Lot 7 Harris Road, PICTON WA 6229 DORAL MINERAL SANDS



Project Name/No.: Yalyalup PASS Sampling Dec 2017	alup PASS Samplin	g Dec 2017			Results	Results Required Date:	ë:			
Email results to:		malcolm.newman@doral.com.au	@doral.com	.au	Lab / L	Lab / Lab Quote No.:				
		damon.bourke@a	@abecenviron.com.au	com.au						
					Purcha	Purchase Order No.:				
COMMENTS: Please keep all samples on cold storage for future CRS analaysis	ep all samples on c	old storage for futu	ire CRS anal	<u>aysis</u>	DHEOX	9gerot2 b	свз		Notes	
LABID	SAMPLE ID	DATE/TIME	PHASE	BOTTLE		loD				
1752508 638 PASS_SZ	ASS_SZ_ 0-1	11-Dec-17	Soil	250g snaplock	×	×				Γ
105 P	5-1 75-884 RES	11-Dec-17	Soil	250g snaplock	×	×				
14 OFO	840 PASS_52 2-3	11-Dec-17	Soil	250g snaplock	×	×				
25_2SAY 1450	ASS_52 3-4	11-Dec-17	Soil	250g snaplock	×	×				
DASS ST	ASSSZ 4-5	11-Dec-17	Soil	250g snaplock	×	×				
C4-3 PASS_57	9-5 25 SSA	11-Dec-17	Soil	250g snaplock	×	×				
CUR PASS 52	ASS 52 6-7	11-Dec-17	Soil	250g snaplock	×	×				
C45 PASS 52	8-L 75 SSA	11-Dec-17	Soil	250g snaplock	×	×				
COM PASS SZ	ASS 52 8-9	11-Dec-17	Soil	250g snaplock	×	×				
CHT PASS 4.7	1-0 LHSSA	11-Dec-17	Soil	250g snaplock	×	×				
PASSA-	45547 1-2	11-Dec-17	Soil	250g snaplock	×	×		סבייושכים	And the second district of the second	
PA PA	PASS-47 2-3	11-Dec-17	Soil	250g snaplock	×	×		Chomocontro		
OS PASS 4	455_47 3-4	11-Dec-17	Soil	250g snaplock	×	×		D Ve	1.00	
OS( PA	PASS_47 4-5	11-Dec-17	Soil	250g snaplock	×	×		Doto: W	17	
052 PASS_47	455-47 5-6	11-Dec-17	Soil	250g snaplock	×	×		Timo: Cal		
053 PASS-47	15547 6-7	11-Dec-17	Soil	250g snaplock	×	×		frozon gold	ambiont	
AN TO	PASS_47 7-8	11-Dec-17	Soil	250g snaplock	×	×		TI	Q	
OSS PASS 47	155_47 8-9	11-Dec-17	Soil	250g snaplock	×	×				
1752508 056 PASS 47 9-10	455_479-10	11-Dec-17	Soil	250g snaplock	×	×				
Relinquished by: Damon Bourke	ourke		Date: 13/12/17	7	Received by:	l by:		A THE RESIDENCE OF THE PERSON		

Relinquished by: Damon Bourke
Sample Condition Upon Receipt:

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DORAL MINERAL SANDS
Lot 7 Harris Road, PICTON WA 6229

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Project Name/No.: Yalyalup PASS Sampling Dec 2017	Iyalup PASS Samplin	Ig Dec 2017			Results	Results Required Date:	ite:	a a filoria paramenten esta un regional destructuras de la consciención de la companya de la confidención de l	CHRONICAN CONTRACTOR C
Email results to:		malcolm.newman@doral.com.au	@doral.com	ne:	Lab / La	Lab / Lab Quote No.:			
		damon.bourke@a	@abecenviron.com.au	com.au					
					Purcha	Purchase Order No.:	-:		
COMMENTS: Please keep all samples on cold storage for f	eep all samples on c	old storage for fut	ruture CRS analaysis	aysis	-				
					рнгох	egeroż2 bl	CRS		Notes
LAB ID	SAMPLE ID	DATE/TIME	PHASE	ВОТТЕ	TO SECURITION AND ADDRESS.	o)			
17525508/057	PASS_48 0-1	11-Dec-17	Soil	250g snaplock	×	×			personnens de sales estados es
100	PASS_48 1-2	11-Dec-17	Soil	250g snaplock	×	×			
550	059 PASS_48 2-3	11-Dec-17	Soil	250g snaplock	×	×			
90	PASS 48 3.4	11-Dec-17	Soil	250g snaplock	×	×			
9	185	11-Dec-17	Soil	250g snaplock	×	×			
793	EGZ PASS_48 5-6	11-Dec-17	Soil	250g snaplock	×	×			
83	CG3 PASS_48 6-7	11-Dec-17	Soil	250g snaplock	×	×			
790	8-1-84-88-487-8	11-Dec-17	Soil	250g snaplock	×	×			
665	665 PASS_48 6-9	11-Dec-17	Soil	250g snaplock	×	×			
990	PASS_41 0-1	11-Dec-17	Soil	250g snaplock	×	×	>		
190	2-1 12-SSA9	11-Dec-17	Soil	250g snaplock	×	×	<u> </u>	RECEIVED	
10000	PASS_41 2-3	11-Dec-17	Soil	250g snaplock	×	×	>	ChemCentre	
190	PASS_41 3-4	11-Dec-17	Soil	250g snaplock	×	×	/	By Kelin R	المرادية
070	PASS_41 4-5	11-Dec-17	Soil	250g snaplock	×	×	>	Dale: 14-12-1	
170	PASS_4 5-6	11-Dec-17	Soil	250g snaplock	×	×	\ \	Time: 10 45	
072	PASS_41 6-7	11-Dec-17	Soil	250g snaplock	×	×	<u>`</u>	frozen cold	ambient
673	673 PASS_41 7-8	11-Dec-17	Soil	250g snaplock	×	×	1/	-	80
1752508/074	PASS_41 8-9	11-Dec-17	Soil	250g snaplock	×	×	^		
	9548	11-Dec-17	Soil	250g snaplock	×	×			
Relinquished by: Damon Bourke	Bourke		Date: 13/12/17	.7	Received by:	by:			
Sample Condition Upon Receipt:							ĸ		
	(e/g)								

DORAL MINERAL SANDS Lot 7 Harris Road, PICTON WA 6229

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Notes ambient cold ChemCentre RECEIVED frozen Time: Joh # Date: CBS Results Required Date: Purchase Order No.: -Lab / Lab Quote No.: Cold Storage × × × × × × × × × × × × × × × × Received by: **DHFOX** × × × × × × × × × × × × × × × × × × 250g snaplock BOTTLE damon.bourke@abecenviron.com.au COMMENTS: Please keep all samples on cold storage for future CRS analaysis malcolm.newman@doral.com.au Date: 13/12/17 PHASE Soil DATE/TIME 11-Dec-17 Project Name/No.: Yalyalup PASS Sampling Dec 2017 4-5 9-10 71-11 3-4 2-6 11-01 4-5 7-1 59 2-10 0 (1) 10 SAMPLEID OS9 PASS\_39 093 PASS 39 PASS\_40 C92 PASS\_39 PASS\_49 PASS\_49 PASS\_40 PASS\_39 OTS PASS\_49 TIL PASS\_49 OTT PASS\_49 OTS PASS\_49 PASS\_49 PASS\_40 PASS 40 085 PASS\_49 PASS 39 PASS 39 079 80 587 080 087 8 B 5 Email results to: LAB ID 752508

Relinquished by: Damon Bourke Sample Condition Upon Receipt:

Lot 7 Harris Road, PICTON WA 6229 DORAL MINERAL SANDS



Comments   Comments   Comment   Co	Purchase Order   Lab			and and Sundama and date of the contraction of the			1100011	ייכספיים ייכספיים כמיכזי			
Purchase Order No.:-   Samples on cold storage for future CRS anallaysis   Purchase Order No.:-   Apple	Purchase Order No.:-   Inture CRS analaysis   PHASE   BOTTLE	mail results to:		malcolm.newman	@doral.con	ı.au	Lab / Li	ab Quote No.			
Purchase Order No.:-   Samples on cold storage for future CRS analaysis   Purchase Order No.:-   Apple 10   DATE/TIME   PHASE   BOTTLE   PHENCE   BOTTLE   PHENCE   BOTTLE	PHASE   BOTTLE   Purchase Order No.:			damon.bourke@a	becenviron.	com.au					
Samples on cold storage for future CRS analaysis   PHOSE   P	PHASE   BOTTLE   PHFOX   Soil   250g snaplock   X   X   X   X   X   X   X   X   X						Purcha	se Order No.:	-		
Marke   Date/Time	PHASE   BOTTLE   PHASE   PHASE	OMMENTS: Please keek	o all samples on co	old storage for futt	ire CRS anal	aysis	рнгох	9ge10j2 b	свз		Notes
54         7-8         11-Dec-17         Soil         250g snaplock         x         x           56         0-1         11-Dec-17         Soil         250g snaplock         x         x         x           56         0-1         11-Dec-17         Soil         250g snaplock         x         x         x           56         1-2         11-Dec-17         Soil         250g snaplock         x         x         x           56         4-5         11-Dec-17         Soil         250g snaplock         x         x         x           56         4-5         11-Dec-17         Soil         250g snaplock         x         x         x           56         7-6         11-Dec-17         Soil         250g snaplock         x         x         x           66         7-7         11-Dec-17         Soil         250g snaplock         x         x         x         x           67         11-Dec-17         Soil         250g snaplock         x         x         x         x         x           68         10-10         11-Dec-17         Soil         250g snaplock         x         x         x         x           66	7-8 11-Dec-17 Soil 250g snaplock x x x x x x x x x x x x x x x x x x x	LABID	SAMPLE ID	DATE/TIME	PHASE	ВОТТЕ		loo			
26         g-q         11-Dec-17         Soil         250g snaplock         x         x           26         0-1         11-Dec-17         Soil         250g snaplock         x         x         x           26         1-2         11-Dec-17         Soil         250g snaplock         x         x         x           26         2-3         11-Dec-17         Soil         250g snaplock         x         x         x           26         3-4         11-Dec-17         Soil         250g snaplock         x         x         x         x           27         4-5         11-Dec-17         Soil         250g snaplock         x         x         x         x           26         6-7         11-Dec-17         Soil         250g snaplock         x         x         x         x           26         11-Dec-17         Soil         250g snaplock         x         x         x         x         x           26         11-Dec-17         Soil         250g snaplock         x         x         x         x         x           27         11-Dec-17         Soil         250g snaplock         x         x         x         x         x<	\$\epsilon -    11-Dec-17         Soil         250g snaplock         x <td></td> <td></td> <td>11-Dec-17</td> <td>Soil</td> <td>250g snaplock</td> <td>×</td> <td>×</td> <td></td> <td></td> <td></td>			11-Dec-17	Soil	250g snaplock	×	×			
\$\langle \text{C} \cdot \text{C} \text{11-Dec-17} \text{ Soil} \text{ 250g snaplock} \times \times \times \text{ x} \times \t	0-          11-Dec-17         Soil         250g snaplock         x         x           2-3         11-Dec-17         Soil         250g snaplock         x         x           3-4         11-Dec-17         Soil         250g snaplock         x         x           4-5         11-Dec-17         Soil         250g snaplock         x         x           5-6         11-Dec-17         Soil         250g snaplock         x         x           6-7         11-Dec-17         Soil         250g snaplock         x         x           8-9         11-Dec-17         Soil         250g snaplock         x         x           10-10         11-Dec-17         Soil         250g snaplock         x         x           10-10         11-Dec-17         Soil         250g snaplock         x         x         x           10-11         11-Dec-17         Soil         250g snaplock         x         x         x           10-11         11-Dec-17         Soil         250g snaplock         x         x         x           1-2         11-Dec-17         Soil         250g snaplock         x         x         x           1-2         11-Dec-17			11-Dec-17	Soil	250g snaplock	×	×			
5.6         1-2         11-Dec-17         Soil         250g snaplock         x         x         x           5.6         2-3         11-Dec-17         Soil         250g snaplock         x	-2   11-Dec-17   Soil   250g snaplock   x   x   x   x   x   x   x   x   x	Of 6 PA		11-Dec-17	Soil	250g snaplock	×	×	>		
L. 3         11-Dec-17         Soil         250g snaplock         x         x         x           L. 3-4         11-Dec-17         Soil         250g snaplock         x         x         x           L. 4-5         11-Dec-17         Soil         250g snaplock         x         x         x           L. 5-6         11-Dec-17         Soil         250g snaplock         x         x         x           L. 6-7         11-Dec-17         Soil         250g snaplock         x         x         x           L. 8-9         11-Dec-17         Soil         250g snaplock         x         x         x           L. 8-9         11-Dec-17         Soil         250g snaplock         x         x         x           L. 8-9         11-Dec-17         Soil         250g snaplock         x         x         x           L. 1-10-17         11-Dec-17         Soil         250g snaplock         x         x         x           L. 1-10-17         11-Dec-17         Soil         250g snaplock         x         x         x           L. 1-10-17         11-Dec-17         Soil         250g snaplock         x         x         x           L. 1-2         11-Dec-17	2-4 11-Dec-17 Soil 250g snaplock x x x x x x x x x x x x x x x x x x x	OFT PA		11-Dec-17	Soil	250g snaplock	×	×	\		
56         3-4         11-Dec-17         Soil         250g snaplock         x         x         x           36         4-5         11-Dec-17         Soil         250g snaplock         x         x         x           36         5-6         11-Dec-17         Soil         250g snaplock         x         x         x           40         4-8         11-Dec-17         Soil         250g snaplock         x         x         x         ChemCentre           40         10-Dec-17         Soil         250g snaplock         x         x         ChemCentre           40         11-Dec-17         Soil         250g snaplock         x         x         ChemCentre           40         11-Dec-17         Soil         250g snaplock         x         x         ChemCentre           40         11-Dec-17         Soil         250g snaplock         x         x         ChemCentre           41         11-Dec-17         Soil         250g snaplock         x         x         x         x           42         11-Dec-17         Soil         250g snaplock         x         x         x         x           42         3-4         11-Dec-17         Soil	3-4         11-Dec-17         Soil         250g snaplock         x </td <td>O18 PA</td> <td></td> <td>11-Dec-17</td> <td>Soil</td> <td>250g snaplock</td> <td>×</td> <td>×</td> <td>&gt;</td> <td></td> <td></td>	O18 PA		11-Dec-17	Soil	250g snaplock	×	×	>		
5c         4-5         11-Dec-17         Soil         250g snaplock         x<	4-5*         11-Dec-17         Soil         250g snaplock         x         x         x           5-6         11-Dec-17         Soil         250g snaplock         x         x         x           6-7         11-Dec-17         Soil         250g snaplock         x         x         x           8-9         11-Dec-17         Soil         250g snaplock         x         x         ChemCe           10-10         11-Dec-17         Soil         250g snaplock         x         x         ChemCe           10-10         11-Dec-17         Soil         250g snaplock         x         x         ChemCe           10-10         11-Dec-17         Soil         250g snaplock         x         x         ChemCe           1-2         11-Dec-17         Soil         250g snaplock         x         x         ChemCe           1-2         11-Dec-17         Soil         250g snaplock         x         x         Lobb#           3-4         11-Dec-17         Soil         250g snaplock         x         x         Lob#           4-5         11-Dec-17         Soil         250g snaplock         x         x         Lob#	OGY PA		11-Dec-17	Soil	250g snaplock	×	×	>		
% 5-6         11-Dec-17         Soil         250g snaplock         x	\$\int \cdot \	100 PA.		11-Dec-17	Soil	250g snaplock	×	×	`		
1, 6-7         11-Dec-17         Soil         250g snaplock         x	6-7 11-Dec-17 Soil 250g snaplock x x x x x x x x x x x x x x x x x x x	(O) PA		11-Dec-17	Soil	250g snaplock	×	×			
1. Pec-17         Soil         250g snaplock         x <td>3-8         11-Dec-17         Soil         250g snaplock         x&lt;</td> <td>102 PA</td> <td></td> <td>11-Dec-17</td> <td>Soil</td> <td>250g snaplock</td> <td>×</td> <td>×</td> <td>?</td> <td></td> <td></td>	3-8         11-Dec-17         Soil         250g snaplock         x<	102 PA		11-Dec-17	Soil	250g snaplock	×	×	?		
(1	8 -9         11-Dec-17         Soil         250g snaplock         x         x         x         ChemCe           0-10         11-Dec-17         Soil         250g snaplock         x         x         ChemCe           10-1/1         11-Dec-17         Soil         250g snaplock         x         x         By: Ke           0-1         11-Dec-17         Soil         250g snaplock         x         x         Imperior           1-2         11-Dec-17         Soil         250g snaplock         x         x         Imperior           2-3         11-Dec-17         Soil         250g snaplock         x         x         Imperior           3-4         11-Dec-17         Soil         250g snaplock         x         x         Imperior           4-5         11-Dec-17         Soil         250g snaplock         x         x         Imperior	KO3 PA		11-Dec-17	Soil	250g snaplock	×	×	`		
6         Classification         Control of the control	q1-10         11-Dec-17         Soil         250g snaplock         x         x         x         ChemCe           10-11         11-Dec-17         Soil         250g snaplock         x         x         x         By: Idea           0-1         11-Dec-17         Soil         250g snaplock         x         x         x         Trime:           1-2         11-Dec-17         Soil         250g snaplock         x         x         frezen           2-3         11-Dec-17         Soil         250g snaplock         x         x         Inbh#           3-4         11-Dec-17         Soil         250g snaplock         x         x         x           4-5         11-Dec-17         Soil         250g snaplock         x         x         x	PA PA		11-Dec-17	Soil	250g snaplock	×	×	>	RECEIVED	
56         10-11         11-Dec-17         Soil         250g snaplock         x         x         x         x         X         X         X         X         Y	(1)-1/2         11-Dec-17         Soil         250g snaplock         x         x         x         x         By: I/Ca           01         11-Dec-17         Soil         250g snaplock         x         x         x         Trime:           1-2         11-Dec-17         Soil         250g snaplock         x         x         x         frezen           2-3         11-Dec-17         Soil         250g snaplock         x         x         Job#           3-4         11-Dec-17         Soil         250g snaplock         x         x         x           4-5         11-Dec-17         Soil         250g snaplock         x         x         x	105 PA		11-Dec-17	Soil	250g snaplock	×	×	>	ChemCentre	
Coll 1-12         11-Dec-17         Soil         250g snaplock         x         <	0-1         11-Dec-17         Soil         250g snaplock         x         x         x         Date:           1-2         11-Dec-17         Soil         250g snaplock         x         x         r         frozen           2-3         11-Dec-17         Soil         250g snaplock         x         x         y         10b #           3-4         11-Dec-17         Soil         250g snaplock         x         x         y           4-5         11-Dec-17         Soil         250g snaplock         x         x         x	IOG PA		11-Dec-17	Soil	250g snaplock	×	×	\ \ '	Ry. Kanin	Rebien
1. Dec-17         Soil         250g snaplock         x         x         x         Trime:         10.45           1. Dec-17         Soil         250g snaplock         x         x         x         frozen         cold           2. 3-4         11-Dec-17         Soil         250g snaplock         x         x         x         x           3.2 4-5         11-Dec-17         Soil         250g snaplock         x         x         x           3.2 4-5         11-Dec-17         Soil         250g snaplock         x         x         x           3.2 4-5         11-Dec-17         Soil         250g snaplock         x         x         x	O-1         11-Dec-17         Soil         250g snaplock         x         x         x         Tinner           1-2         11-Dec-17         Soil         250g snaplock         x         x         x         Lob#           3-4         11-Dec-17         Soil         250g snaplock         x         x         x         x           4-5         11-Dec-17         Soil         250g snaplock         x         x         x	(67 PA	2000	11-Dec-17	Soil	250g snaplock	×	×	1		
2         1-2         11-Dec-17         Soil         250g snaplock         x         x         x         frozen         cóld           12         2-3         11-Dec-17         Soil         250g snaplock         x	1-2 11-Dec-17 Soil 250g snaplock x x x	PAS PAS		11-Dec-17	Soil	250g snaplock	×	×	1		V.
12         2-3         11-Dec-17         Soil         250g snaplock         x<	2-3 11-Dec-17 Soil 250g snaplock x x x   Job #   Job	ON PA		11-Dec-17	Soil	250g snaplock	×	×	,		
2         3-4         11-Dec-17         Soil         250g snaplock         x         x         x           52         4-5         11-Dec-17         Soil         250g snaplock         x         x         x           52         4-5         11-Dec-17         Soil         250g snaplock         x         x           6         4-5         11-Dec-17         Soil         250g snaplock         x         x	3-4 11-Dec-17 Soil 250g snaplock x x x 4-5 11-Dec-17 Soil 250g snaplock x x x	110 PA		11-Dec-17	Soil	250g snaplock	×	×	1	-	1
32 4 - S 11-Dec-17 Soil 250g snaplock x   x   Date: 13/12/17 Received by	4-5 11-Dec-17 Soil 250g snaplock x			11-Dec-17	Soil	250g snaplock	×	×	,		
Date: 13/12/17		1752508/112 PA		11-Dec-17	Soil	250g snaplock	×	×	>		
	Date: 13/12/17	inquished by: Damon Bo	urke		Date: 13/12/.	17	Received	1 by:			
		• • • • • • • • • • • • • • • • • • •	500				,			(	-

\* Sample by labelled PASS\_34 1-2m but received in PASS-32 series by KSK 1+/12/17.

DORAL MINERAL SANDS Lot 7 Harris Road, PICTON WA 6229

Sheet 7 of 12 Doral

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Email results to:		malcolm.newman@doral.com.au	@doral.com	au	Lab / La	Lab / Lab Quote No.			
		damon.bourke@abecenviron.com.au	becenviron.	com.au		-			
					Purcha	Purchase Order No.:	-:		
COMMENTS: Please keep all samples on cold storage for future CRS analaysis	ep all samples on co	old storage for fut	ure CRS anal	<u>aysis</u>	рнеох	egerof2 b	свз		Notes
LABID	SAMPLE ID	DATE/TIME	PHASE	BOTTLE	i	loɔ			
752508/113 F	PASS_32 5-6	11-Dec-17	Soil	250g snaplock	×	×	1		
711	14 PASS_32 6-7	11-Dec-17	Soil	250g snaplock	×	×	//		
115 P	PASS_32 7-8	11-Dec-17	Soil	250g snaplock	×	×	//		
911	6-8 75-22A	11-Dec-17	Soil	250g snaplock	×	×	,		
	PASS_34 0-1	11-Dec-17	Soil	250g snaplock	×	×	,		
B 811	PASS_34 1-2	11-Dec-17	Soil	250g snaplock	×	×	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
d 61)	PASS_34 2-3	11-Dec-17	Soil	250g snaplock	×	×	>		
1 02)	120 PASS_34 3-4	11-Dec-17	Soil	250g snaplock	×	×	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
121 P	PASS_24 4-5	11-Dec-17	Soil	250g snaplock	×	×	,		
122 P	9-5 K-88A	11-Dec-17	Soil	250g snaplock	×	×	`		
123 F	123 PASS_34 6-7	11-Dec-17	Soil	250g snaplock	×	×	1	RECEIVED	
174	8-1 H-88-74 7-8	11-Dec-17	Soil	250g snaplock	×	×	/	ChemCentre	
(25	125 PASS_24 8-9	11-Dec-17	Soil	250g snaplock	×	×	1	(20	dopul
126 P	PASS_34 9-10	11-Dec-17	Soil	250g snaplock	×	×	1	Dale: 14-12-1	
127 1	127 PASS_34 10-11	11-Dec-17	Soil	250g snaplock	×	×	1/	Time. 10.45	
1752508/128 PASS_34	12/11 PE-884	11-Dec-17	Soil	250g snaplock	×	×	>	frozen cold	ambient
4	PASS_	11-Dec-17	Soil	250g snaplock	×	×		)	1525508
т	PASS_	11-Dec-17	Soil	250g snaplock	×	×			
	PASS_	11-Dec-17	Soil	250g snaplock	×	×			
-	ASS	14 000 FF	100	1	<	<			

Relinquished by: Damon Bourke Sample Condition Upon Receipt:

Lot 7 Harris Road, PICTON WA 6229 DORAL MINERAL SANDS

Sheet 8 of 12 DOFA

COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage for future CRS analaysis   Purchase Order No:-   COMMENTS: Please keep all samples on cold stociage order No:-   COMMENTS: Please keep all samples on cold stociage order No:-   COMMENTS: Please keep all samples on cold stociage order No:-   COMMENTS: Please keep all samples on cold stociage order No:-   COMMENTS: Please keep all samples on cold stociage order No:-   COMMENTS: Please keep all samples on cold stociage order No:-   COMMENTS: Please keep all samples on cold stociage order No:-   COMMENTS: Please keep all samples order No:-	SAMPLE ID   DATE/TIME   PHASE   BOTTLE								_		
Samples on cold storage for future CRS analaysis   Purcisae Order No.:-   Apple	PHASE   BOTTLE   Soil   250g snaplock   X   X   X   X   X   X   X   X   X	Email results to:			@doral.com	ne.	Lab / La	b Quote No.:			
Marchae on cold storage for future CRS analaysis   Purchase Order No   Samples on cold storage for future CRS analaysis   Purchase Order No   March   Date	Purchase Order No.:-   Purchase Order No.:-   PHASE   BOTTLE   Cold			damon.bourke@a	abecenviron.	com.au					
Mayer   Date   Mayer   Date   Date	PHASE   BOTTLE   Cold Storage   Co						Purchas	se Order No.:	-		
May   Lange   Date/Time	SAMPLE ID   DATE/TIME   PHASE   BOTTLE   Soli   250g snaplock   X   X   X     1.24   PASS_37   1.2   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   11.Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.1Dec-17   Soli   250g snaplock   X   X   X     1.25   PASS_37   2.4   2.4   2.4   2.4   2.4   2.4     1.25   PASS_37   2.4   2.4   2.4   2.4   2.4   2.4     2.45   PASS_37   2.4   2.4   2.4   2.4   2.4   2.4   2.4     2.45   PASS_37   2.4   2.	COMMENTS: <u>Please k</u>	eep all samples on c	cold storage for fut	ure CRS anal	<u>aysis</u>	PHFOX	9ge10†2 b	CRS		Notes
75 0-1 11-Dec-17 Soil 250g snaplock x x x x x x x x x x x x x x x x x x x	129   PASS_37   0-1   11-Dec-17   Soil   250g snaplock   X   X   X   X   X   X   X   X   X	LAB ID	SAMPLE ID	DATE/TIME	PHASE	ВОТПЕ		100			
35         1-2         11-Dec-17         Soil         250g snaplock         x         x           35         3-4         11-Dec-17         Soil         250g snaplock         x         x         x           35         3-4         11-Dec-17         Soil         250g snaplock         x         x         x           35         4-5         11-Dec-17         Soil         250g snaplock         x         x         x           35         5-4         11-Dec-17         Soil         250g snaplock         x         x         x         x           35         5-4         11-Dec-17         Soil         250g snaplock         x         x         x         x         x           35         5-4         11-Dec-17         Soil         250g snaplock         x         <	13c         PASS_35         1-L         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         2-3         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         2-4         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         4-5         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         6-7         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         6-7         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         6-7         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         6-7         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         1(-1)         11-Dec-17         Soil         250g snaplock         x         x           13c         PASS_33         1(-1)         11-Dec-17         Soil         250g snaplock         x         x	1129		11-Dec-17	Soil	250g snaplock	×	×			
13         2-3         11-Dec-17         Soil         250g snaplock         x         x         x           25         3-4         11-Dec-17         Soil         250g snaplock         x         x         x           35         4-5         11-Dec-17         Soil         250g snaplock         x         x         x           35         5-7         11-Dec-17         Soil         250g snaplock         x         x         x           35         5-4         11-Dec-17         Soil         250g snaplock         x         x         x         x           35         5-4         11-Dec-17         Soil         250g snaplock         x         x         x         x         x           35         5-4-10         11-Dec-17         Soil         250g snaplock         x	131         PASS_33         2-3         11-Dec-17         Soil         250g snaplock         x         x           132         PASS_33         3-4         11-Dec-17         Soil         250g snaplock         x         x           134         PASS_33         4-5         11-Dec-17         Soil         250g snaplock         x         x           134         PASS_33         5-7         11-Dec-17         Soil         250g snaplock         x         x           135         PASS_33         5-7         11-Dec-17         Soil         250g snaplock         x         x           137         PASS_33         5-7         11-Dec-17         Soil         250g snaplock         x         x           137         PASS_33         5-7         11-Dec-17         Soil         250g snaplock         x         x           138         PASS_33         10-11         11-Dec-17         Soil         250g snaplock         x         x           138         PASS_33         10-11         11-Dec-17         Soil         250g snaplock         x         x           PASS_33         10-11         11-Dec-17         Soil         250g snaplock         x         x <t< td=""><td>130</td><td></td><td>11-Dec-17</td><td>Soil</td><td>250g snaplock</td><td>×</td><td>×</td><td></td><td></td><td></td></t<>	130		11-Dec-17	Soil	250g snaplock	×	×			
55         3-4         11-Dec-17         Soil         250g snaplock         x         x         x           35         4-5         11-Dec-17         Soil         250g snaplock         x	32   PASS_35   3-4   11-Dec-17   Soil   250g snaplock   x   x   x   x			11-Dec-17	Soil	250g snaplock	×	×			
35         41-5         11-Dec-17         Soil         250g snaplock         x         x         x           55         5-4         11-Dec-17         Soil         250g snaplock         x	134       PASS_33       45       11-Dec-17       Soil       250g snaplock       x       x       x         134       PASS_33       5-4       11-Dec-17       Soil       250g snaplock       x       x       x         136       PASS_33       6-7       11-Dec-17       Soil       250g snaplock       x       x       x         137       PASS_33       6-7       11-Dec-17       Soil       250g snaplock       x       x       x         138       PASS_33       6-7       11-Dec-17       Soil       250g snaplock       x       x       x         138       PASS_33       11-16       11-Dec-17       Soil       250g snaplock       x       x       x         138       PASS_33       11-16       11-Dec-17       Soil       250g snaplock       x       x       x         PASS_       11-Dec-17       Soil       250g snaplock<	(32	33	11-Dec-17	Soil	250g snaplock	×	×			
32         5-L         11-Dec-17         Soil         250g snaplock         x         x         x           52         6-7         11-Dec-17         Soil         250g snaplock         x	134         PASS_33         5-6         11-Dec-17         Soil         250g snaplock         x         x           136         PASS_33         6-7         11-Dec-17         Soil         250g snaplock         x         x           131         PASS_33         6-7         11-Dec-17         Soil         250g snaplock         x         x           131         PASS_33         6-40         11-Dec-17         Soil         250g snaplock         x         x           136         PASS_33         10-10         11-Dec-17         Soil         250g snaplock         x         x           140         PASS_33         10-10         11-Dec-17         Soil         250g snaplock         x         x           PASS_33         10-10         11-Dec-17         Soil         250g snaplock         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_         11-Dec-17         Soil	(33	PASS_33	11-Dec-17	Soil	250g snaplock	х	×			
53         6-7         11-Dec-17         Soil         250g snaplock         x         x         x           53         7-8         11-Dec-17         Soil         250g snaplock         x	135         PASS_33         6-7         11-Dec-17         Soil         250g snaplock         x         x         x           136         PASS_33         7-8         11-Dec-17         Soil         250g snaplock         x         x         x           137         PASS_33         6-40         11-Dec-17         Soil         250g snaplock         x         x         x           138         PASS_33         (0-40         11-Dec-17         Soil         250g snaplock         x         x         x           139         PASS_33         (1-12         11-Dec-17         Soil         250g snaplock         x         x         x           140         PASS_33         11-Dec-17         Soil         250g snaplock         x         x         x           140         11-Dec-17         Soil         250g snaplock         x         x         x		33	11-Dec-17	Soil	250g snaplock	×	×			
32 7-8 11-Dec-17 Soil 250g snaplock x x x x x x x x x x x x x x x x x x x	136       PASS_33       7-8       11-Dec-17       Soil       250g snaplock       x       x       x         151       PASS_33       6-40       11-Dec-17       Soil       250g snaplock       x       x       x         158       PASS_33       4-40       11-Dec-17       Soil       250g snaplock       x       x       x         159       PASS_33       14-16       11-Dec-17       Soil       250g snaplock       x       x       x         PASS_       11-Dec-17       Soil       250g snaplock       x       x       x	135		11-Dec-17	Soil	250g snaplock	×	×			
52         6-4         11-Dec-17         Soil         250g snaplock         x<	131         PASS_33         \$-4         11-Dec-17         Soil         250g snaplock         x         x         x           134         PASS_32         \$-4.0         11-Dec-17         Soil         250g snaplock         x         x         x           134         PASS_33         \$(O-4)          \$11-Dec-17         Soil         \$250g snaplock         x         x         x           PASS_33         \$(1-12)          \$11-Dec-17         \$0il         \$250g snaplock         x         x         x           PASS_4         \$11-Dec-17         \$0il         \$250g snaplock         x         x         x           PASS_5         \$11-Dec-17         \$0il         \$250g snaplock         x         x         x           PASS_5         \$11-Dec-17         \$0il         \$250g snaplock         x         x         x		33	11-Dec-17	Soil	250g snaplock	×	×			
35         4-10         11-Dec-17         Soil         250g snaplock         x	35   PASS_35   4-t0   11-Dec-17   Soil   250g snaplock   x   x   x   x   x   x   x   x   x	137	201	11-Dec-17	Soil	250g snaplock	×	×			
11-Dec-17   Soil   250g snaplock   X   X   X   X   X   X   X   X   X	134         PASS_33         10-41         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_33         11-12         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x         x	138	_	11-Dec-17	Soil	250g snaplock	×	×			
11-Dec-17   Soil   250g snaplock   X   X   X   X   X   X   X   X   X	PASS_33         11-12         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x         x	139			Soil	250g snaplock	×	×		DECEIVED	
11-Dec-17         Soil         250g snaplock         x         x         x         x         x         y         Kelving           11-Dec-17         Soil         250g snaplock         x         x         x         Time:         15.           11-Dec-17         Soil         250g snaplock         x         x         x         x         60ld           11-Dec-17         Soil         250g snaplock         x         x         x         100 ##         15.           11-Dec-17         Soil         250g snaplock         x         x         x         x         x           11-Dec-17         Soil         250g snaplock         x         x         x         x         x           11-Dec-17         Soil         250g snaplock         x         x         x         x         x           11-Dec-17         Soil         250g snaplock         x         x         x         x         x	11-Dec-17         Soil         250g snaplock         x         x         x		33		Soil	250g snaplock	×	×		ChomContro	
11-Dec-17 Soil 250g snaplock x x x x Date:  11-Dec-17 Soil 250g snaplock x x x x x Tirne:  11-Dec-17 Soil 250g snaplock x x x x x x x x x x x x x x x x x x x	PASS_         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x         x	,	PASS_	11-Dec-17	Soil	250g snaplock	×	×		Kann P	Chins
11-Dec-17         Soil         250g snaplock         x         x         x         x         Fringe:         Frozen         Fold           11-Dec-17         Soil         250g snaplock         x         x         x         y         Instance         Instance<	PASS_         11-Dec-17         Soil         250g snaplock         x         x           PASS_         11-Dec-17         Soil         250g snaplock         x         x		PASS_	11-Dec-17	Soil	250g snaplock	×	×			F.
11-Dec-17         Soil         250g snaplock         x         x         x         frozen           11-Dec-17         Soil         250g snaplock         x         x         x         Job#           11-Dec-17         Soil         250g snaplock         x         x         x         x           11-Dec-17         Soil         250g snaplock         x         x         x         x           Date: 13/12/17         Received by:         Received by:         Received by:         x         x	PASS_ 11-Dec-17 Soil 250g snaplock x x		PASS_	11-Dec-17	Soil	250g snaplock	×	×			4
11-Dec-17         Soil         250g snaplock         x         x         x         Lobert           11-Dec-17         Soil         250g snaplock         x         x         x         x           11-Dec-17         Soil         250g snaplock         x         x         x         x           Date: 13/12/17         Received by:         Received by:         x         x         x		•	PASS	11-Dec-17	Soil	250g snaplock	×	×			ambient
11-Dec-17         Soil         250g snaplock         x         x         x           11-Dec-17         Soil         250g snaplock         x         x         x           Date: 13/12/17         Received by:	PASS_ 11-Dec-17 Soil 250g snaplock x x		PASS_	11-Dec-17	Soil	250g snaplock	×	×			SOS
11-Dec-17 Soil 250g snaplock x Date: 13/12/17 Received by	11-Dec-17 Soil 250g snaplock x x		PASS_	11-Dec-17	Soil	250g snaplock	×	×		+	
Date: 13/12/17	11-Dec-17 Soil 250g snaplock x		PASS	11-Dec-17	Soil	250g snaplock	×	*. ×			
	Date: 13/12/17	Relinquished by: Damon	n Bourke	•	Date: 13/12/1	7.	Received	i by:			
Sample Condition Upon Receipt:		Sample Condition Upon I									



DORAL MINERAL SANDS Lot 7 Harris Road, PICTON WA 6229



Project Name/No.: Yalyalup PASS Sampling Dec 2017	alup PASS Samplin	Ig Dec 2017			Results	Results Required Date:	te:		The second secon
Email results to:		malcolm.newman	@doral.com	an	Lab / La	Lab / Lab Quote No.:			
	•	damon.bourke@abecenviron.com	@abecenviron.com.au	om.au					
					Purcha	Purchase Order No.: -			
COMMENTS: Please keep all samples on cold storage for	p all samples on c		future CRS analaysis	<u>vsis</u>	DHEOX	9ge1012 b	SBO		Notes
LABID	SAMPLE ID	DATE/TIME	PHASE	ВОТТЕ		loD			
1752558 HT P	PASS_63 0-1	12-Dec-17	Soil	250g snaplock	×	×			
747	PASS_63 1-2	12-Dec-17	Soil	250g snaplock	×	×	\		
143 PA	PASS_63 2-3	12-Dec-17	Soil	250g snaplock	×	×	,		
	PASS_63 3-4	12-Dec-17	Soil	250g snaplock	×	×	/		
14 St)	PASS_63 4-5	12-Dec-17	Soil	250g snaplock	×	×	/		
1d 9h)	1-5 63_22A	12-Dec-17	Soil	250g snaplock	×	×	/		
	F-3 63_2AA	12-Dec-17	Soil	250g snaplock	×	×	`		
148 PA	8-L 69-SSYd	12-Dec-17	Soil	250g snaplock	×	×	/		
14 6th	PASS_63 8-9	12-Dec-17	Soil	250g snaplock	×	×	>		
	1-0 \$9-SSYd	12-Dec-17	Soil	250g snaplock	×	×			
NA ISI	PASS_64 1-2	12-Dec-17	Soil	250g snaplock	×	×		RECEIVED	
152 PASS_64	455_64 2-3	12-Dec-17	Soil	250g snaplock	×	×		ChemCentre	
153 PA	PASS_64 3-4	12-Dec-17	Soil	250g snaplock	×	×		RV Koun R	cholins
PASS_CA	2-4 4-5	12-Dec-17	Soil	250g snaplock	×	×		Dale: 14-12-1	7
ISS PA	PASS_64 5-1	12-Dec-17	Soil	250g snaplock	×	×		Time: 15.45	
156 PASS_64	(-9 H)-SSY	12-Dec-17	Soil	250g snaplock	×	×		frozen cold	ambient
157 PASS_64	8-L 45-88	12-Dec-17	Soil	250g snaplock	×	×		_	52508
1752508 158 PASS_64	h-8 49-85	12-Dec-17	Soil	250g snaplock	×	×			
d	2500 D	12-Dec-17	Soil	250g snaplock	×	×			
Relinquished by: Damon Bourke	ourke		Date: 13/12/17	7	Received by:	l by:			

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Nellinquising 2,... Sample Condition Upon Receipt: Relinquished by: Damon Bourke

Lot 7 Harris Road, PICTON WA 6229 DORAL MINERAL SANDS

Sheet 18 12 Doral

Project Name/No.: Yalyalup PASS Sampling Dec 2017	Iyalup PASS Sar	mpling	Dec 2017			Results	Results Required Date:	te:	The second of th		
Email results to:			malcolm.newman@doral.com.au	@doral.com	au	Lab/L	Lab / Lab Quote No.				
		Loi	damon.bourke@abecenviron.com.au	becenviron.	com.au						
						Purcha	Purchase Order No.:				
COMMENTS: Please keep all samples on cold storage for future CRS analaysis	eep all samples	on col	d storage for futu	re CRS anala	aysis		ə				
	:1					рНЕОХ	gerot2 bl	СВЗ			Notes
LABID	SAMPLEID	_	DATE/TIME	PHASE	BOTTLE		o)				
1752508/159 PASS_59		10	12-Dec-17	Soil	250g snaplock	×	×	_		AND THE PROPERTY OF THE PROPER	
9		1-7	12-Dec-17	Soil	250g snaplock	×	×				
191		2-3	12-Dec-17	Soil	250g snaplock	×	×				
	PASS_SQ 3	4	12-Dec-17	Soil	250g snaplock	×	×				
163	PASS_CO	4-5	12-Dec-17	Soil	250g snaplock	×	×				
164	164 PASS_59 5	9-5	12-Dec-17	Soil	250g snaplock	×	×				
59!	PASS_SS9 6	6-3	12-Dec-17	Soil	250g snaplock	×	×				
991	PASS_559 7	28	12-Dec-17	Soil	250g snaplock	×	×				
167		6-9	12-Dec-17	Soil	250g snaplock	×	×				
(68	PASS_67 0	1-0	12-Dec-17	Soil	250g snaplock	×	×				
		7-1	12-Dec-17	Soil	250g snaplock	×	×		מבעבוועבוי		
07)	PASS_67 2	1-3	12-Dec-17	Soil	250g snaplock	×	×		Chomogra		
(7)		3-4	12-Dec-17	Soil	250g snaplock	×	×		D. Vol.	adain	
172	PASS_67 4	4-5-	12-Dec-17	Soil	250g snaplock	×	×		Dy.	177	
173	173 PASS_67 5	19-5	12-Dec-17	Soil	250g snaplock	×	×		Time.	, VI	
4	74 PASS_67 6-	1	12-Dec-17	Soil	250g snaplock	×	×		. 9	old old	ambiont
175	175 PASS_67 7.	25	12-Dec-17	Soil	250g snaplock	×	×	_	-	V	
1752508/176	PASS_67 8	8-9	12-Dec-17	Soil	250g snaplock	×	×				
	100		12-Dec-17	Soil	250g snaplock	×	×				
Relinquished by: Damon Bourke	Bourke		_	Date: 13/12/17	7	Received by:	d by:				

Relinquisned by. Sample Condition Upon Receipt: Relinquished by: Damon Bourke

CHAIN OF CUSTODY
DORAL MINERAL SANDS
Lot 7 Harris Road, PICTON WA 6229



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DORAL MINERAL SANDS Lot 7 Harris Road, PICTON WA 6229

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Received by:

Date: 13/12/17

Relinquished by: Damon Bourke

Sample Condition Upon Receipt:

### **Doral**

### Doral



**Doral Mineral Sands Pty Ltd** ABN 18 096 342 451 ACN 096 342 451 Lot 7 Harris Road, Picton WA 6229 Tel:+61 8 9725 5444 Fax:+61 8 9725 4557 Email: admin@doral.com.au Website: www.doral.com.au



### APPENDIX 2

YALYALUP MINE CLOSURE RISK ASSESSMENT

### DARDANUP MINE CLOSURE RISK ASSESSMENT

					Risk Analysis				Control Analysis			
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Item No.	Risk	Hazard	Possible Causes	Potential Impacts	Worst Case Scenario	Likelihood	Consequence	Risk Rating	Control	Likelihood	Consequence	Risk Rating
1	Compliance	Legal Obligations and commitments	1. Failure to plan to meet legal obligations. 2. Failure to implement / undertake legal obligations. 3. Failure to understand, or difference in interpretation, of obligations.	<ol> <li>Prosecution with associated penalties.</li> <li>Delay to relinquishing land tenure, involving management time and cost.</li> <li>Cost of rework.</li> <li>Deterioration of public reputation.</li> <li>Failure to get bonds released.</li> </ol>	Earthworks are required to rework final landform(s) to meet an obligation.	Possible	Catastrophic	High	1. Legal obligations and commitments identified and included within MCP. 2. MCP includes tracking of how obligations and commitments are being met. 3. 'Decision making stakeholder' review and acceptance of how obligations are being met, prior to closure. 4. AER includes discussion on closure and rehabilitation 5. Update and maintain Legal Compliance Register	Rare	Major	Medium
2	Completion Criteria	Geotechnical stability (subsidence)	1. Backfill in mine pits consolidation pattern is unknown or not as expected. 2. Post-mining land owners build structures on backfilled mining voids.	1. Cost of rework to correct (e.g. maintenance backfilling of shallow slumps). 2. Compensation (cost) to future land users if structures fail. 3. Changes to surface water drainage if not corrected. 4. Restrictions to post—mining agricultural management (e.g. hazards to livestock or restriction to vehicle and equipment movement). 5. Structural failure of road (built over mine pit). 6. Reduced land value at time of sale.	Cost to correct or remedy structure (i.e. road, house or shed) built on backfilled mine pit which fails due to ground subsidence.	Possible	Major	High	<ol> <li>Mined out road tenure (i.e. areas where post-mining landuse is road reserve) is backfilled with materials that meet compaction specifications.</li> <li>Subsidence monitoring and rework to correct.</li> <li>Land is retained by Doral for at least 3 years prior to resale.</li> <li>Map rehabilitated mine pit backfill types and depth.</li> </ol>	Rare	Moderate	Low
3	Completion Criteria	Landuse	1. Landuse not agreed with landowners and/or DMIRS. 2. Change in landuse post-closure to a landuse incompatible with land capability. 3. Post-mining land capability is not able to support agreed landuse.	Delay in handover / relinquishment of land as it is not fit for new purpose.     Cost to rework to meet required landuse.	Cost of rework to meet landuse standards	Possible	Major	High	1. Landowner agreements include broad post-mining landuse. 2. Over next 6-12 months submit designs and discuss post-mining landuse with landowners to work out details. 3. MCP submitted and approved by DMIRS. 4. Obtain legal advice on mechanisms for limiting Doral's liability of future landholders utilising land for landuses other than those the landform was designed for.	Unlikely	Major	High
4	Completion Criteria	Weeds (agricultural, environmental and declared)	1. Failure to identify, monitor and control weeds	<ol> <li>Cost of control.</li> <li>Compliance (declared weeds, revegetation composition).</li> <li>Deterioration of public relations.</li> <li>Competition from weeds results in failure of revegetation.</li> </ol>	Competition from weeds results in revegetation failure (either native or agricultural revegetation).	Almost certain	Moderate	Extreme	<ol> <li>Pre-disturbance surveys</li> <li>Inspections</li> <li>Removal and spraying of weeds in native vegetation areas and declared weeds.</li> <li>Implement weed control in other agricultural areas.</li> </ol>	Unlikely	Minor	Low

					Risk Analysis				Control Analysis			
						li	nher	ent		R	esid	ual
Item No.	Risk	Hazard	Possible Causes	Potential Impacts	Worst Case Scenario	Likelihood	Consequence	Risk Rating	Control	Likelihood	Consequence	Risk Rating
5	Completion Criteria	Agricultural Productivity (is not as good as or better than pre- mining levels)	1. Post-mining soil profiles do not support productive pastures 2. Saline ground water contaminates surface soils 3. Poor pasture management practices (e.g. fertiliser use, weed control, stock management)	1. Post-mining land fails to be as productive as pre-mining land. 2. Loss of access to future deposits. 3. Inability to realise commercial value of land held by Doral upon sale of land.	Landowners refuse to provide access to southern extension and other future mining areas	Possible	Catastrophic	Extreme	<ol> <li>Design soils profiles for each rehab block with at least 1m of soil materials on top of sand tails.</li> <li>Keep 100mm of topsoil and subsoil where available for use in rehab.</li> <li>Measure soil properties and agricultural productivity (pre and post mining).</li> <li>Control of brackish and saline groundwater during operations, such that rehab surface soils are not contaminated.</li> <li>Implement good practice pasture management practices.</li> <li>Develop and obtain landholder agreement to detailed landform designs.</li> </ol>	Unlikely	Moderate	Medium
6	Completion Criteria	Erosion	Unstable and unvegetated surface soils (i.e. sands) and drainage lines.     Landform design does not accommodate surface water flows off site.	1. Unacceptable turbidity in waterways. 2. Meandering drainage lines kill revegetation by eroding and/or sedimentation of vegetation. 3. Increase siltation within drainage lines . 4. Cost of rework. 5. Deterioration of public reputation. 6. Impacts on neighbours (e.g. road reserves, adjoining landowners)	Unstable drainage line meanders annually killing vegetation, modifying topography and deteriorating downstream water quality.	Unlikely	Moderate	Medium	<ol> <li>Reconstruct drainage lines less than 1:130. Where they are at a steeper slope than this rock armouring is utilised to prevent scouring.</li> <li>Each drainage line created in rehabilitation areas is subject to site specific design.</li> <li>Inspection and rework to correct smaller issues before escalation to significant damage.</li> </ol>	Rare	Minor	Low
7	Completion Criteria	Contaminated Sites	1. Dry plant tails not adequately covered with low radiation soils. 2. Diesel (or other hydrocarbon) spill or leak. 3. Acid Sulphate Soils are oxidised creating acidity.	1. Elevated radiation levels at the final landform surface. 2. Hydrocarbon contaminated soil and/or water. 3. Acidified soil and/or water.	Contaminated site prevents relinquishment of land and incurs significant costs for ongoing treatment	Possible	Major	High	1. Undertake hydrocarbon site contamination assessment. 2. Decontaminate any hydrocarbon contamination identified. 3. Pre- and post-mining radiation surveys. 4. Water and soil monitoring to detect acidification resulting from ASS. 5. Implementation of the ASS Managment Plan.	Rare	Moderate	Low
8	Completion Criteria	Native Revegetation (fails to establish where planted)	1. Planted in areas with too little soil water available (e.g. mine voids backfilled with sand tails). 2. Stock or vermin (e.g. rabbits) eat seedlings 3. Area is unexpectedly waterlogged and seedlings die due to waterlogging. 4. Vegetation succumbs to disease (i.e dieback). 5. Erosion 6. Weed competition. 7. Low rainfall seasonal conditions.	Native vegetation rehabilitation targets not able to be achieved (resulting in compliance issue, loss of licence to	Native revegetation fails to establish.	Likely	Major	Extreme	<ol> <li>Deep rooted vegetation is not planted in rehabilitated mine pits that have been backfilled with sand tails.</li> <li>Seedlings area planted and tree guards installed.</li> <li>Implement dieback management measures.</li> <li>Vegetation species are selected based on the expected conditions of the site (e.g. wetland species to be planted in areas where waterlogging could be expected).</li> <li>Kangaroo fencing and managed culling.</li> <li>Rabbit control baiting.</li> <li>Site preparation activities, including weed control for 2 years prior to planting, ripping and scalping.</li> <li>Inspection and adaptive management (response to weeds, grazing pressure, erosion)</li> </ol>	Unlikely	Moderate	Medium
9	Completion Criteria	Mining Infrastructure removal (failure to completely remove)	Not enough money     available at closure to remove     all infrastructure.     Not all infrastructure		Delay in handover / relinquish of land resulting in ongoing cost incursion.	Possible	Major	High	Closure cost estimates and provisioning includes removal of infrastructure.     Closure cost estimates and provisioning is reviewed and updated on annual basis.	Unlikely	Major	High

					Risk Analysis				Control Analysis			
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Item No.	Risk	Hazard	Possible Causes	Potential Impacts	Worst Case Scenario	Likelihood	Consequence	Risk Rating	Control	Likelihood	Consequence	Risk Rating
10	Completion Criteria	(failure to reinstate to	Failure to plan to reinstate all required infrastructure.     Reinstated instructure not build to required standard.	Unplanned rework cost.     Delay in handover / relinquishment of land.	Cost of rework / remediation.	Possible	Major	High	<ol> <li>Infrastructure to be reinstated is clearly identified and costed for within MCP.</li> <li>Utilisation of City of Busselton road standards.</li> <li>Define irrigation and access infrastructure in consultation with landholders and include within MCP.</li> </ol>	Rare	Moderate	Low
11	Completion Criteria	Groundwater (does not return similar to pre-mining functioning)	1. Groundwater patterns and flows on site not understood. 2. Groundwater flows and quality not considered in rehabilitation planning. 3. Backfill of mine pits with sand or overburden/tails locally changes the groundwater behaviour (i.e. localised waterlogging / flooding occurs, or soil suffers springtime 'drought').	<ol> <li>Amenity / use of land is compromised.</li> <li>Agricultural productivity is reduced.</li> <li>Land not able to sustain target native vegetation growth.</li> <li>Neighbours water bores dry up at or post-closure.</li> </ol>	Neighbours water bores dry up at or post- closure.	Possible	Moderate	High	Groundwater investigation, modelling and assessment undertaken, including post-mining groundwater recovery.     Groundwater monitoring includes neighbouring landowners bores.	Unlikely	Moderate	Medium
12	Completion Criteria	Native revegetation areas (are not sustained)	Dieback kills established vegetation     Altered water regime (ie local drought or waterlogging resulting from removal of SEPs)	Loss of access to future deposits.     Deterioration of public reputation.	Native vegetation dies shortly after closure and acccess to future mineral deposits is denied by Government.	Unlikely	Catastrophic	High	Legal mechanisms for implementing management controls of are established by Doral prior to land transfer.	Rare	Catastrophic	High
13	Completion Criteria	Landforms (do not support agreed landuses)	1. Design landforms and soil profiles do not support agreed landuse. 2. Performance of landforms and soil profiles not well understood and assumptions prove incorrect. 3. Landforms and soil profiles are not created (implemented) as designed.	Delay in handover / relinquishment of land as it is not fit for new landuse     Cost to rework to meet agreed landuse.	Cost of rework / remediation.	Possible	Major	High	1. Landform and soil profile design based on industry experience, good science and site specific information. 2. Adequate supervision of rehabilitation activities so that landforms and soil profiles are created as designed. 3. Monitor/measure performance of landforms and soil profiles in rehabilitated areas, and incorporate any learnings/lessons into future rehabilitation design.	Unlikely	Major	Medium
14	Cost	Inadequate Provision	Underestimate of costs     Specific items required at     and post-closure are not	State government pursues     Doral owners for costs.     Deterioration of public     reputation.	State government pursues Doral owners for costs	Likely	Catastrophic	Extreme	Annual review of MCP and cost estimates, with continual improvement in the level of detail contained.     Feedback from actual rehabilitation expenditure is utilised in updates to rehabilitation cost estimates and provisioning.     Assumptions used in cost estimates to be included within the MCP and reviewed annually.	Unlikely	Catastrophic	High
15	Closure Plan	Schedules	<ol> <li>Closure implementation not planned for.</li> <li>Closure implementation schedule not based on learnings from progressive rehabilitation.</li> <li>Schedule is not location specific.</li> </ol>	1. Cost overrun due to increased duration of activities. 2. Deterioration of public reputation. 3. Impact on neighbouring landowners and community due ongoing delays (e.g. ongoing road closures, noise impacts, irrigation channel control)	Cost overrun due to increased duration of activities	Likely	Catastrophic	Extreme	MCP and rehabilitation schedule annually updated.     Ongoing consultation with neighbours, community and other stakeholders regarding planned implementation of closure.	Unlikely	Major	High