

TECHNICAL ASSESSMENT CHECKLIST AND RECOMMENDATIONS

EXPLORATION PERMITS FOR COAL NO. 14, 241, 95,203,249,119, 295, 265,
300,175, 300, 300, 298, 300,150, 259,150, 292, 284, 300

Variation

Date of Grant:

Applicant(s)/Holder(s): WARATAH Coal Pty Ltd	
Project Name: GALILEE BASIN PROJECT	
Commodity: Export thermal coal	
Number of sub-blocks applied for: 14+241+95+203+249+119+295+265+300+ 175+300+300+298+300+150+ 259+150+292+284+300= 4589	Application at folio:

Assessment Summary

Technical and financial resources: Satisfactory, supported by Clive Palmer's Minerology Pty Ltd.
Program and concepts: Satisfactory
Location: Contiguous, 30km NW of Alpha
Level of ground impact for NT considerations: Low
The applicant DOES NOT need to submit further information to support the application. - Information requested in accordance with section 133A and at folio - Information provided on (see folio)

Conditions sought

Conditions recommended

1039 Recommendations

Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Old Program	New Program	Comments
6	9/3/12	8/3/13	14	120,000	46,052	Drilling, feasibility studies		Recommend project status Recommend vary year 1-5 expenditure, year 3-5 area, year 2-5 work program (dated 19-10-11)
7	9/3/13	8/3/14	14	50,000		Application for a higher tenure		
8	9/3/14	8/3/15	14	50,000		Await grant of higher tenure		
9	9/3/15	8/3/16	14	50,000		Await grant of higher tenure		
10	9/3/16	8/3/17	14	50,000		Await grant of higher tenure		

1040 Recommendations

							Comments
6	22/6/11	21/6/12	241	200,000	134,049	<ul style="list-style-type: none"> ▪ Resource infill drilling ▪ Feasibility study 	
7	22/6/12	21/6/13	241	200,000	2,56,787 4	<ul style="list-style-type: none"> ▪ Resource infill drilling ▪ Feasibility study 	Recommend project status
8	22/6/13	21/6/14	193	200,000		<ul style="list-style-type: none"> ▪ Resource infill drilling ▪ Feasibility study 	Recommend:
9	22/6/14 13-153	21/6/15	154	200,000		<ul style="list-style-type: none"> ▪ Bankable feasibility study <p style="text-align: center;">DL Documents</p>	To renew for year 6, 7, 8, 1

10	22/6/15	21/6/16	123	200,000		Progress to ML		9 & 10 over area of 241 sub – blocks. <u>Mandatory relinquishment of 20% at the end of year 7 or MDL application over the resource area within the EPC 1040.</u> Standard reporting condition
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1555 Recommendations

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6	30/8/12	29/8/13	95	85,000		Drilling, feasibility studies		
7	30/8/13	29/8/14	76	50,000		Apply for higher tenure (on grant of EPC 1105 due early 2013)		Renewal still to be carried out (good past expenditure)
8	30/8/14	29/8/15	61	50,000		Preparatory studies awaiting grant of higher tenure		Recommend project status
9	30/8/15	29/8/16	49	50,000		Preparatory studies awaiting grant of higher tenure		
10	30/8/16	29/8/17	40	50,000		Preparatory studies awaiting grant of higher tenure		

1053 Recommendations

Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1	19/2/10	18/2/11	5	\$10,000	10,307	<ul style="list-style-type: none"> Literature reviews. GIS. Stratigraphic mapping / drilling. 		Granted 5 sub-blocks for 5 years under normal conditions.
2	19/2/11	18/2/12	5	\$50,000		<ul style="list-style-type: none"> Review of previous work. Stratigraphy / structural mapping. Interpretation. Scout drilling. 		Recommend project status
3	19/2/12	18/2/13	4	\$78,000		<ul style="list-style-type: none"> Review of previous work. Scout drilling. Follow-up interpretation. 		
4			4	\$126,000		<ul style="list-style-type: none"> Review of all data. Follow-up drilling. Coal analysis. 		
5			4	\$212,000		<ul style="list-style-type: none"> Review of all data. Drilling. Testing. Pre-feasibility scoping. 		

1079 Recommendations

Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
6	2/11/12	1/11/13	203	120,000		Drilling, feasibility studies		Recommend project status
7	2/11/13	1/11/14	163	50,000		Apply for higher tenure (post grant of EPC 1105 due early 2013)		

8	2/11/14	1/11/15	131	50,000		Preparatory studies awaiting grant of higher tenure	
9	2/11/15	1/11/16	105	50,000		Preparatory studies awaiting grant of higher tenure	
10	2/11/16	1/11/17	84	50,000		Preparatory studies awaiting grant of higher tenure	

1080 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report A -Annual	Comments
6	2/11/12	1/11/13	200	120,000		Drilling, coal quality analysis		Recommend project status Recommended to relinquish 49 SB out of requested 249 SB by FOB 23/8/12, Merlin still showing 249 SB granted?
7	2/11/13	1/11/14	160	50,000		Drilling, coal quality analysis		
8	2/11/14	1/11/15	128	50,000		Drilling, coal quality analysis		
9	2/11/15	1/11/16	103	50,000		Drilling, coal quality analysis		
10	2/11/16	1/11/17	82	50,000		Drilling, coal quality analysis Await grant of higher tenure		
Total expenditure for the 5 year term :				816,000				

1105 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report A -Annual	Comments
1			119	96,500		<ul style="list-style-type: none"> Literature reviews & summaries GIS compilation & targeting Stratigraphic mapping & interpretation Scout drilling 	A	Recommend: Grant for 5 year, over area of 119 S/Bs. Standard conditions including standard reporting condition Recommend project status
2			119	110,000		<ul style="list-style-type: none"> Review of targets and concepts Infill drilling Geological resource modelling 	A	
3			96	120,000		<ul style="list-style-type: none"> Project review Additional drilling Metallurgical testwork 3D seismic over key resource area 	A	
4			77	130,000		<ul style="list-style-type: none"> Project review Detailed drilling Metallurgical testwork Pre feasibility scoping studies 	A	
5			62	125,000		<ul style="list-style-type: none"> Project review Detailed drilling Metallurgical testwork Pre feasibility studies 	A	
Total expenditure for the 5 year term :				581,500				

1155 Recommendations									
Yr	Fr	T	S/B	Min Prop\$	Act	Program	Keywords	Report	Comments
1			295	155,000		<ul style="list-style-type: none"> Literature reviews & summaries GIS compilation & targeting Stratigraphic mapping & interpretation Review of year 1 activities Detailed gravity survey Scout drilling 			Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			295						
3			236	330,000		<ul style="list-style-type: none"> Review of targets & concepts 			

4		189		<ul style="list-style-type: none"> •Further drilling of additional targets •Project review •Additional drilling •Metallurgical testwork 		<p>Good expenditure record</p> <p>Renewal pending in yr.2013</p>
5		151	220,000	<ul style="list-style-type: none"> •Project review •Detailed drilling •Metallurgical testwork •Pre feasibility scoping studies 		

1156 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report A- Annual	Comments
4	22/10/11	21/10/12	265	120,000		Drilling		Vary to hold 265 s/b on renewal. Significant work programme and expenditure proposed, and whole of tenement required for drilling correlation of seams. Also required for prerequisite tenure for MDL application 455. Recommend: Tenement be renewed for five years over 265 s/bs
Of sea ms. Also 5	22/10/12	21/10/13	265	150,000		Drilling		
6	22/10/13	21/10/14	265	180,000		Drilling, feasibility studies		
7	22/10/14	21/10/15	265	200,000		Drilling, feasibility studies		
8	22/10/15	21/10/16	265	200,000		Bankable feasibility studies		
								Recommend project status

1157 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report A- Annual	Comments
1	21/10/08	20/8/09	300	0	86,979	<ul style="list-style-type: none"> •Literature reviews •GIS •Stratigraphic mapping/drilling •Review •Stratigraphy/structural mapping •Interpretation •Scout drilling 		Grant for 3 years. Standard conditions including standard reporting conditions.
2	21/10/09	20/8/10	300	155,000	43,208			
3	21/10/10	20/8/11	300	145,000	55,267	<ul style="list-style-type: none"> •Review •Drilling •Follow-up interpretation 		
4	21/10/11	20/8/12	300	120,000	52,150	Drilling		Vpc request lodged to hold 300 s/b on renewal
5	21/10/12	20/8/13	240	150,000		Drilling		Conditions sought to increase expenditure to cover shortfall of year 4 proposal.
6	21/10/13	20/8/14	192	180,000		Drilling, feasibility studies		
7	21/10/14	20/8/15	154	200,000		Drilling, feasibility studies		
8	21/10/15	20/8/16	124	200,000		Bankable feasibility studies		

1280 Recommendations

Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			300	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			300	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
3			240	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
4			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
5			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
			TOTAL:	1,365,000				

1281 Recommendations

Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			300	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			300	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
			240	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
			Total:	1,365,000				

1283 Recommendations

Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			298	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend:

2			298	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
			238	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
Total :				1,365.000				

1284 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			300	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			300	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
3			240	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
4			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
5			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
Total :				1,365.000				

1285 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			300	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			300	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
			240	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
Total :				1,365.000				



1286 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			300	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			300	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
			240	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
Total:				1,365,000				

1287 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			300	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			300	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
3			240	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
4			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
5			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
TOTAL:				1,365,000				

1288 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			292	235,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Recommend: Grant for 5 years. Standard conditions
2			292	250,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		

3			234	265,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		including standard reporting conditions.
4			187	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		Recommend project status
5			150	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
Total:				1,350.000				

1289 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			284	230,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			284	245,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
3			227	260,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
4			182	285,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
5			146	285,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
Total:				1,305.000				

1290 Recommendations								
Yr	From	To	S/B Actual	Min Prop\$	Actual \$	Program	Report – Annual R – Part Rel F – Final O – Other	Comments
1			300	240,000		<ul style="list-style-type: none"> ◆ Literature reviews & summaries ◆ Stratigraphical mapping/interpretation ◆ Scout Drilling 		Recommend: Grant for 5 years. Standard conditions including standard reporting conditions. Recommend project status
2			300	255,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
3			240	270,000		<ul style="list-style-type: none"> ◆ Review of previous years activity ◆ Details stratigraphical/structural mapping interpretation ◆ Scout Drilling 		
4			190	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
5			152	300,000		<ul style="list-style-type: none"> ◆ Review of all data ◆ Follow up drilling ◆ Coal analysis 		
Total:				1,365.000				

The Technical Assessment Checklist provides technical advice to the Delegated Authority on whether an application should proceed to grant. It offers a recommended course of action only and as such it should **not** be viewed as an approval document. All references to sections are references to the *Mineral Resources Act 1989*.

CHECK LIST		Y or N
Holders	Are all the holders the same?	Y
Unifying concept	Being explored for export thermal coal via Abbot point port, pit head electricity generation and UCG	Y
Relinquishment	Is relinquishment compliant?	Y
Expenditure	Has expenditure been acceptable? In most cases it is too early to tell as tenements were recently granted	Y?
Work Program	Has the program of work been complied with (or an equivalent body of work)? Weather has forced delays to the work programs on these permits	N
Conditions	Have specified conditions been complied with?	N/A
Reporting	Have the reporting requirements been adhered to?	Y
Bona Fide	Do the actions of the holder appear to be bona fide?	Y
Significant Mineralisation	Has the holder reported significant mineralisation? See s176?	N
Outcome	Is the holder complying with the conditions of this tenure? As far as the weather has allowed.	Y
Performance History of Holder	Are there sufficient grounds to recommend against renewal under s141(1) or 160(1), for non-compliance with the technical requirements of the Act?	N
Failure to Relinquish Land	Due to non-compliance with relinquishment requirements, does a recommendation need to be made regarding the area the Minister may direct be relinquished under s139(6) or 140(1)?	N
Direction to Apply for Higher Tenure	Do sufficient technical grounds exist to warrant recommending to the Minister that the Holder apply for a higher form of tenure under section 176(2)?	N
RECOMMENDED CONDITIONS		
Compliance with the approved work program and expenditure commitments, or an equivalent body of work, acceptable to the Minister, of this exploration permit is a condition of grant of this tenure. Failure to comply with this requirement will be taken into account in the assessment of any application for the renewal of this tenure and may also result in the cancellation of this tenure. Application for any amendment to the conditions of grant must be in writing and directed to the Registrar, Minerals and Coal.		
Other Advice	Strategy to utilise deeper coals such as EPC 1280 and further on are not clearly discussed, as exploration in those tenements are in early stages and nature of coal is uncertain. A large portion of tenements are deeper than 500m in depth (figure 3 of the submission). Unifying concept for; deeper 'coal gasification' relatively moderate depth 'underground mining' and shallower 'open cut' is not discussed clearly. UCG technology is still at bench or pilot scale in Australia.	

RENEWAL SIGN-OFF			
Signed	Hem Chandra	Date:	4-9-13
		Title:	Geoscientist
Signed	Ian Rienks	Date:	
		Title:	Senior Geologist