THE APPLICANT**

Table 1: Applicant's Contact Details

ITEM	COMPANY CONTACT DETAILS
Name	Laurence Matthews
Tel no	0285721326
Fax no:	0865121346
Cellular no	0833309128
E-mail address	docmud@telkomsa.net
Postal address	8 Steyn Street BARRYDALE 6750

2. REGULATION 7(1)(b): PLAN CONTEMPLATED IN REGULATION 2(2) SHOWING THE LAND TO WHICH THE APPLICATION RELATES


OVERVIEW PLAN
Eastern Cape
Western Cape
Ladismith
Calitzdorp
Oudtshoorn
George
Riversdale
Groot-brakrivier
Mosselbaai
List of corner co-ordinates
DATUM: WGS84
ID | LONGITUDE | LATITUDE
1 | 21.980113 E | 34.128735 S
2 | 21.93588 E | 34.125858 S
3 | 21.934509 E | 34.124171 S
4 | 21.926277 E | 34.113888 S
5 | 21.917453 E | 34.102752 S
6 | 21.917249 E | 34.102494 S
7 | 21.917203 E | 34.102436 S
8 | 21.917092 E | 34.102298 S
9 | 21.91614 E | 34.092432 S
10 | 21.914902 E | 34.079565 S
11 | 21.914358 E | 34.073821 S
12 | 21.945183 E | 34.081028 S
13 | 21.945503 E | 34.079719 S
14 | 21.946538 E | 34.079867 S
15 | 21.948695 E | 34.07978 S
16 | 21.950042 E | 34.080116 S
17 | 21.951481 E | 34.080864 S
18 | 21.953759 E | 34.082168 S
19 | 21.954679 E | 34.082833 S
20 | 21.956591 E | 34.083982 S
21 | 21.95841 E | 34.083416 S
22 | 21.959958 E | 34.083788 S
23 | 21.960555 E | 34.083737 S
24 | 21.96988 E | 34.083888 S
25 | 21.973038 E | 34.083938 S
26 | 21.984799 E | 34.083354 S
27 | 21.986377 E | 34.08477 S
28 | 21.992025 E | 34.085446 S
29 | 21.992115 E | 34.086301 S
30 | 21.992127 E | 34.086411 S
31 | 21.99216 E | 34.086689 S
32 | 21.992194 E | 34.086983 S
33 | 21.992165 E | 34.086999 S
34 | 21.985857 E | 34.090308 S
35 | 21.983366 E | 34.091615 S
36 | 21.979962 E | 34.0934 S
37 | 21.980708 E | 34.096304 S
38 | 21.984573 E | 34.095207 S
39 | 21.985051 E | 34.095231 S
40 | 21.986561 E | 34.095152 S
41 | 21.987857 E | 34.095138 S
42 | 21.988532 E | 34.095248 S
43 | 21.989147 E | 34.095528 S
44 | 21.990307 E | 34.096664 S
45 | 21.990185 E | 34.098502 S
46 | 21.990185 E | 34.098503 S
47 | 21.988761 E | 34.099611 S
48 | 21.990848 E | 34.111987 S
49 | 21.989267 E | 34.116561 S
50 | 21.987765 E | 34.117799 S
51 | 21.987394 E | 34.1181 S
52 | 21.985848 E | 34.11939 S
53 | 21.985269 E | 34.121973 S
54 | 21.987088 E | 34.124466 S
55 | 21.985537 E | 34.126436 S
56 | 21.981665 E | 34.126013 S
Berg En Dal 383
Annex Melkboom 168
Goedemoed 397
Plenaarskraal 384
Koppies 342
Melkboom 209
Elands Dans 206
Matjesfontein 210
Matjesdrift 329
Farm 323
Farm 372
Patrys Fontein 228
Welgedagt 215
The figure numbered 1 to 56 represents an area of land, in extent approximately 3098.185 hectares, situated on the farms Melkboom 209, Matjesfontein 210, a portion of the farm Matjesdrift 329, a portion of Farm 323 and a portion of Farm 372, in the Mossel Bay Magisterial District in respect of a prospecting right which is applied for by:
Applicant: Midden Mining (Pty) Ltd
Registration Number: 2009/023713/07
The co-ordinates for this prospecting right area have been derived from the Surveyor General digital cadastral data.
On this basis the co-ordinates listed on this plan represent the prospecting right area which is applied for in terms of Section 16 of the Mineral & Petroleum Resources Development Act 2002; Subject to Regulation 17 of the Mine Health and Safety Act 29 of 1996, excluding any area within 100 meters of any public road, railway, cemetery, residential area or public area.
Signature
Name R N Barnett
Designation Director
Date
Duly Authorised
By Midden Mining (Pty) Limited
Signature
Name
Designation
Date
Duly Authorised
By Department of Mineral Resources
Legend
Corner points
Prospecting right area
Town
Farm boundary
Portion boundary
River, stream
Inland waterbody
Contour (20m)
Railway
National Freeway
National Route
Arterial Route
Main Road
N
W
E
S
1:75,000
APPLICATION FOR A PROSPECTING RIGHT
Plan showing 'Melkboom' Prospecting Right Area
Figure 1
Datum: D_WGS_1984
Midden Mining (Pty) Limited

3. REGULATION 7(1)(c): THE REGISTERED DESCRIPTION OF THE LAND TO WHICH THE APPLICATION RELATES

The land to which the application relates is 3098.185 ha in extent, situated on the farms Melkboom 209, Matjesfontein 210, a portion of the farm Matjiesdrift 329, a portion of Farm 323 and a portion of Farm 372.

4. REGULATION 7(1)(d) and (e): THE MINERAL OR MINERALS TO BE PROSPECTED FOR

Table 4.1: Minerals to be prospected for

ITEM	DETAIL
Type of mineral(s)	Bentonite (Clay)
Type of minerals continued	Zeolite (Industrial Minerals)
Type of minerals continued	
Locality **(Direction and distance from nearest town)**	14 km W.N.W of Mossel Bay
Extent of the area required for prospecting	3098.185
Geological formation	Kirkwood formation

4.2 Description why the Geological formation substantiates the minerals to be prospected for (provide a justification as to why the geological formation supports the possibility that the minerals applied for could be found therein)

Regional Geology

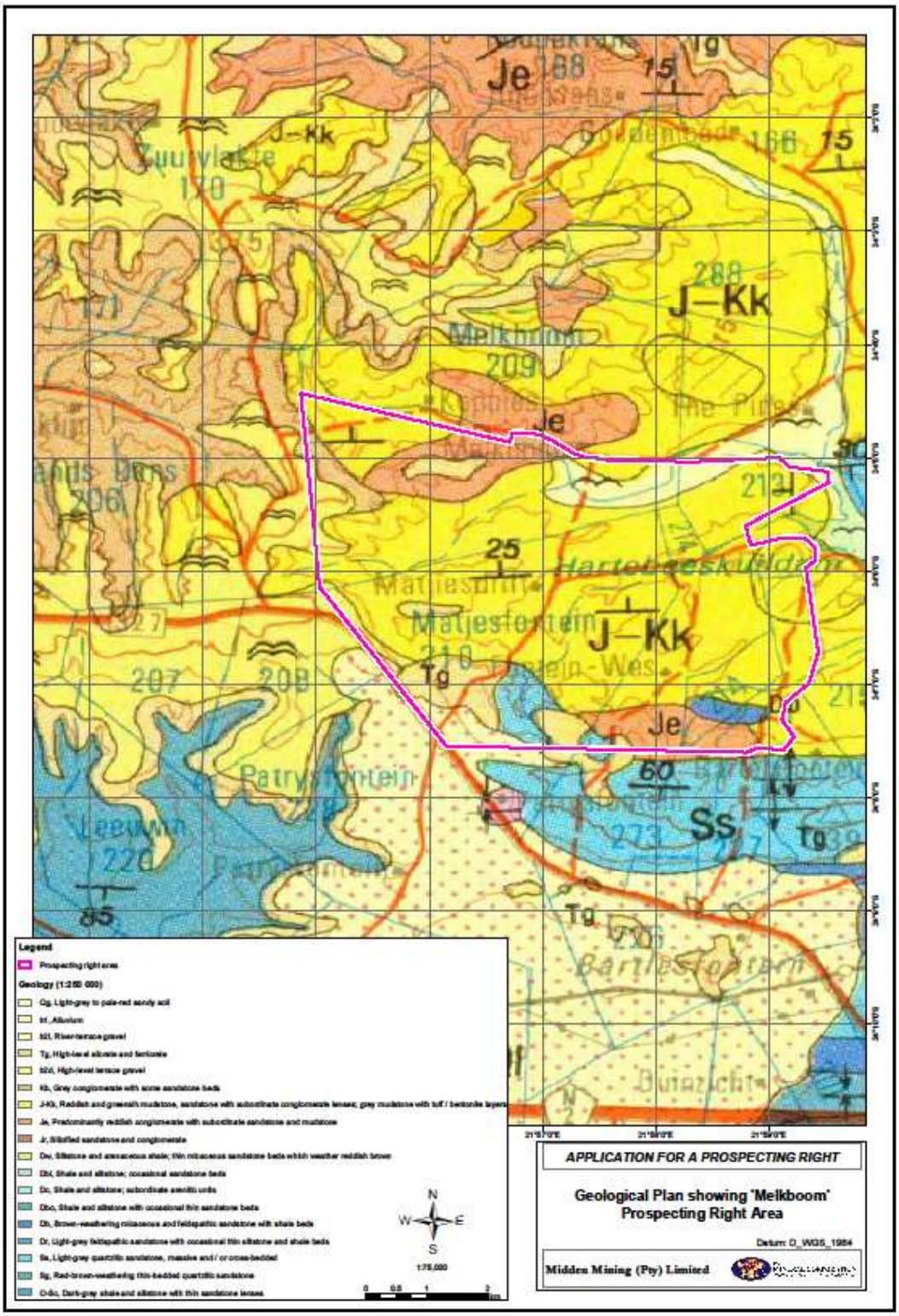
The prospect area is situated within the Mossel Bay basin, one of a number of Mesozoic rift related basins which are located along a 600 km long line of half grabens known as the Worcester – Pletmos line in the Western Cape Province. The basins formed on the downthrown southern side of normal mega faults and are in filled with sediments of the Uitenhage Group which fully developed, comprises the Enon, Kirkwood, Buffelskloof and Hartenbos Formations. The Uitenhage Group includes clastic sediments such as conglomerates, grits sandstones siltstones and shales. The Kirkwood Formation contains within it ash and lava layers that are associated with bentonite and zeolite horizons.

Local Geology

The prospect area lies within the bentonite zeolite bearing Kirkwood Formation within the Mesozoic Mossel Bay half graben. Similar to other Mesozoic half grabens the Mossel Bay basin is filled with sediments and volcanics of the Uitenhage Group. The Kirkwood Formation and associated bentonite zeolite volcanic assemblage occupies the central part of the basin.

The bentonitic zeolite bearing Kirkwood Formation is divided into two units, viz an upper fluvial zone consisting of multicoloured sandstone and mudstone, and a lower zone comprising lacustrine mud and sandstone beds. Bentonite is associated with two tuffaceous zones and underlies zeolite-bearing horizons The lacustrine lower bentonite – zeolite-bearing zones of the Kirkwood Formation can be up to 10 metres thick consisting of several bentonite horizons directly overlain by zeolite bearing altered and reworked tuff.

4.3 Attach a geological map that justifies the description why there is a possibility that the minerals applied for could occur on the land concerned.


Je
J–Kk
Tg
Ss
25
60
85
Legend
Prospecting right area
Geology (1:250 000)
Qg, Light-grey to pale-red sandy soil
Kb, Grey conglomerate with some sandstone beds
J-Kk, Reddish and greenish mudstone, sandstone with subordinate conglomerate lenses; grey mudstone with tuff / bentonite layers
Je, Predominantly reddish conglomerate with subordinate sandstone and mudstone
Jr, Silicified sandstone and conglomerate
Dbi, Shale and siltstone; occasional sandstone beds
Dc, Shale and siltstone; subordinate arenitic units
Dbo, Shale and siltstone with occasional thin sandstone beds
Db, Brown-weathering micaceous and feldspathic sandstone with shale beds
Dr, Light-grey feldspathic sandstone with occasional thin siltstone and shale beds
Se, Light-grey quartzitic sandstone, massive and / or cross-bedded
Sg, Red-brown-weathering thin-bedded quartzitic sandstone
C-Dc, Dark-grey shale and siltstone with thin sandstone lenses
N
W
E
S
1:75,000
APPLICATION FOR A PROSPECTING RIGHT
Geological Plan showing 'Melkboom' Prospecting Right Area
Datum: D_WGS_1984
Midden Mining (Pty) Limited

5. REGULATION 7(1)(f): A DESCRIPTION OF HOW THE MINERAL RESOURCE AND MINERAL DISTRIBUTION OF THE PROSPECTING AREA WILL BE DETERMINED

7.(1)(f)(i) the prospecting work to be performed;

Reconnaissance Surveys

A comprehensive reconnaissance survey and full mapping program is planned over the area for all 5 years. This mapping will add to the geological understanding of the surface geology of the prospecting area, as well as providing a detailed structural framework.

This mapping will lay the foundations for trenching and drilling plans that are described under the relevant sections below.

7.(1)(f)(ii) a geochemical survey to be carried out; and
No geochemical surveys are envisaged for this prospecting project.

7.(1)(f)(iii) a geophysical survey to be undertaken;
No geophysical surveys are planned over the prospect area.

REGULATION 7(1)(g): A DESCRIPTION OF THE PROSPECTING METHOD OR METHODS TO BE IMPLEMENTED

(i) DESCRIPTION OF PLANNED NON-INVASIVE ACTIVITIES:

(These activities do not disturb the land where prospecting will take place e.g. aerial photography, desktop studies, aeromagnetic surveys, etc)

(ii) DESCRIPTION OF PLANNED INVASIVE ACTIVITIES:

(These activities result in land disturbances e.g. sampling, drilling, bulk sampling, etc)

(iii) DESCRIPTION OF PRE-/FEASIBILITY STUDIES

(Activities in this section includes but are not limited to: initial, geological modeling, resource determination, possible future funding models, etc)

7.(1)(g)(i) any excavations, trenching, pitting and drilling to be carried out;

Trenching and Pitting

Excavations are envisaged over surface bentonite, and tuffaceous horizons delineated from regional mapping.

Drilling

Diamond drilling has been scheduled to commence from Year 2 onwards and to continue for the full remainder of the five-year prospecting work programme. These boreholes have been designed so as to intersect the bentonite and zeolite bearing horizons to assist in grade and ore body definition.

7.(1)(g)(ii) any bulk sampling and testing to be carried out; and

No bulk sampling is envisaged in the early stages of the programme, however, if results indicate the need for such a survey it will be planned, costed and applied for to the Department of Mineral Resources via the relevant application structure.

7.(1)(g)(iii) any other prospecting methods to be applied;

Assaying, mineralogical testing and process testing on trench and borehole samples will be undertaken to obtain results for the work carried out. No other methods are envisaged at this stage.

Commitment to provide addendums in respect of additional prospecting activities

I herewith commit to provide the Department of Mineral Resources with an addendum in respect of both the EM Plan and Prospecting Work Programme regarding any future in-fill prospecting required but not described above, prior to undertaking such activities. The addendum will cover all the Regulations as per the Prospecting Work Programme.

I agree that the addendums will provide for similar activities only and if the scope changes I would be required to apply in terms of Section 102 of the MPRDA for an amendment of the Prospecting Work Programme

Mark with X

ACCEPT	X

AND

REGULATION 7(1)(h): ALL PLANNED PROSPECTING ACTIVITIES MUST BE CONDUCTED IN PHASES AND WITHIN SPECIFIC TIMEFRAMES

Table 1: Prospecting activities within specific timeframes on the farms Bergsig 367, Outeniquasbosch 151 portion 2 and the remaining extent, Farm 292 portion 2, Nagenoeg 395 and Bergsig 355.

YEAR 1	
Activity	
Desktop Research	
➲ Topographic maps	
➲ Geology maps	
➲ Public Domain Database Data	
➲ Market Research/Commodity Reviews	
Total days	**60**
Broad Targeting	
➲ Prospective Geology	
➲ Prospective Structures	
Total days	**10**
Field Work	
➲ Outcrop mapping	
➲ Soil Mapping	
Total days	**60**

Trenching	
➲ Prospective Geology	
▪ (10 trenches; 20m long, 1.5m wide)	
Total **days**	**22**

Pitting	
➲ Prospective Geology	
➲ 50 pits across	50
Total **days**	**55**

Modelling	
➲ Interpretation of Mapping	
➲ Interpretation of Trenching and Pitting	
Total **days**	**44**

Environmental	
➲ Fill in Trenches	
➲ Fill in Pits	
Total **days**	**20**

Assays	
➲ Analysis trench and pit samples for chemistry and mineralogy	100
Total **days**	**20**

Note: Please be advised that all stages within the work programme and the successive years' work is fully dependent upon the previous years' findings and interpretation. This note is especially relevant when considering whether to proceed with an extensive and expensive drilling programme.

YEAR 2	
Activity	
Desktop Research	
➲ Data review from previous year	
➲ Drill Targeting	
Total **days**	**12**

Drilling	
➲ Drilling to intersect bentonite and zeolite layers	
▪ 5 boreholes(Average Depth = 50m)	
Total **metres**	**250m**
Total **days**	**30**

Trenching	
➲ Prospective Geology	
▪ (5 trenches; 20m long, 1.5m wide)	
Total **days**	**10**

Pitting	
➲ Prospective Geology	
▪ 25 pits	
Total **days**	**30**

Modelling	
➲ Interpretation of Drilling	
➲ Interpretation of Trenching and pitting	
Total **days**	**44**

Environmental	
➲ Fill in Trenches and Pits	
➲ Rehabilitation of Drill sites	
Total **days**	**20**

Assays	
➲ Analysis borehole, trench and pit samples for chemistry and mineralogy	66
Total **samples**	**55**
Total **days**	**30**

Note: Please be advised that all stages within the work programme and the successive years' work is fully dependent upon the previous years' findings and interpretation. This note is especially relevant when considering whether or not to proceed with an extensive and expensive drilling programme.

YEAR 3		
Activity		
Desktop Research		
➲ Data review from previous year		
➲ Drill targeting		
Total	**days**	**12**

Drilling		
➲ Drilling to intersect bentonite and zeolite layers		
▪ 5 boreholes(Average Depth = 50m)		5 000m
Total	**metres**	**250**
Total	**days**	**30**

Trenching		
➲ None Envisaged		
Total	**days**	

Pitting		
➲ None Envisaged		
Total	**days**	

Modelling		
➲ Interpretation of Drilling		
Total	**days**	**60**

Environmental	
➲ Rehabilitation of Drill Sites	
Total **days**	**20**

Assays	
➲ Analysis borehole, trench and pit samples for chemistry and mineralogy	15
➲ Bentonite and zeolite laboratory activation tests	15
Total **samples**	**30**
Total **days**	**45**

Note: Please be advised that all stages within the work programme and the successive years' work is fully dependent upon the previous years' findings and interpretation. This note is especially relevant when considering whether or not to proceed with an extensive and expensive drilling programme.

YEAR 4	
Activity	
Desktop Research	
➲ Data review from previous year	
➲ Drill Targeting	
Total **days**	**12**

Drilling	
➲ Drilling to intersect bentonite and zeolite layers	
▪ 20 boreholes(Average Depth = 50m)	
Total **meters**	**1 000**
Total **days**	**66**

Trenching	
None Envisaged	
Total **days**	

Pitting	
None Envisaged	
Total **days**	

Modelling	
➲ Interpretation of Drilling	
Total **days**	**60**

Environmental	
➲ Rehabilitation of Drill Sites	
Total **days**	**25**

Assays	
➲ Analysis borehole, trench and pit samples for chemistry and mineralogy	60
➲ Bentonite and zeolite laboratory activation tests	20
Total **samples**	**80**
Total **days**	**60**

Note: Please be advised that all stages within the work programme and the successive years' work is fully dependent upon the previous years' findings and interpretation. This note is especially relevant when considering whether or not to proceed with an extensive and expensive drilling programme.

YEAR 5	
Activity	
Desktop Research	
➲ Data review from previous year	
➲ Drill Targeting	
Total days	**12**

Drilling	
➲ Drilling to intersect bentonite and zeolite layers	
▪ 40 boreholes(Average Depth = 50m)	2 000m
Total meters	**2 000**
Total days	**120**

Trenching	
None Envisaged	
Total days	

Pitting	
None Envisaged	
Total days	

Modelling	
➲ Interpretation of Drilling	
Total days	**60**

Environmental	
➲ Rehabilitation of Drill Sites	
Total days	**25**

Mining Right Application	
➲ Pre feasibility study	120
➲ Mining Right Application	120
Total days	**240**

Assays	
➲ Analysis borehole, trench and pit samples for chemistry and mineralogy	120
➲ Bentonite and zeolite laboratory activation tests	40
➲ Laboratory bench scale process tests	10
Total samples	**170**
Total days	**90**

AND

REGULATION 7(1)(i):TECHNICAL DATA DETAILING THE PROSPECTING METHOD OR METHODS TO BE IMPLEMENTED AND THE TIME REQUIRED FOR EACH PHASE OF THE PROPOSED PROSPECTING OPERATION

Please refer to section 7.1(h) for details on the time required for each phase. The technical detail below summarises a variety of techniques used within the industry. This is a comprehensive list of all techniques of which some may not be applicable to the area referred to in this document.

Reconnaissance Surveys

Basic Mapping would entail the generation of a basic map of all distinguishable rock and clay types and the collection of these rocks for chemical and mineralogical analysis. Major structural/geological outcrops will be mapped in detail in order to comprehend the regional geology.

Desk top studies would entail the sourcing of old maps, reports, databases, digital datasets, as well as literature studies for the relevant area. An important study will be that of commodity reviews to fully understand the target markets and the overall market economics.

Infrastructure and Accessibility by use of the public domain maps and site visits to the area's it will be possible to ascertain what steps will be needed in order to gain access to the target area's, as well as what will be needed in order to facilitate further work over the tenure of the prospecting programme.

Detailed Geological Surveys

Mapping would entail detailed measurements of all exposed rock and clay outcrop features, which will greatly enhance the understanding of their relationships to sub-surface features and the bentonite - zeolite horizons themselves. A series of maps and cross sections through the properties would be the end product of such a programme.

Trench Mapping trenching across structural/intrusive features will provide basic information on rock type, structural relationships and the local weathering profile. Detailed mapping of all structures exposed will be undertaken.

Geochemical Surveys

No geochemical surveys will be conducted as part of this prospecting project. However, as part of the geological surface mapping, and trenching and pitting grab rock and clay samples will be taken for analytical purposes. Likewise borehole core samples will be taken for analysis

Remote Sensing
Not applicable.

Geophysical Surveys to be undertaken
Not applicable

Trenching and Pitting

Trenching is planned along the bentonite, zeolitic tuff sub outcrops during several phases. The trenches will be approximately 20m long by 1.5m wide by up to 2m deep (depending on overburden depth).

Pits will likewise be dug along bentonite and zeolitic tuff sub outcrops and will typically be 2m x 2m in area and up to 5m deep.

The dimensions vary according to the dimensions of the feature. Geological measurements and photographs will be taken before the trenches and pits are backfilled.

Drilling

After reconnaissance and planning, borehole sites will be positioned by the prospecting project geologists and drilled by a contract drilling company. The diamond drilling rigs will be truck/skid mounted.

Diamond and or air flush rotary percussion drilling will be used to explore beneath the subsurface so as to ascertain geology, stratigraphy, structure and mineralization. The bentonite and zeolitic tuff horizons will be cored for logging and sampling purposes.

Boreholes will be logged and captured into an appropriate software database, whilst sampling of the bentonite – zeolitic tuff intersections.

The bentonite – zeolitic tuff borehole intersections would be split lengthways, cut into appropriate sample intervals and dispatched for assay.

Chemical and mineralogical analysis of samples will be conducted by a contract laboratory.

All samples will be chemically and mineralogically analyzed.

Activation tests will be conducted by a contract industrial minerals laboratory as will the laboratory bench scale processing tests.

Bulk sampling and testing

Not applicable

The table below incorporates the information required in respect of Regulations 7(1)(f), 7(1)(h) and 7(1)(i):

Table 5.1

Phase	**Activity** (what are the activities that are planned to achieve optimal prospecting)	**Skill(s) required** (refers to the competent personnel that will be employed to achieve the required results)	**Timeframe** (in months) for the activity)	**Outcome** (What is the expected deliverable, e.g. Geological report, analytical results, feasibility study, etc.)	**Timeframe for outcome** (deadline for the expected outcome to be delivered)	**What technical expert will sign off on the outcome?** (e.g. geologist, mining engineer, surveyor, economist, etc)
1	Non invasive prospecting: desktop studies Geological mapping	Geologist Geologist	4 months 2 months	Geological report Geological plan	Month 6	Geologist
2	Invasive prospecting: Trenching & pitting	Mechanical – TLB operator	4 months	Collection of samples	Month 11	Geologist
3	Non invasive prospecting: Analytical work	Certified laboratory	1 month	Analytical results	Month 12	Certified laboratory technician

4	Invasive prospecting: Environmental	Mechanical – TLB operator	5 months spread as 1 month per year	Infilling of pits and trenches and environmental repair of drilling sites	Month 13, 25, 37, 49 and 56	
5	Invasive prospecting: Drilling	Drill crew	1 month in year 2 1 month in year 3 2 months in year 4 4 months in year 5	Drill cores for geological and analytical work to establish ore reserves	Month 22 Month 34 Month 46 Month 54	Geologist
6	Non invasive prospecting: Deskwork	Geologist	1.5 months in year 2 2.5 months in year 3 2.5 months in year 4 2.5 months in year 5	Geological progress reports	Month 13 Month 25 Month 37 Month 58	Geologist
7	Non invasive prospecting: Analytical work	Certified laboratory	1 month in year 2 1.5 months in	Analytical results	Month 21	Certified laboratory technician

			year 3 2 months in year 4 3 months in year 5		Month 33 Month 45 Month 57	
8	Non invasive prospecting: Pre-feasibility report Mining Rights Application	Geologist Financial planner	4 months 4 months	Pre-feasibility report Mining Right	Month 58	Competent person

7. REGULATION 7(1)(j)(i):DETAILS WITH DOCUMENTARY PROOF OF THE APPLICANT'S TECHNICAL ABILITY OR ACCESS THERETO TO CONDUCT THE PROPOSED PROSPECTING OPERATION

7.1 Competencies to be employed in terms of the Mine Health and Safety Act

COMPETENCIES TO BE EMPLOYED (List the legal appointments that will be made in terms of the Mine Health and Safety Act, appropriate for the type of operation)
Prospecting Operations Manager
Competent Engineering Person
Health & Safety Representative

I herewith confirm that I, in Table 9.1 have budgeted and financially provided for the required skills listed above.

CONFIRMED (Mark with an **X**)	X

7.2 List of Appropriate equipment at your disposal (If Applicable)

Not applicable.

Table D: Appropriate Equipment Available

Pitting, trenching and drilling equipment will be supplied by contractors as and when required.

7.3 Technical skills provided Free of Charge

7.3.1 Information (CV's) in respect of skills already acquired (append)
Appended in **Appendix 1**

7.3.2 Copy of the relevant contractual agreements between the service provider and the applicant relative to the duration of the planned prospecting period, where applicable. (append)
Not applicable.

7.3.3 ALL other evidence of Technical Ability (append)
See CV's in **Appendix 1**.

8. REGULATION 7(1)(j)(ii):DETAILS WITH DOCUMENTARY PROOF OF A BUDGET AND DOCUMENTARY PROOF OF THE APPLICANT'S FINANCIAL ABILITY OR ACCESS THERETO

AND

9. REGULATION 7(1)(k) A COST ESTIMATE OF THE EXPENDITURE TO BE INCURRED FOR EACH PHASE OF THE PROPOSED PROSPECTING OPERATION (remember to also include prospecting fees)

Table 9.1

ACTIVITY	YEAR 1 Expenditure (R')	YEAR 2 Expenditure (R')	YEAR 3 Expenditure (R')	YEAR 4 Expenditure (R')	YEAR 5 Expenditure (R')
PHASE 1 (12 months)					
Desktop studies	40,000				
Field mapping	40,000				
Pitting & trenching	35,000				
Environmental rehabilitation	10,000				
Assays	20,000				
Data analysis & interpretation	15,000				
Admin & logistics	10,000				

PHASE 2 (42 MONTHS)					
Data review		15,000	15,000	15,000	15,000
Field mapping		10,000	10,000	10,000	10,000
Pitting & trenching		15,000			
Drilling		220,000	220,000	795,000	1,560,000
Environmental rehabilitation		10,000	10,000	10,000	10,000
Assays		66,000	30,000	30,000	30,000
Data analysis & interpretation		15,000	15,000	15,000	15,000
Admin & logistics		10,000	10,000	10,000	5,000
PHASE 3 (6 months)					
Pre feasibility study					60,000
Mining Right Application					60,000
ANNUAL TOTAL	170,000	361,000	310,000	885,000	1,765,000
PROJECT TOTAL					3,491,000

NOTE! If any person (including the applicant) provides services in any job or skills category at a reduced rate or free of charge, then such person's Curriculum Vitae (CV) must be attached as documentary proof of the technical ability available to the applicant.

10. FINANCIAL ABILITY TO GIVE EFFECT TO THE WORK PROGRAMME

10.1 The amount required to finance the Work Programme.

(State the amount required to complete the work)

The amount required as per Table 9.1 above is R3,491,000.

Activities to be undertaken by R Barnett, LC Matthews and M Wynn

Activity	YEAR 1 Value (R')	YEAR 2 Value (R')	YEAR 3 Value (R')	YEAR 4 Value (R')	YEAR 5 Value (R')
Data review		15000	15000	15000	15000
Desktop studies	40000				
Field mapping	40000	10000	10000	10000	10000
Data analysis & interpretation	15000	15000	15000	15000	15000
Admin & logistics	10000	10000	10000	10000	10000
Pre feasibility study					60000
Mining right application					60000
	105000	35000	35000	35000	155000
Cost estimate per Table 9.1	170000	361000	310000	885000	1765000
Net amount (required to finance)	65000	326000	275000	850000	1610000
Total of YEAR 1 to 3, funded by:					
R, Barnett, LC Matthews & M Wynn	65000	326000	275000		
Year 4 and 5 by raising bank finance				850000	1610000

10.2 Detail regarding the financing arrangements

(Elaborate on the financing arrangements, in terms of where the finance will be sourced, extent to which the financing has been finalized and on the level of certainty that such financing can be secured.)

R.N. Barnett, L. Matthews and M. Wynn will pay for the costs of year 1 to year 3 out of income generated from consulting work as well as fixed employment. Bank finance will be raised for the costs in years 4 and 5 using personal assets as collateral.

10.3 Confirmation of supporting evidence appended

(Attach evidence of available funding and or financing arrangements such as balance sheets, agreements with financial institutions, underwriting agreements, etc. and **specifically confirm** in this regard what documentation has been attached as appendices).

See attached Board Resolution in **Appendix 2** wherein the company directors resolve to fund the prospecting activities. Also in **Appendix 2** are bank letters of good standing for the company directors will be responsible for the prospect funding.

11 Confirmation of the availability of funds to implement the proposed project.

See the attached Board Resolution in **Appendix 2** wherein the company directors resolve to fund the prospecting activities.

12 I herewith confirm that I have budgeted and financially provided for the total budget as identified in Regulation 7(1)(k).

Confirmed (Mark with an X)	**X**

13 REGULATION 7(1) (m): UNDERTAKING, SIGNED BY THE APPLICANT, TO ADHERE TO THE PROPOSALS AS SET OUT IN THE PROSPECTING WORK PROGRAMME

Table: 13.1

Herewith I, the person whose name and identity number is stated below, confirm that I am the Applicant or the person authorised to act as representative of the Applicant in terms of the resolution submitted with the application, and undertake to implement this prospecting work programme and adhere to the proposals set out herein.	
Full Names and Surname	R. N. Barnett
Identity Number	4811305106185

END

APPENDIX 1 - CURRICULUM VITAE OF TECHNICAL PERSONS

R. N. Barnett

Born 30 November 1948

BSc Eng Mining Geology Witwatersrand University 1972

MSc Hull University UK Industrial Mineralogy 1979

National Higher Diploma in Quality Assurance Pretoria Technikon 1992

1973 – 1975 Base Metal and Coal prospecting for TexasGulf Inc and Aloe Minerals (Pty) Ltd

1975 – 2000 Industrial Minerals company G&W Base & Industrial Minerals (Pty) Ltd. Started as Company Geologist and ended as Technical Manager. The experience gained at the company included mining and prospecting geology, laboratory testing and management, research and product development, and production and mine management. The company was and is a major bentonite supplier and much of the writer's experience was in this field.

2000 – present Industrial Mineral consultant to a range of mineral industries.

L. Matthews Pr Sci Nat

Born 16 December 1949

Bsc Rhodes University 1970

BSc(Hons) Rhodes University 1972

1988 – 2011 Consulting to various companies:

Exploration for gold in Southern and West Africa. Evaluation of tantalum deposits in Cote de Ivoire and Mozambique. Assess gold potential of Madagascar. Assess the mining potential of a number of mineral deposits in Nigeria. Conduct a pre-feasibility study for a proposed cement plant on the Philippine island of Palawan.

1986 – 1988 Nigel Gold Mining Company (Pty) Ltd, Head of Technical Services

1983 – 1985 Transvaal Alloys (Pty) Ltd, Mine Manager/ Geologist

1982 – 1983 Rand Mines Limited, Marico Fluorspar & ERPM Gold Mine

1980 – 1982 G & W Base & Ind. Minerals (Pty) Ltd, Production Manager

M. Wynn

University of South Africa, Bachelor of Accounting Science, 1989

University of South Africa, Bachelor of Accounting Science Honours, 1992

University of Pretoria, MDP (Management Development Programme), 1994

University of Johannesburg, Chartered Institute of Management Accountants Qualifying Exams (Stages 2, 3 & final), 2001

Manchester Business School (UK), Master of Business Administration, 2006

2001- Current, Vesuvius – Cookson Group, Business Unit Manager of Foseco

South Africa, Director of Cookson Group in South Africa (Vesuvius South Africa) and Foseco

Holding (South Africa).

1997 – 2001, G & W Base & Industrial Minerals (Pty)Ltd, Financial Manager

1994 – 1997, Standard Engineering (part of the Murray & Roberts group): Drill Steels and

Mining Carbide, Financial Manager

1983 – 1993 Various positions in Auditing and Accounting

Fellow of the Institute of Chartered Management Accountants (FCMA)

Institute of Directors in South Africa

Chartered Institute of Marketing

APPENDIX 2 – BOARD RESOLUTION TO FUND PROSPECTING AND BANK LETTERS OF GOOD STANDING

FNB

Voted the top retail bank in the Sunday Times Top Brands Survey 2009

2010-06-15

To Whom It May Concern:

This letter serves to confirm that Mr Robert N Barnett Id 4811305106185 currently has an active FNB Encore account in our books since 01061988. He has been operating the following account in a satisfactory manner

Account Number: 51310075415

Branch Code: 251542

Branch: Lambton

I trust you will find the above in order.

Greetings

Mrs Chantell Schwartz
Personal Relationship Manager
011 824-0640
082 885 4970
cschwartz@fnb.co.za

Standard Bank

Department of Minerals and Energy To whom it may concern
Swellendam Branch

5 July 2010 **0860 101 341** **PJ Mostert**

.CONFIRMATION OF ACCOUNT DETAILS: L. C. Matthews;

We hereby confirm that Mr. Laurence Charles Matthews (I.D. No. 481216 5035 084) conducts a current account in the books of Standard Bank, Swellendam Branch, since 13 January 1987.

Account Number: 28 001 2381

Branch Code:
05-0513

We further confirm that Mr. Matthews is an esteem customer of the Bank, who conducts his account in a exemplary manner.

We trust that you will find the above in order.

Paul Mostert **Service Head Swellendam**

STANDARD BANK
SWELLENDAM

- 5 JUL 2010

SERVICE HE AD/DIENSHOOF
05-O5-13

32a Voortrek Street Swellendam 6740
PO Box 5 Swellendam 6740
Tel: 0860 101 341 Fax: 028 514 1 597

RMB
PRIVATE BANK
A division of FirstRand Bank Limited

14 June 2010

Department of Minerals and Energy:

Letter of Reference

We confirm that Mr. Mark Wynn presently residing at 29 Pauline Street, Constantia Kloof Ext 1, Roodepoort has banked with the FirstRand Group since July 2003. He is currently a client of RMB Private Bank, a division of FirstRand Bank Ltd, which offers private banking services to high net worth individuals.

During this period Mr. Wynn has managed and maintained his banking accounts with the bank in a responsible and commendable manner.

Through our dealings with Mr. Wynn, he has become well known to us and we have built up a high regard for him as an individual of integrity.

We are neither aware of any past or present criminal activities in which Mr. Wynn may be involved, nor have we any information at hand that may influence your favourable consideration in this matter.

We recommend Mr. Wynn as a client with whom you may deal in complete confidence.

This letter is provided for your confidential information only and without any liability for the Bank or its employees.

Anne Ferreira
Banker

MIDDEN MINING (PTY)LTD
Registration number 2009/023713/07
("the company")

RESOLUTION OF THE DIRECTORS

RECORDED THAT:

In order to proceed with the prospecting work programme and environmental management plan for the prospecting right application on the properties: Melkboom 209, Matjesfontein 210, Matjesdrift 329, Farm 352 and Farm 323 in the Mossel Bay magisterial district of the Western Cape province.

RESOLVED THAT:

1. The directors jointly and severally agree to fund the prospecting work programme and environmental management plan.
2. Robert Nicholas Barnett be and is hereby authorised, on behalf of the Company, to sign all such documents and agreements, including the prospecting right application, and do all such other things as may be necessary to give effect to and implement the resolution set out above or any agreements or documents contemplated therein.

Name: RN Barnett
Date: 15/3/2011

Name: LC Matthews
Date:

Name: M Wynn
Date: 14/03/2011

Name: MS Mashabathakga
Date: