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### Addendum to the

1st phase H.I.A. of a proposed upgrading and extension of the proposed storm-water management project at Venetia Mine, Limpopo Province, South Africa

For De Beers Consolidated Mines (Pty) Ltd.

**Project number DEB-VEN-21-02-03** 

 $(Amendment\ 1\ on\ request\ from\ SAHRA\ APM\ unit\ letter\ dated\ 27^{th}\ September\ 2021)$ 



Report prepared by: -

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Owing to concerns raised by SAHRA regarding insufficient track logging for the De Beers Consolidated Mines (Pty) Ltd. Project number DEB-VEN-21-02-03, this issue was revisited by the present author. There are several concerns, challenges and realities in play.

#### 1. Past occupation of the Landscape.

It is well known, as discussed in the 1<sup>st</sup> phase assessment, that owing to the geology, yearly precipitation and vegetative matters men and women have for a very long time settled permanently in this region along the river complexes and in the fertile valleys. The landscape abounded with all types of game, birds, reptiles and insects as well with a bounty of a variety of edible fruits, berries and plants, as well as for medicinal use. With the arrival of the Agro Pastoralists, the soils also proved to be productive and during the first 1500 years AD the yearly precipitation allowed sufficient crop yields. In due course, with the continuous climate change, the yearly precipitation fell to the region of 250 mm per year that is insufficient for dry-land agriculture.

This existence of this extensive population is also underscored by the myriads of rock shelters in the sandstone hillsides that was intensely utilised by Stone Age peoples. The heritage estate of South Africa also have here one of the most concentrated rock-art ensembles in Southern Africa, often including engravings and paintings in the same shelters. (One of the very special features in this region is the use of green as a colour in some of the images that is apparently due to the occurrence of copper at Musina.) This occurrence of rock-art in the region is extensively discussed by the likes of Schoonraad, Pager, Eastwood, Cnoops, Blundell,

Regarding the Iron Age period one may assume that from as early as the fourth century they also appear in this landscape, as proven by the Klein Africa site only some 80 kilometres to the south of Venetia, excavated by H.P. Prinsloo in the 1970's. Then for 10 more centuries the Iron Age population waxed and waned around the highpoint of the Mapungubwe culture.

#### 2. Geology and vegetation.

But, as all over the world, societies depended on grains as a central food source needs soils to cultivate these grains in. Soils on their turn is either a direct derivative from the geological substructure of the region, or is/was deposited by either ice, water or wind born sources. This was then the basis for the thriving Iron Age occupation of the Vhembe district.

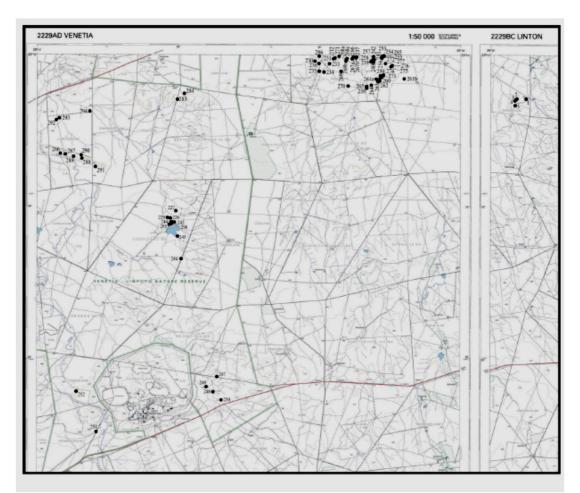


BUT.....The formation of the multifaceted kimberlite core of the Venetia mine also transformed the geology around its epicentre leavening behind a very hard calcite geological sub stratum for the formation of soils, which did not really occur. This resulted in the very stunted mopani-veld surrounding the mine, as well as nearly no soils suitable for cultivation. This very basic tool of archaeological investigation then leads the investigator to the hypothesis that the probability of finding any significant archaeological remains are very low and then also low risk in missing any sites that might be detected.

Fig. 01. The landscape in the areas of investigation consists of a calcite substructure inhibiting growth in vegetation, both trees and grass species. This substructure supports mainly two indigenous tree species of, namely Colophospermum mopane (Mopani tree) in the dry veld and Lonchocarpus capassa (Apple leaf tree) along drainage lines. On most portions of the site under investigation it is possible to do an on-foot survey owing to the scarcity of vegetation. This is then also a clear indication of the soils not being capable to support grain based societies. (Photo S.M. Miller 2021.)



Fig. 02. Drainage lines such as the Matotwane in this image here on the eastern side and the Kolope on the western side of the mine may have had some suitable soils for limited cultivation. That is why these areas were more intensly investigated by on-foot survey. Note the stunted Colophospermum mopane (Mopani trees) growing right up to the drainage line, with the Lonchocarpus capassa (Apple leaf trees) surviving in the little soil available along its banks. (Photo S.M. Miller 2021.)



**Fig. 03.** The hypothesis of settlement distribution in relation to geology and vegetation is then also underlined by this map kindly supplied by Tom Huffman which is the result of years of research in the Vhembe district by the Wits Department of Archaeology (**Map Tom Huffman.**<sup>1</sup>)

<sup>&</sup>lt;sup>1</sup> This is the intellectual property of the University of the Witwatersrand and its researchers and may not be used in publications without their consent

#### 3. Previous Archaeological Impact Assessments.

#### 3.1. The 2000 Hanish Report.

An important aspect that appears to be amiss in the case of the present HIA, is that the whole site within the security fences of the Venetia mine has been assessed and mitigated by H.O.M. Hanish between 1989 and 2000. In the region of 27 sites were identified and over time assessed for importance. As none were found to be retained without a chance of mitigation, all sites were recorded and mitigated as described in the *Environmental Management Report for Venetia Mine of* July 2000, Appendix 3.

The Mine has therefor exercised its right to proceed with mining operations for the last 21 years with no intervention of re-assessment of heritage material inside its mining rights area.

To therefore require a new AIA or HIA within the previously cleared area may be prudent on the side of the Environmental team but technically out of order.

The rules of finding previously undetected heritage resources is managed by the mine's Heritage Management Plan that prescribes actions to be taken in such cases.

#### 3.2. The 2011 Pistorius Report.

In an extensive report covering 58 pages Pistorius verbally describes the finding of six Iron Age sites, a graveyard and a MSA in one page. The information regarding these sites are only descriptive, with only two photographs of the grave site and what appears to be some bulldozed rocks.

- 1. There is no track record of how these sites were identified, and no GPS reading to locate or re-locate them are available.
- 2. The one Iron Age site on the west of the mine at the foot of the dump and the MSA site ought to have been immediately mitigated in 2012 according to the mine's Heritage Management Plan and SAHRA directives.
- 3. The wall in the photograph has no characteristics of a Khami Period wall and Pistorius describes the ceramics as "un-diagnostic". So it is difficult to understand the site being described a "Khami-Period site?
- 4. The MSA site Pistorius described as a small ensemble of stone artefacts. If they were left in place there is no chance that they would have survived 9 years of mine traffic over PCD1. <sup>2</sup>
- 5. It is also noted that in August 2015 excavation permits were issued to Dr Shadreck Chirikuri by SAHRA for possibly the mitigation of the 7 sites mentioned in the 2011 report. As there is no record of these permits being utilised, it must be assumed that the sites were not mitigated, or could not be found?
- 6. As these sites fall outside the designated areas for the present H.I.A. no further attention were allocated to them. If SAHRA is in a quandary regarding the sites, maybe Chirikuri is the responsible person to communicate with.

#### 4. Mine and Game Farm Security.

The final and one of the most inhibiting factors to consider doing HIA work on mining property is rules, regulations and restriction to certain areas on site, as well as the security fencing seen in the image below.

In the case of Venetia there then also exist a double line of security fences placed about 100 meters apart, with the internal area effectively a no-go zone.

<sup>&</sup>lt;sup>2</sup> The present author did visit the proximity of the site (as indicated on Pistorius's 2012 map,) but without a GPS reading there was no chance of finding it.

In the mine there exist concerns regarding the health and safety of the consultant, as well as the "health and safety" of the mine's product. In the game farm that surrounding the mine itself there also occur elephant, lion and leopard that impact on concerns from the mine's side to escort a consultant in the game area.

All of the above then does impact on how assessments are conducted at Venetia Mine.





Figs. 04 and 05. Conditions that impact heritage assessment on Venetia mine. An elephant foot path in the eastern portion surveyed and the typical all-present security fencing regulating nogo zones. (Photo's S. M. Miller 2021.)

#### 5. Mitigation.

With all the above in mind, and to address the concerns of SAHRA, the present investigator acquired a system of GPS track logging that also allows the user to take digital photographs that are four dimensionally recorded and labelled.

The present author then revisited the site on the 12<sup>th</sup> and 13<sup>th</sup> of October 2021with Mr Cecil Cloete from the environmental office as main host. He is well conversant with the site and the challenges surrounding access and recording on site. Inside the game farm Trevor Tshiwanandalani escorted Mr Cloete and the consultant in the PCD3 and Eastern Portion areas that are in fact the only "new areas" for investigation. A total of 243 points were logged and photographed, covering as must as humanely possible of the proposed development area.

The photographs are not included in this document but is presented in a separate file for the perusal of interested parties.

NOTE. Legally only the two portions falling in the game farm are "new investigation" areas. However, to avoid contention between parties, the consultant also re-visited the areas of present interest inside the site already cleared in the 2000 report by Hanish.

It can then also clearly be seen in Figs 7 and 9 that the consultant covered these areas inside the game farm on foot to find conditions likely for settlement.

**6. Track Log.** (See google earth images on pages 14 to 21)

No	Latitude	Longitude	Day	Time	Photo	Comment
			-		ID	

			on number. F	or the purpo	ose of avoid	ding confusion only the last four
	were used for ID in the 3 Outside mine	is track log.				
1	22°26'55.28"S	29°17'31.90"E	10/11	10:30	0697	Facing north. Dam caused large impact
2	22°26'53.43"S	29°17'30.90"E	10/11	10:38	9551	Facing west
3	22°26'52.65"S	29°17'30.52"E	10/11	10:39	5873	Facing east
4	22°26'51.50"S	29°17'30.09"E	10/11	10:41	4856	Facing north, vegetation
5	22°26'51.01"S	29°17'31.18"E	10/11	10:44	4147	Facing north, geology
6	22°26'50.67"S	29°17'31.74"E	10/11	10:46	0861	Facing north, vegetation
7	22°26'50.11"S	29°17'32.88"E	10/11	10:46	4664	Facing north, geology
8	22°26'50.13"S	29°17'32.78"E	10/11	10:48	0704	Facing north, geology
9	22°26'50.46"S	29°17'32.47"E	10/11	10:49	3617	Facing northeast, geology
10	22°26'49.85"S	29°17'33.94"E	10/11	10:49	8173	Facing northeast, geology
11	22°26'49.06"S	29°17'35.77"E	10/11	10:52	7203	Facing north, geology
12	22°26'48.99"S	29°17'35.87"E	10/11	10:53	0228	Facing northeast, disturbance
13	22°26'49.39"S	29°17'34.61"E	10/11	10:54	6696	Facing northeast, disturbance
14	22°26'48.64"S	29°17'36.49"E	10/11	10:55	3630	Facing east, disturbance
15	22°26'49.84"S	29°17'34.03"E		ect GPS rea ed position		g to loss of satellite signals.
	22°26'49.84"S	29°17'37.85"E	10/11	10:56	8805	Facing north disturbance
16	22°26'50.48"S	29°17'35.09"E				g to loss of satellite signals.
10	22 20 30.70 3	27 11 33.07 E		ed position		5 to 1055 of Satellite Signals.
	22°26'51.00"S	29°17'37.02"E	10/11	10:59	8806	Facing southwest, vegetation
17	22°26'50.93"S	29°17'33.96"E	Incorre			g to loss of satellite signals.
			Estimat	ed position		
	22°26'52.72"S	29°17'37.98"E	10/11	11:02	0120	Facing northeast,
		2001		1		disturbance/road
18	22°26'53.54"S	29°17'35.47"E	10/11	11:03	2295	Facing north, vegetation
19	22°26'51.71"S	29°17'34.07"E				g to loss of satellite signals.
	22°26'56.49"S	29°17'37.73"E	10/11	ed position 11:05	6796	Facing south,
	22 20 30.49 3	29 11 31.13 E	10/11	11.03	0/90	vegetation/geology
20	22°26'51.29"S	29°17'34.41"E	Incorre	ct GPS rea	ding owing	g to loss of satellite signals.
	22 2001.27 5	2, 1, 0 2		ed position		g to 1000 of Suremite Signature
	22°26'56.57"S	29°17'35.14"E	10/11	11:07	3845	Facing northeast,
						disturbance/road
		T	1	1		
21	22°26'54.77"S	29°17'34.19"E	10/11	11:08	9659	Facing south,
22	2202615 4 557116	20017122 00117	10/11	11.10	52.42	vegetation/geology
22	22°26'54.77"S	29°17'33.89"E	10/11	11:10	5343	Facing south, vegetation/geology
23	22°26'55.27"S	29°17'32.37"E	10/11	11:10	4398	Author on site
24	22°26'55.27"S	29°17'32.37"E	10/11	11:11	6649	Facing northeast
25	22°26'46.18"S	29°17'37.35"E	10/11	11:18	9171	Facing west, vegetation
26	22°26'46.40"S	29°17'36.49"E	10/11	11:19	3751	Facing west, geology
27	22°26'47.33"S	29°17'35.13"E	10/11	11:22	8277	Facing west
28	22°26'46.32"S	29°17'34.47"E	10/11	11:24	2016	Facing northwest vegetation
29	22°26'45.53"S	29°17'34.77"E	10/11	11:25	9125	Geology
30	22°26'44.85"S	29°17'34.35"E	10/11	11:26	5860	Vegetation
31	22°26'44.71"S	29°17'34.13"E	10/11	11:28	2448	Geology vegetation
32	22°27'2.33"S	29°17'43.76"E	10/11	11:26	0890	Facing south, South road
33	22°27'2.26"S	29°17'43.80"E	10/11	11:32	5797	Facing north, South road
34	22°27'2.97"S	29°17'42.12"E	10/11	11:35	9456	Facing west, vegetation
35	22°27'2.17"S	29°17'41.43"E	10/11	11:36	3617	Facing northwest, geology
36 37	22°27'0.97"S 22°27'1.17"S	29°17'40.92"E 29°17'40.73"E	10/11 10/11	11:38	8971 2478	Facing northwest, vegetation Facing northwest, vegetation
38	22°27'1.17"S 22°27'0.74"S	29°17'40.73"E 29°17'41.57"E	10/11	11:39 11:42	8891	Facing northwest, vegetation  Facing east, vegetation
39	22°26'59.26"S	29°17'41.13"E				g to loss of satellite signals.
0)	22 2007.20 0	2) 11 T1.13 L		ed position		5 to 1000 of bateline signals.
	22°26'57.69"S	29°17'40.48"E	10/11	11:45	5907	Facing north, geology
40	22°27'0.07"S	29°17'41.52"E				g to loss of satellite signals.
				ed position		-
	22°26'56.86"S	29°17'41.79"E	10/11	11:47	6618	Facing northwest,
						disturbance/road
	22°26'56.37"S	29°17'41.50"E	10/11	11:49	6914	Author on site
41		29°17'49.43"E	10/11	11:56	5784	Facing east, South road
42	22°27'25.60"S		10/11	11 70		
42 43	22°27'24.08"S	29°18'12.87"E	10/11	11:59	7263	Facing west, South road
42 43 44	22°27'24.08"S 22°27'24.08"S	29°18'12.87"E 29°18'12.99"E	10/11	12:00	2725	Facing east, South road
42 43	22°27'24.08"S	29°18'12.87"E				

47         22°27'22.37"S         29°18'48.08"E         10/11         12:04         8702         Facing east, \$\$           48         22°27'12.46"S         29°19'10.06"E         10/11         12:08         0357         Facing east, \$\$           49         22°27'17.15"S         29°19'20.76"E         10/11         12:26         1447         Venter cemet           50         22°27'16.99"S         29°19'20.97"E         10/11         12:30         4356         Venter cemet           51         22°27'14.58"S         29°19'21.87"E         ?         ?         ?         Original Veninvestigate	
49         22°27'17.15"S         29°19'20.76"E         10/11         12:26         1447         Venter cemet           50         22°27'16.99"S         29°19'20.97"E         10/11         12:30         4356         Venter cemet           51         22°27'14.58"S         29°19'21.87"E         ?         ?         ?         Original Ven	
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<b>54</b> 22°25′28.33"S 29°20′41.39"E 10/12 08:20 6451 Facing east	
55   22°25'27.52"S   29°20'40.86"E   10/12   08:25   3675   Facing east	
56 22°25'23.38"S 29°20'38.34"E 10/12 08:25 5906 Facing north,	elephant footpath
57 22°25'24.24"S 29°20'39.08"E 10/12 08:28 6308 Facing west	
58 22°25'20.87"S 29°20'37.39"E 10/12 08:28 7922 Facing east, g	realogy
59   No Photo	cology
	river crossing
<b>61</b> 22°25'12.01"S 29°20'36.70"E 10/12 08:38 4024 Facing west	
<b>62</b> 22°25'13.20"S 29°20'37.96"E 10/12 08:46 8087 Facing west	
63   22°25'12.83"S   29°20'37.90"E   10/12   08:41   8859   Author on sit	e
<b>64</b> 22°25'14.04"S 29°20'38.40"E 10/12 08:45 5126 Facing west,	
65 22°25'15.30"S 29°20'39.69"E 10/12 08:46 7486 Facing west,	
66 22°25'13.80"S 29°20'38.72"E Incorrect GPS reading owing to loss of satel	
22°25 15.80 S 29°20 58.72 E Incorrect GPS reading owing to loss of sater Estimated position below	nic signais.
22°25'18.18"S 29°20'42.07"E 10/12 08:52 2688 Facing east, v	
67 22°25'22.17"S 29°20'46.33"E Incorrect GPS reading owing to loss of satel	lite signals.
Estimated position below	
22°25'20.14"S 29°20'44.94"E 10/12 08:56 4774 Facing west,	vegetation
68 22°25'22.59"S 29°20'46.78"E 10/12 08:57 0237 Facing west,	vegetation
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71 22°24'52.06"S 29°20'29.09"E 10/12 09:20 8662 Facing north,	
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72 22°24'53.86"S 29°20'31.77"E 10/12 09:23 1249 Facing east	
73 22°24'53.54"S 29°20'31.52"E Incorrect GPS reading owing to loss of satel	lite signals.
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22°24'57.77"S 29°20'34.36"E 10/12 09:28 7997 Facing west	
74 0000510 00110 0000010 7011E 10/10 00 00 0074 E :	
<b>74</b> 22°25′0.98"S 29°20′36.70"E 10/12 09:28 8674 Facing west	
<b>75</b> 22°25′2.81"S 29°20′37.34"E 10/12 09:30 9446 Facing east	
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south	
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south           77         22°25′6.98″S         29°20′35.31″E         10/12         09:37         0050         Facing south	roalogy.
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south           77         22°25′6.98″S         29°20′35.31″E         10/12         09:37         0050         Facing south           78         22°25′7.92″S         29°20′34.69″E         10/12         09:41         1569         Facing west g	
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75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine	geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g	geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine	geology
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south           77         22°25′6.98″S         29°20′35.31″E         10/12         09:37         0050         Facing south           78         22°25′7.92″S         29°20′34.69″E         10/12         09:41         1569         Facing west g           79         22°25′12.45″S         29°20′30.83″E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine           80         22°25′23.24″S         29°20′30.79″E         10/12         09:47         1082         Facing east g	geology eology
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south           77         22°25′6.98″S         29°20′35.31″E         10/12         09:37         0050         Facing south           78         22°25′7.92″S         29°20′34.69″E         10/12         09:41         1569         Facing west g           79         22°25′12.45″S         29°20′30.83″E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine           80         22°25′23.24″S         29°20′30.79″E         10/12         09:47         1082         Facing east g           81         22°25′30.71″S         29°20′32.46″E         10/12         09:48         4825         Facing east y	eology egetation
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south           77         22°25′6.98″S         29°20′35.31″E         10/12         09:37         0050         Facing south           78         22°25′7.92″S         29°20′34.69″E         10/12         09:41         1569         Facing west g           79         22°25′12.45″S         29°20′30.83″E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine           80         22°25′23.24″S         29°20′30.79″E         10/12         09:47         1082         Facing east g           81         22°25′30.71″S         29°20′32.46″E         10/12         09:48         4825         Facing east y           82         22°25′31.08″S         29°20′33.17″E         Incorrect GPS reading owing to loss of satel	eology egetation
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine           80         22°25'23.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below	ecology ecology egetation lite signals.
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine           80         22°25'23.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east y	ecology ecology egetation lite signals. egetation
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south           77         22°25′6.98″S         29°20′35.31″E         10/12         09:37         0050         Facing south           78         22°25′7.92″S         29°20′34.69″E         10/12         09:41         1569         Facing west g           79         22°25′12.45″S         29°20′30.83″E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine           80         22°25′23.24″S         29°20′30.79″E         10/12         09:47         1082         Facing east g           81         22°25′30.71″S         29°20′32.46″E         10/12         09:48         4825         Facing east g           82         22°25′31.08″S         29°20′33.17″E         Incorrect GPS reading owing to loss of satel Estimated position below           22°25′33.83″S         29°20′38.33″E         10/12         09:49         1572         Facing east g           83         22°25′37.58″S         29°20′47.12″E         10/12         09:51         8778         Facing east g	ecology ecology egetation lite signals. egetation egetation
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           Eastern Portion. Inside the mine           80         22°25'12.45"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east g           83         22°25'37.58"S         29°20'47.12"E         10/12         09:51         8778         Facing east g           84         22°25'27.20"S         29°20'25.34"E         10/12         11:14         9198         Facing west g <th>eeology eeology egetation lite signals. egetation egetation egology</th>	eeology eeology egetation lite signals. egetation egetation egology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'23.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east g           83         22°25'37.58"S         29°20'47.12"E         10/12         09:51         8778         Facing east g           84	eeology eeology egetation lite signals. egetation egetation egology geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'23.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           83         22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east g           84         22°25'37.58"S         29°20'47.12"E         10/12         09:51         8778         Facing west g	eeology eeology egetation lite signals. egetation egetation egology eeology eeology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'32.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           83         22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east y           84         22°25'37.58"S         29°20'47.12"E         10/12         09:51         878         Facing west g	ecology ecology egetation lite signals. egetation egetation ecology ecology ecology ecology ecology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'32.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east w           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east w           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east w           83         22°25'3.7.58"S         29°20'47.12"E         10/12         09:51         8778         Facing west g           84	ecology ecology egetation lite signals. egetation egetation ecology ecology ecology ecology ecology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         Book of particular of particula	ecology ecology egetation lite signals. egetation egetation egetation egetology ecology ecology ecology ecology ecology ecology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         Book of particular of particula	ecology ecology egetation lite signals. egetation egetation egetology ecology ecology ecology ecology ecology ecology ecology ecology ecology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         Bold Park Portion. Inside the mine           80         22°25'3.24"S         29°20'32.46"E         10/12         09:47         1082         Facing east v           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east v           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           83         22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east v           84         22°25'37.58"S         29°20'47.12"E         10/12         11:14<	ecology ecology egetation lite signals. egetation egetation egetology ecology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'32.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east v           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east v           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           83         22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east v           84         22°25'37.58"S         29°20'47.12"E         10/12         09:51         8778         Facing west g	ecology ecology egetation lite signals. egetation egetation egetation egetology ecology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'3.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east w           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east w           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           83         22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east w           84         22°25'37.58"S         29°20'247.12"E         10/12         09:51         8778         Facing east w	geology eology egetation lite signals. egetation egetation egetation egetology ecology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'23.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel g           Estimated position below         10/12         09:49         1572         Facing east g           83         22°25'37.58"S         29°20'38.33"E         10/12         09:51         8778         Facing west g           84         22°25'15.2"S         29°20'	geology eology egetation lite signals. egetation egetation egetation geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'23.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'31.08"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel g           Estimated position below         10/12         09:49         1572         Facing east g           83         22°25'31.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east g           84         22°25'15.2"S         29°20'	geology eology egetation lite signals. egetation egetation egetation egetology eology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'32.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east g           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           83         22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east y           84         22°25'33.83"S         29°20'24.43"E         10/12         11:14         9198         Facing west g	geology eology egetation lite signals. egetation egetation egetation egetology geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'12.45"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'32.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           82         22°25'31.08"S         29°20'38.33"E         10/12         09:49         1572         Facing east v           83         22°25'37.58"S         29°20'38.33"E         10/12         09:49         1572         Facing east v           84         22°25'37.58"S         29°20'23.34"E         10/12         11:14         9198         Facing east v	geology eelogy eelogy egetation lite signals. egetation egetation egetology geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'12.45"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'32.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east g           81         22°25'30.71"S         29°20'33.17"E         Incorrect GPS reading owing to loss of satel Estimated position below           82         22°25'31.08"S         29°20'38.33"E         10/12         09:49         1572         Facing east v           83         22°25'37.58"S         29°20'38.33"E         10/12         09:49         1572         Facing east v           84         22°25'37.58"S         29°20'23.34"E         10/12         11:14         9198         Facing east v	geology eology egetation lite signals. egetation egetation egetation egetology geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west §           79         22°25'12.45"S         29°20'30.83"E         10/12         09:41         1569         Facing west §           Eastern Portion. Inside the mine         80         22°25'33.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east v           81         22°25'30.71"S         29°20'32.46"E         10/12         09:48         4825         Facing east v           82         22°25'31.08"S         29°20'33.31"E         10/12         09:48         4825         Facing east v           83         22°25'33.83"S         29°20'38.33"E         10/12         09:49         1572         Facing east v           84         22°25'30.75"S         29°20'47.12"E         10/12         09:49         1572         Facing east v	geology eology egetation lite signals. egetation egetation egetation egetology geology
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east racing east ra	geology eology egetation lite signals. egetation egetation egetation egetology geology
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east racing east racing east racing south           76         22°25′5.30″S         29°20′35.77″E         10/12         09:35         0481         Facing south           77         22°25′6.98″S         29°20′35.31″E         10/12         09:37         0050         Facing south           78         22°25′7.92″S         29°20′36.69″E         10/12         09:41         1569         Facing west g           Eastern Portion. Inside the mine           80         22°25′32.44″S         29°20′30.79″E         10/12         09:48         4825         Facing east v           81         22°25′31.08″S         29°20′33.17″E         Incorrect GPS reading owing to loss of satel Estimated position below           82         22°25′33.83″S         29°20′33.17″E         Incorrect GPS reading owing to loss of satel Estimated position below           83         22°25′31.88″S         29°20′25.34″E         10/12         09:49         1572         Facing east v           84         22°25′27.20″S         29°20′25.34″E         10/12         11:14         9198         Facing west g           85         22°25′31.52″S         29°20′25.25″E         10/12         11:16         6832	geology eology eology egetation lite signals. egetation egetation egetation egetation egetation egetology eology
75         22°25′2.81″S         29°20′37.34″E         10/12         09:30         9446         Facing east racing east ra	geology eology eology egetation lite signals. egetation egetation egetation egetation egetation egetology eology
75	geology eelogy egetation lite signals. egetation egetation egetation egetation egetology eelogy
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east racing east racing couth           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         80         22°25'33.24"S         29°20'30.79"E         10/12         09:47         1082         Facing east y           82         22°25'31.08"S         29°20'33.31"E         10/12         09:48         4825         Facing east y           83         22°25'31.88"S         29°20'38.33"E         10/12         09:49         1572         Facing east y           84         22°25'37.58"S         29°20'47.12"E         10/12         09:51         8778         Facing east y           85         22°25'17.20"S         29°20'25.34"E         10/12         11:14         9198         Facing	geology eology eology egetation lite signals. egetation egetation egetation egetation egetation egetology eology
75	geology eology eology egetation lite signals. egetation egetation egetation egetation geology
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east Facing south           76         22°25'5.30"S         29°20'35.71"E         10/12         09:35         0481         Facing south           77         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'34.69"E         10/12         09:41         1569         Facing west g           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west g           Eastern Portion. Inside the mine         B           81         22°25'30.71"S         29°20'32.46"E         10/12         09:47         1082         Facing east y           82         22°25'31.08"S         29°20'33.31"E         10/12         09:48         4825         Facing east y           83         22°25'31.88"S         29°20'38.33"E         10/12         09:49         1572         Facing east y           84         22°25'37.58"S         29°20'23.34"E         10/12         09:49         1572         Facing east y           85         22°25'37.58"S         29°20'21.32"E         10/12         11:14	geology eelogy egetation lite signals. egetation egetation egetation egetation egetation egetology eelogy
75         22°25'2.81"S         29°20'37.34"E         10/12         09:30         9446         Facing east Facing south           76         22°25'5.30"S         29°20'35.77"E         10/12         09:35         0481         Facing south           78         22°25'6.98"S         29°20'35.31"E         10/12         09:37         0050         Facing south           78         22°25'7.92"S         29°20'35.31"E         10/12         09:41         1569         Facing west price           79         22°25'12.45"S         29°20'30.83"E         10/12         09:42         0693         Facing west price           Eastern Portion. Inside the mine         80           81         22°25'30.71"S         29°20'32.46"E         10/12         09:47         1082         Facing east price           82         22°25'31.08"S         29°20'33.17"E         Incorrect GPS reading owing to loss of sate price         Incorrect GPS reading owing to loss of sate price           83         22°25'31.83"S         29°20'33.31"E         10/12         09:49         1572         Facing east very price           84         22°25'3.83"S         29°20'25.34"E         10/12         11:14         9198         Facing east very price           85         22°25'17.90"S         29	geology eology egetation lite signals. egetation egetation egetation egetation egetology eology eolo
75	geology eelogy egetation lite signals. egetation egetation egetation egetation egetation egetology eelogy

10.5	T	T	1	T	T 0=10	1=
106	22°25'35.61"S	29°20'42.25"E	10/12	11:47	8719	Facing southeast vegetation
107 108	22°25'27.81"S 22°25'21.91"S	29°20'31.06"E 29°20'30.57"E	10/12	11:49 11:50	3457 4409	Facing west vegetation Facing west vegetation
109	22°25'17.21"S	29°20'29.87"E	10/12	11:51	4564	Facing west vegetation  Facing west vegetation
110	22°25'20.73"S	29°20'30.24"E	10/12	11:52	8428	Facing west vegetation  Facing west vegetation
111	22°25'08.71"S	29°20'28.95"E	10/12	11:53	5227	Facing west vegetation
1112	22°25'05.18"S	29°20'28.64"E	10/12	11:53	8253	Facing west vegetation
113	22°25'02.06"S	29°20'28.28"E	10/12	11:54	6984	Facing west vegetation
114	22°24'58.84"S	29°20'27.93"E	10/12	11:55	6270	Facing west vegetation
115	22°24'53.58"S	29°20'27.44"E	10/12	11:55	5774	Facing west vegetation
116	22°24'51.54"S	29°20'25.44"E	10/12	11:56	9396	Facing north geology
North		27 20202	10/12	11.00	,,,,	Tuesing merun geeregy
117	22°24'52.58"S	29°20'17.03"E	10/12	11:59	9072	Facing northwest, geology
118	22°24'51.19"S	29°20'13.93"E	10/12	12:00	2477	Facing northwest
119	22°24'50.59"S	29°20'12.35"E	10/12	12:01	4706	Facing northwest, geology
120	22°24'48.87"S	29°20'8.30"E	10/12	12:02	8821	Facing southwest, disturbance
121	22°24'46.11"S	29°20'0, 77"E	10/12	12:03	9408	Facing southwest, disturbance
						_
122	22°24'45.62"S	29°20'0.78"E	10/12	12:01	7677	Facing northwest geology
123	22°24'43.29"S	29°19'55.87"E	10/12	12:02	0653	Facing northwest
124	22°24'38.02"S	29°19'42.46"E	10/12	12:06	5089	Facing northwest, dump impact
125	22°24'37.83"S	29°19'42.49"E	10/12	12:06	8930	Facing south, dump impact
126	22°24'37.75"S	29°19'41.24"E	10/12	12:07	4547	Facing west
127	22°24'36.63"S	29°19'24.51"E	10/12	12:08	3636	Facing southwest, dump
						impact
128	22°24'36.37"S	29°19'22.39"E	10/12	12:11	6468	Facing south, seepage impact
129	22°24'36.40"S	29°19'22.32"E	10/12	12:11	7930	Facing south, seepage impact
130	22°24'37.32"S	29°19'9.26"E	10/12	12:13	9010	Facing south, dump impact
131	22°24'39.69"S	29°19'2.12"E	10/12	12:14	7280	Facing south, dump impact
132	22°24'39.65"S	29°19'1.77"E	10/12	12:14	8827	Facing southeast, dump impact
133	22°24'43.25"S	29°18'51.41"E	10/12	12:18	4692	Facing southeast, dump impact
134 135	22°24'45.96"S 22°24'44.92"S	29°18'46.02"E 29°18'46.37"E	10/12	12:19	2736	Facing southeast, dump impact to loss of satellite signals.
135	22 24 44.92 3	29 18 40.37 E		ed position		g to loss of satellite signals.
	22°24'47.44"S	29°18'39.84"E	10/12	12:20	6926	Facing southeast, dump impact
136	22°24'45.70"S	29°18'44.28"E				to loss of satellite signals.
130	22 24 43.70 5	2) 10 44.20 E		ed position		to 1033 of Satellite Signals.
	22°24'49.43"S	29°18'33.71"E	10/12	12:21	3020	Facing southeast, dump impact
137	22°24'52.30"S	29°18'25.62"E	10/12	12:21	8571	Facing southeast, seepage
						impact
138	22°24'55.68"S	29°18'15.30"E	10/12	12:24	9286	Facing south, dump impact
139	22°24'56.04"S	29°18'14.17"E	10/12	12:25	8902	Facing south, general
						earthmoving impact
140	22°25'2.81"S	29°17'54.67"E	10/12	12:27	0265	Facing south, general
						earthmoving impact
	Inside mine	1	1		1	
141	22°26'39.97"S	29°17'33.86"E	10/12	12:38	2900	Facing east, general impact,
1.10	22026141 4086	20017125 00117	10/12	10.00	2250	road/electricity
142	22°26'41.48"S	29°17'35.00"E	10/12	12:39	2258	Facing east, geology
143	22°26'40.91"S	29°17'34.71"E		ct GPS rea ed position		g to loss of satellite signals.
	22°26'43.41"S	29°17'38.28"E	10/12	12:40	3304	Facing east, excavation impact
144	22°26'45.66"S	29°17'39.47"E	10/12	12:40	2046	Facing east, excavation impact
145	22°26'46.10"S	29°17'42.39"E	10/12	12:42	7333	Facing east, infrastructure
140	22 20 70.10 3	2) 1172.3) L	10/12	12.72	1333	impact
146	22°26'45.92"S	29°17'42.72"E	10/12	12:43	0691	Facing east, infrastructure
1.10	22 20 13.72 5	25 17 12.72 2	10/12	12.13	0071	impact
147	22°26'44.44"S	29°17'41.09"E	10/12	12:44	7885	Facing northeast, mega
	-					earthmoving impact
148	22°26'37.01"S	29°17'34.82"E	10/12	12:46	8203	Facing east, mega seepage
				<u> </u>		impact
149	22°26'39.97"S	29°17'36.33"E	10/12	12:46	0417	Facing north, typical
						crisscrossing of area by
						infrastructure such as roads,
						power lines and seepage
4=0	22026112 62::2	20017/20 50***	10/15	10.10	1	control.
150	22°26'42.63"S	29°17'39.50"E	10/12	12:49	1414	Facing east, mega earthmoving
151	22026147.25116	20017144 0000	10/12	10.50	7006	impact
	22°26'47.25"S	29°17'44.09"E	10/12	12:52	7906	Facing east, mega road impact
151						Fooing southt 1
151	22°26'52.30"S	29°17'45.52"E	10/12	12:53	4392	Facing southeast, geology and dump impact

153	22°26'53.54"S	29°17'45.81"E	10/12	12:54	0843	Facing east, geology and dump impact
154	22°27'1.92"S	29°17'47.61"E	10/12	12:56	8962	Facing east, geology and dump impact
155	22°26'59.38"S	29°17'47.42"E	10/12	12:56	4315	Facing south, geology and road impact
156	22°26'53.82"S	29°17'46.8"E	10/12	12:56	0897	Facing north, geology and seepage impact
157	22°26'53.15"S	29°17'49.24"E	10/12	12:56	7522	Facing north, geology and road impact
158	22°26'53.41"S	29°17'48.47"E	10/12	12:56	1225	Facing north, infrastructure impact
DWD	1		1	1	1	impact
159	22°26'23.94"S	29°18'22.51"E	10/12	13:14	3582	Facing west, infrastructure impact
160	22°26'18.32"S	29°18'20.58"E	10/12	13:16	1890	Facing northeast, infrastructure impact
		L	I	l.		Impact
1./1	22026122 12119	20010121 72115		4 CIDC		4 1 6 4 1124 1 1
161	22°26'22.13"S	29°18'21.73"E				g to loss of satellite signals.
	2002014#42#0	***************************************		ed position		I =
	22°26'15.12"S	29°18'25.08"E	10/12	13:17	5132	Facing northeast, infrastructure impact
PCD 2	2					
162	22°26'35.62"S	29°18'20.1"E	10/12	13:36	5134	Facing east, infrastructure impact
163	22°26'34.78"S	29°18'23.55"E	10/12	13:37	8199	Facing south, infrastructure impact
164	22°26'35.64"S	29°18'26.87"E	10/12	13:39	6212	Facing south, infrastructure impact
165	22°26'35.44"S	29°18'25.33"E	Incorrec	t GPS read	ding owing	to loss of satellite signals.
			Estimate	ed position	below	_
	22°26'36.72''S	29°18'29.18''E	10/12	13:39	7871	Facing east, infrastructure impact, new road
166	22°26'35.91"S	29°18'27.90"E		et GPS reac		to loss of satellite signals.
	22°26'39.05"S	29°18'31.20"E	10/12	13:39	6716	Facing east, infrastructure
						impact, new road
PCD 4		-			•	
167	22°26'31.18"S	29°19'7.76"E	10/12	13:57	7346	Facing east, infrastructure impact, new road
168	22°26'32.38"S	29°19'10.58"E	10/12	13:59	1282	Facing east, infrastructure impact, new road
OMW	SD3 North of fence a	nd road		1	1	
169	22°26'55.37"S	29°19'14.74"E	10/13	08:54	7734	Facing southeast, infrastructure impact, pipelines and power lines
170	22°26'54.85"S	29°19'16.51"E	10/13	08:55	0759	Facing north, infrastructure impact, road
171	22°26'54.51"S	29°19'15.64"E	10/13	08:56	0851	
172	22°26'51.96"S					Vegetation
173	22 20 31.70 3	29°19'15.90"E	10/13	08:57		Vegetation Vegetation/disturbance
174	22°26'51.44"S		10/13 10/13	_	3858	
-,-		29°19'15.90"E 29°19'15.04"E 29°19'14.7"E		08:57		Vegetation/disturbance
	22°26'51.44"S 22°26'52.66"S	29°19'15.04"E 29°19'14.7"E	10/13 10/13	08:57 08:58	3858 5371 5142	Vegetation/disturbance Vegetation Power lines
175	22°26'51.44"S	29°19'15.04"E	10/13	08:57 08:58 09:01	3858 5371	Vegetation/disturbance Vegetation
	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E	10/13 10/13 10/13	08:57 08:58 09:01 09:01	3858 5371 5142 6267	Vegetation/disturbance Vegetation Power lines Storage/disturbance
175 176	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E	10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02	3858 5371 5142 6267 5204	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation
175 176 177 178	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'19.47"E	10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04	3858 5371 5142 6267 5204 1303 0349	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole
175 176 177	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E	10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03	3858 5371 5142 6267 5204 1303	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole
175 176 177 178 179 180	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.85"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'19.47"E 29°19'17.76"E 29°19'17.86"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06	3858 5371 5142 6267 5204 1303 0349 2334 6056	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance
175 176 177 178 179 180	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.85"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'19.47"E 29°19'17.76"E 29°19'17.86"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06	3858 5371 5142 6267 5204 1303 0349 2334 6056	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance
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175 176 177 178 179 180	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.85"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'19.47"E 29°19'17.76"E 29°19'17.86"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06	3858 5371 5142 6267 5204 1303 0349 2334 6056	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation/disturbance  Vegetation/disturbance  Pipelines/pipe manholes Pipe manholes Pipeline with dams in
175 176 177 178 179 180 181 182 183 184	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.33"S 22°26'50.73"S 22°26'50.29"S 22°26'49.88"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'19.47"E 29°19'17.76"E 29°19'17.86"E  29°19'17.47"E 29°19'28.30"E 29°19'27.04"E 29°19'25.26"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:10	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance  Vegetation/disturbance Pipelines/pipe manholes Pipe manholes Pipe manholes Pipeline with dams in background
175 176 177 178 179 180 181 182 183 184 PCD 1	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.33"S 22°26'50.73"S 22°26'50.29"S 22°26'49.88"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'17.76"E 29°19'17.47"E 29°19'17.47"E 29°19'17.44"E 29°19'28.30"E 29°19'25.26"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:11	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance  Vegetation/disturbance Pipelines/pipe manholes Pipe manholes Pipe manholes Pipeline with dams in background  Road/disturbance
175 176 177 178 179 180 181 182 183 184 PCD 1 185 186	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.33"S 22°26'50.73"S 22°26'50.29"S 22°26'40.88"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'17.76"E 29°19'17.47"E 29°19'17.47"E 29°19'25.26"E  29°19'25.26"E  29°19'25.26"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:11 09:17 09:19	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance  Vegetation/disturbance Pipelines/pipe manholes Pipe manholes Pipe manholes Pipeline with dams in background  Road/disturbance Dam
175 176 177 178 179 180 181 182 183 184 PCD 1 185 186 187	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.75"S 22°26'53.76"S 22°26'53.85"S  22°26'50.73"S 22°26'50.29"S 22°26'40.88"S 22°26'40.88"S 22°26'41.34"S 22°26'42.45"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'17.76"E 29°19'17.47"E 29°19'17.47"E 29°19'28.30"E 29°19'27.04"E 29°19'25.26"E  29°19'13.31"E 29°19'13.31"E 29°19'13.33"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:11 09:17 09:19 09:20	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance  Vegetation/disturbance Pipelines/pipe manholes Pipe manholes Pipe manholes Pipeline with dams in background  Road/disturbance Dam Powerline
175 176 177 178 179 180 181 182 183 184 PCD 1 185 186 187	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.33"S 22°26'50.73"S 22°26'50.29"S 22°26'40.88"S 22°26'40.88"S 22°26'41.34"S 22°26'42.45"S 22°26'43.50"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'17.76"E 29°19'17.47"E 29°19'17.47"E 29°19'28.30"E 29°19'27.04"E 29°19'25.26"E  29°19'13.31"E 29°19'13.32"E 29°19'13.33"E 29°19'14.53"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:11 09:17 09:19 09:20 09:21	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation/disturbance  Vegetation/disturbance  Pipelines/pipe manholes Pipe manholes Pipe manholes Pipe manholes Pipe manholes Pipeline with dams in background  Road/disturbance Dam Powerline Vegetation
175 176 177 178 179 180 181 182 183 184 PCD 1 185 186 187 188	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.33"S 22°26'50.73"S 22°26'50.29"S 22°26'40.88"S 22°26'40.88"S 22°26'44.50"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'17.76"E 29°19'17.47"E 29°19'17.47"E 29°19'28.30"E 29°19'27.04"E 29°19'25.26"E  29°19'13.31"E 29°19'13.33"E 29°19'14.53"E 29°19'14.53"E 29°19'15.42"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:11 09:17 09:19 09:20 09:21 09:25	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247 5105 3839 7890 8381 5022	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance  Vegetation/disturbance Pipelines/pipe manholes Pipe manholes Pipeline with dams in background  Road/disturbance Dam Powerline Vegetation Pipelines
175 176 177 178 179 180 181 182 183 184 PCD 1 185 186 187 188 189 190	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.33"S 22°26'50.29"S 22°26'50.29"S 22°26'40.88"S 22°26'40.88"S 22°26'44.50"S 22°26'44.50"S 22°26'45.04"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'17.76"E 29°19'17.47"E 29°19'17.47"E 29°19'28.30"E 29°19'27.04"E 29°19'25.26"E  29°19'13.31"E 29°19'13.31"E 29°19'14.53"E 29°19'14.53"E 29°19'15.42"E 29°19'14.04"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:11 09:17 09:19 09:20 09:21 09:25 09:27	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247 5105 3839 7890 8381 5022 4674	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation/disturbance  Vegetation/disturbance Pipelines/pipe manholes Pipe manholes Pipeline with dams in background  Road/disturbance Dam Powerline Vegetation Pipelines Pipelines Pipelines Pipelines
175 176 177 178 179 180 181 182 183 184 PCD 1 185 186 187 188	22°26'51.44"S 22°26'52.66"S 22°26'52.40"S 22°26'52.59"S 22°26'53.61"S 22°26'53.75"S 22°26'53.76"S 22°26'53.33"S 22°26'50.73"S 22°26'50.29"S 22°26'40.88"S 22°26'40.88"S 22°26'44.50"S	29°19'15.04"E 29°19'14.7"E 29°19'15.3"E 29°19'16.1"E 29°19'20.68"E 29°19'17.76"E 29°19'17.47"E 29°19'17.47"E 29°19'28.30"E 29°19'27.04"E 29°19'25.26"E  29°19'13.31"E 29°19'13.33"E 29°19'14.53"E 29°19'14.53"E 29°19'15.42"E	10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13 10/13	08:57 08:58 09:01 09:01 09:02 09:03 09:04 09:05 09:06 09:08 09:09 09:11 09:17 09:19 09:20 09:21 09:25	3858 5371 5142 6267 5204 1303 0349 2334 6056 9564 3530 3386 5247 5105 3839 7890 8381 5022	Vegetation/disturbance Vegetation Power lines Storage/disturbance Vegetation Road/pipe manhole Pipe manhole Vegetation Vegetation Vegetation/disturbance  Vegetation/disturbance Pipelines/pipe manholes Pipe manholes Pipeline with dams in background  Road/disturbance Dam Powerline Vegetation Pipelines

		_			,	
193	22°26'43.51"S	29°19'13.39"E	10/13	09:29	5369	Vegetation
	SD3 South of fence at		10/12	10.11	4521	T D' 1' /1' / 1
194 195	22°26'53.99"S 22°26'55.18"S	29°19'31.29"E 29°19'26.94"E	10/13 10/13	10:11 10:12	4521 4903	Pipelines/disturbance Facing north/security
						fence/vegetation
196	22°26'55.34"S	29°19'26.26"E	10/13	10:13	2010	Facing north/security fence/vegetation Blasting
197	22°26'55.38"S	29°19'26.00"E	10/13	10:14	2179	Facing north/security fence/vegetation
198	22°26'57.07"S	29°19'21.03"E	10/13	10:15	6763	Facing north/security fence/vegetation
199	22°26'57.99"S	29°19'17.87"E	10/13	10:16	8140	Facing north/security
						fence/vegetation
200	22°26'58.07"S 22°26'55.42"S	29°19'17.82"E 29°19'26.02"E	10/13	10:17	2958	East dams on right
201		29°19'20.02 E	10/13	10:19	9292	Facing west over OMWSD N&R
OMW		1	1	T	T	
202	22°26'55.48"S	29°19'28.32"E	10/13	10:21	8505	Entrance road large vehicles
203						
204						
206						
207						
208						
209						
210	22025155 1502	20010/22 25***	1025	10.01	2	
211	22°26'55.46"S	29°19'32.27"E	10/13	10:21	3661	Facing west, Storage areas tires machines
212	22°26'54.34"S	29°19'36.50"E	10/13	10:26	4933	Facing south, geology/vegetation/disturbance
213	22°26'54.22"S	29°19'36.53"E	10/13	10:27	1313	Facing south, geology/vegetation/disturbance
214						geology, regettation, distancement
215	22°26'52.78"S	29°19'40.59"E	10/13	10:27	1709	Facing south, geology/vegetation/disturbance
216	22°26'53.31"S	29°19'37.98"E	Incorrec	et GPS read	ding owing	to loss of satellite signals.
				ed position	_	
	22°26'51.96''S	29°19'37.74''E	10/13	10:30	8166	Facing south, geology/vegetation/disturbance
217	22°26'49.76"S	29°19'43.72"E	10/13	10:31	9000	Facing south, geology/vegetation/disturbance
218	22°26'49.97"S	29°19'43.38"E	10/13	10:32	9457	Facing south, geology/vegetation/disturbance
219	22°26'48.62"S	29°19'46.94"E	10/13	10:34	5848	Facing south, geology/vegetation/disturbance
220	22°26'47.07"S	29°19'52.03"E	10/13	10:34	3616	Facing south, geology/vegetation/disturbance
221	22°26'45.87"S	29°19'54.97"E	10/13	10:35	8787	Facing south,
222	22°26'48.65"S	29°19'59.87"E	10/13	10:38	1152	geology/vegetation/disturbance Two baobabs
223	22°26'48.50"S	29°20'0.05"E	10/13	10:38	1723	Two baobabs
224			7	1	4323	Door handle
225	22°26'48.98"S	29°20'0.13"E	10/13	10:41	0725	New tire storage
226	22°26'48.53"S	29°20'0.05"E	10/13	10:44	4911	Relocated baobabs
227	22°26'53.32"S	29°19'55.59"E	10/13	10:47	1690	Facing northwest, disturbance
228	22°26'53.26"S	29°19'55.62"E		ct GPS reac ed position		to loss of satellite signals.
	22°26'58.48"S	29°19'49.88''E	10/13	10:48	4899	Facing north, geology/vegetation/disturbance
229	22°26'57.69"S	29°19'45.56"E	10/13	10:53	7819	Facing south,
230	22°26'57.26"S	29°19'42.39"E	10/13	10:54	7590	geology/vegetation/disturbance Facing south,
231	22°26'56.78"S	29°19'39.61"E	10/13	10:55	3247	geology/vegetation/disturbance Facing south,
222	2202656 40119	20010127 (2115	10/12	10.56	0403	geology/vegetation/disturbance
232	22°26'56.49"S 22°26'53.99"S	29°19'37.62"E 29°19'44.73"E	10/13 10/13	10:56 11:04	0403 9559	Facing east, geology Facing south,
						geology/vegetation/disturbance
234	22°26'54.23"S	29°19'46.15"E	10/13	11:04	0779	Facing south, geology/vegetation
235	22°26'54.55"S	29°19'47.84"E	10/13	11:05	8840	Facing south, geology/vegetation

236	22°26'54.91"S	29°19'50.03"E	10/13	11:06	0960	Facing south, vegetation
237	22°26'57.42"S	29°19'51.59"E	10/13	11:07	3027	Facing west, out of focus
238	22°27'0.34"S	29°19'45.91"E	10/13	11:08	7446	Mirror vegetation
239	22°27'1.04"S	29°19'43.48"E	10/13	11:08	6735	Facing south,
						geology/vegetation
240	22°27'2.98"S	29°19'39.8"E	10/13	11:09	5936	Window
241	22°27'5.73"S	29°19'38.59"E	10/13	11:09	1728	Facing northeast,
						geology/vegetation
242	22°27'8.78"S	29°19'38.54"E	10/13	11:10	4806	Facing north, vegetation
243	22°27'10.55"S	29°19'38.49"E	10/13	11:10	7782	Facing northeast,
						geology/vegetation

Fig. 06. All the points visited during the investigation marked by four dimensionally verified photographs. (Google Earth 2020.)

Fig. 07. All the points of the eastern portion visited during the investigation. (Google Earth 2020.)



Fig. 08. All the points on the north road visited during the investigation. (Google Earth 2020.)



Fig. 09. All the points visited in PCD3 during the investigation. (Google Earth 2020.)

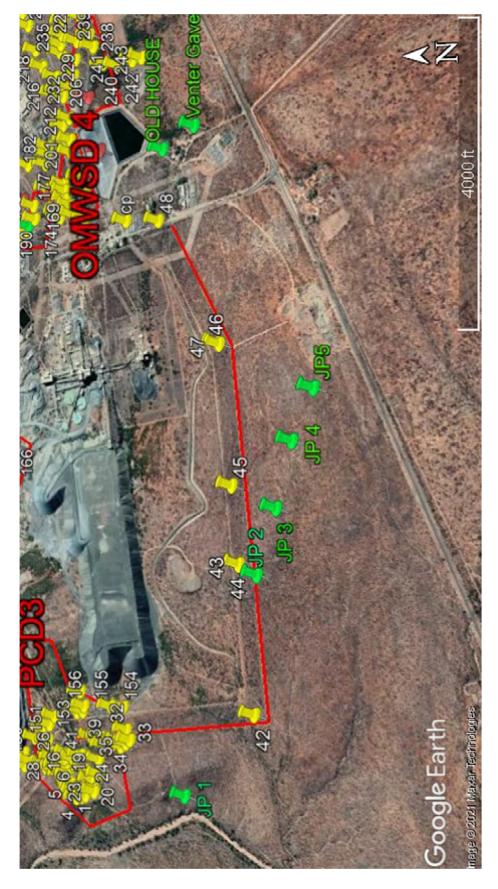


Fig. 10. All the points visited on the south road during the investigation. The green markers are approximation markers of the sites mentioned in Pistorius's 2012 AIA. (Google Earth 2020.)

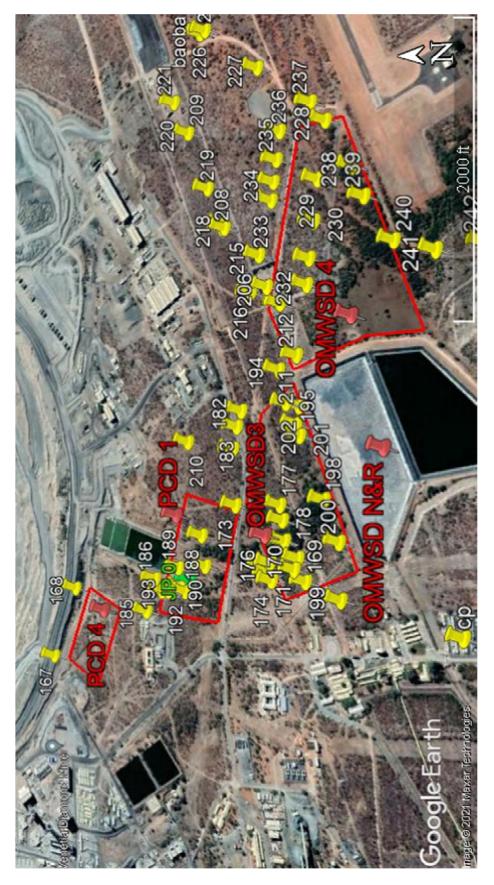


Fig. 11. All the points visited in PCD 4, PCD 1, OMWSD 3, OMWSD 4 and OMWSD N&R during the investigation. (Google Earth 2020.)

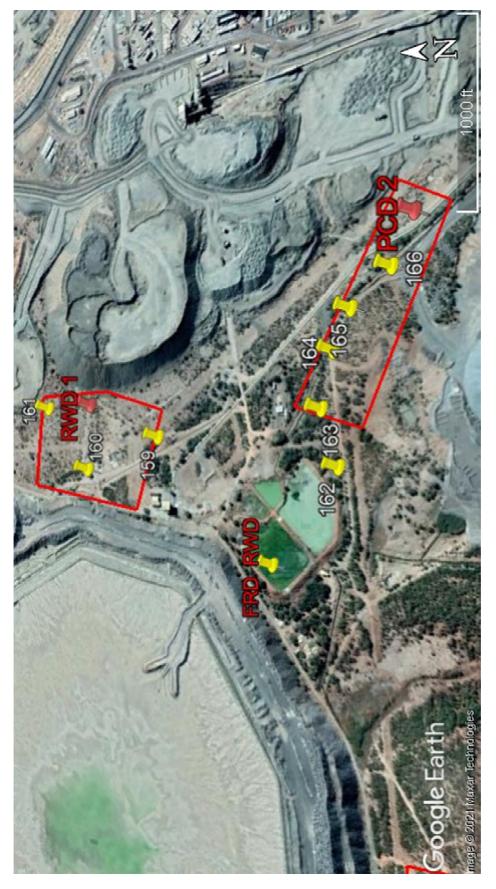


Fig. 12. All the points visited in RWD 1, PCD 2 and FRD RWD during the investigation. (Google Earth 2020.)



Fig. 13. The green marker is one of the points mentioned in the 2011 Pistorius AIA. (Google Earth 2020.)

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