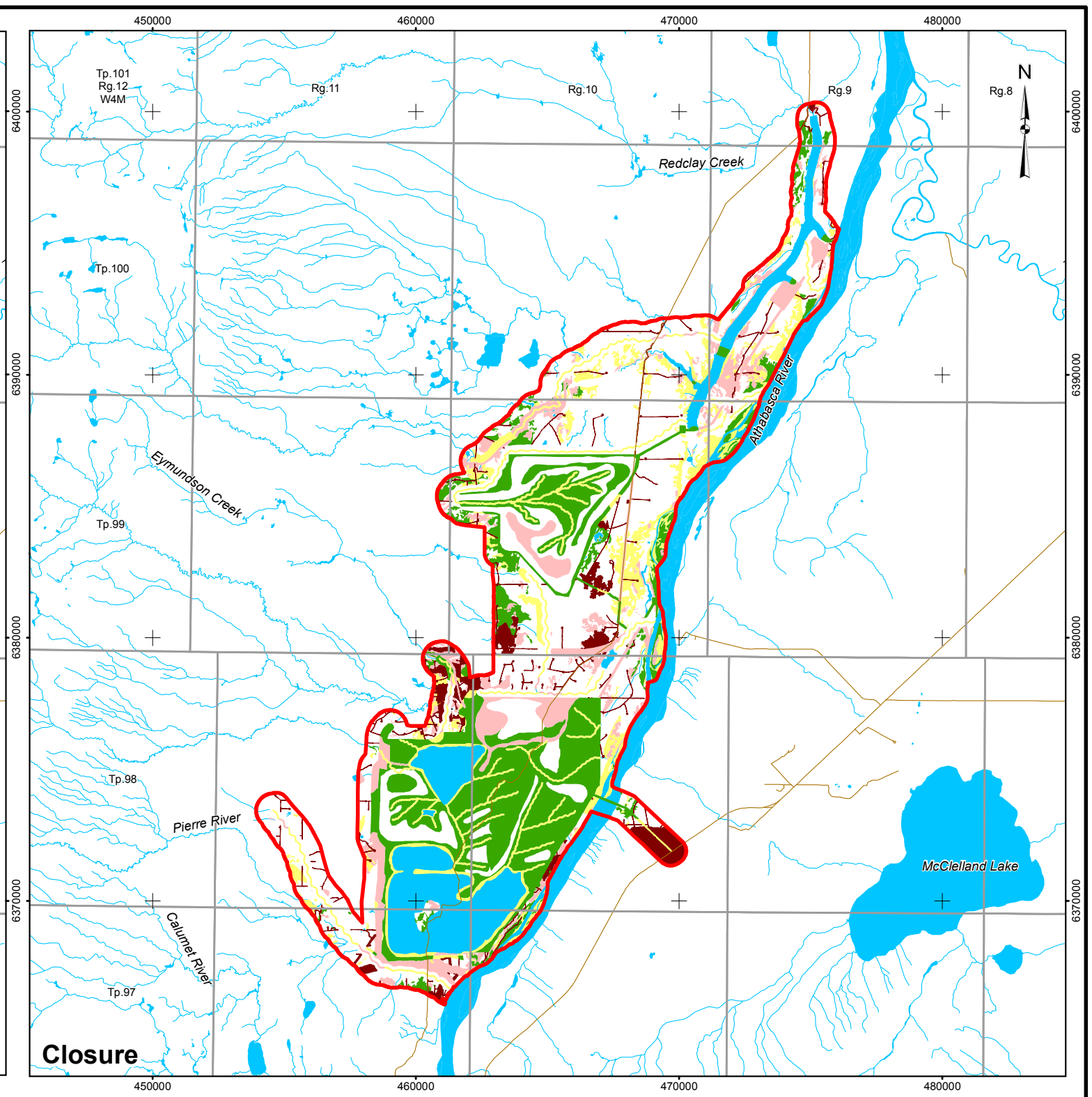
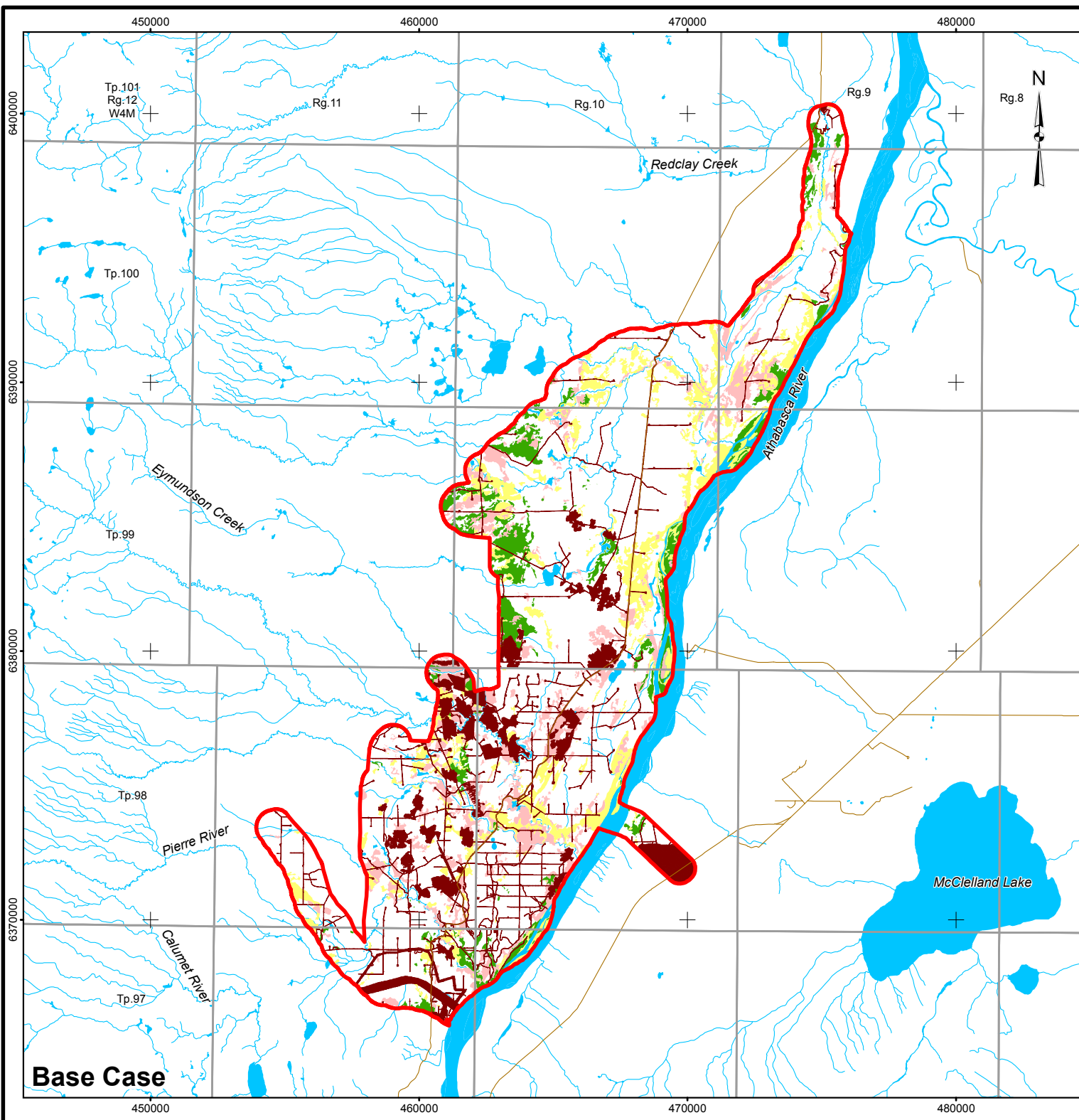
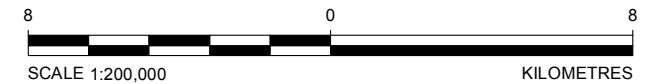


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**LEGEND**

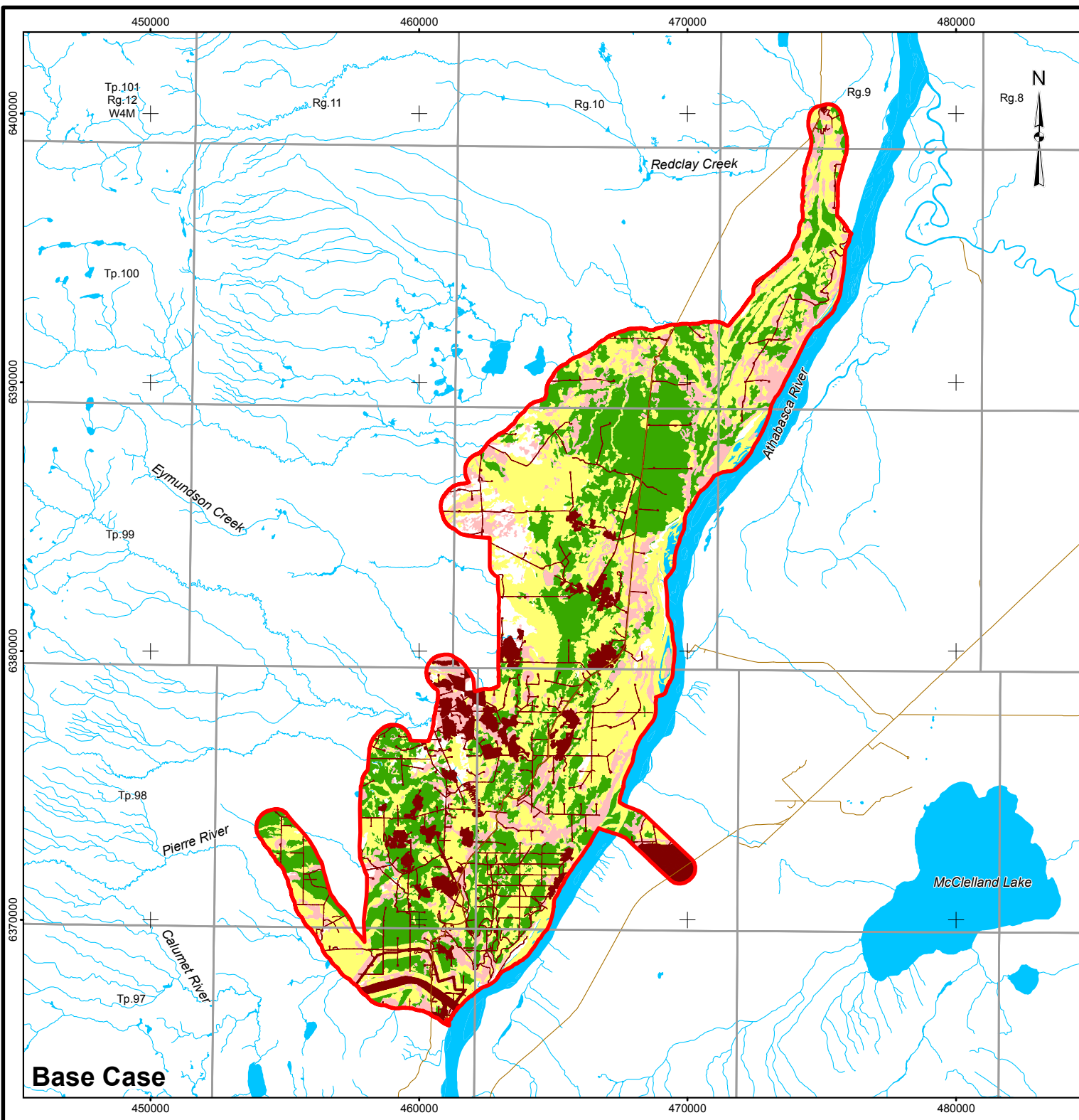
UNPAVED ROAD	<b>HABITAT SUITABILITY</b>
WATERCOURSE	HIGH
PIERRE RIVER MINE LOCAL STUDY AREA	MODERATE
OPEN WATER	LOW
<b>DISTURBED</b>	NIL
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



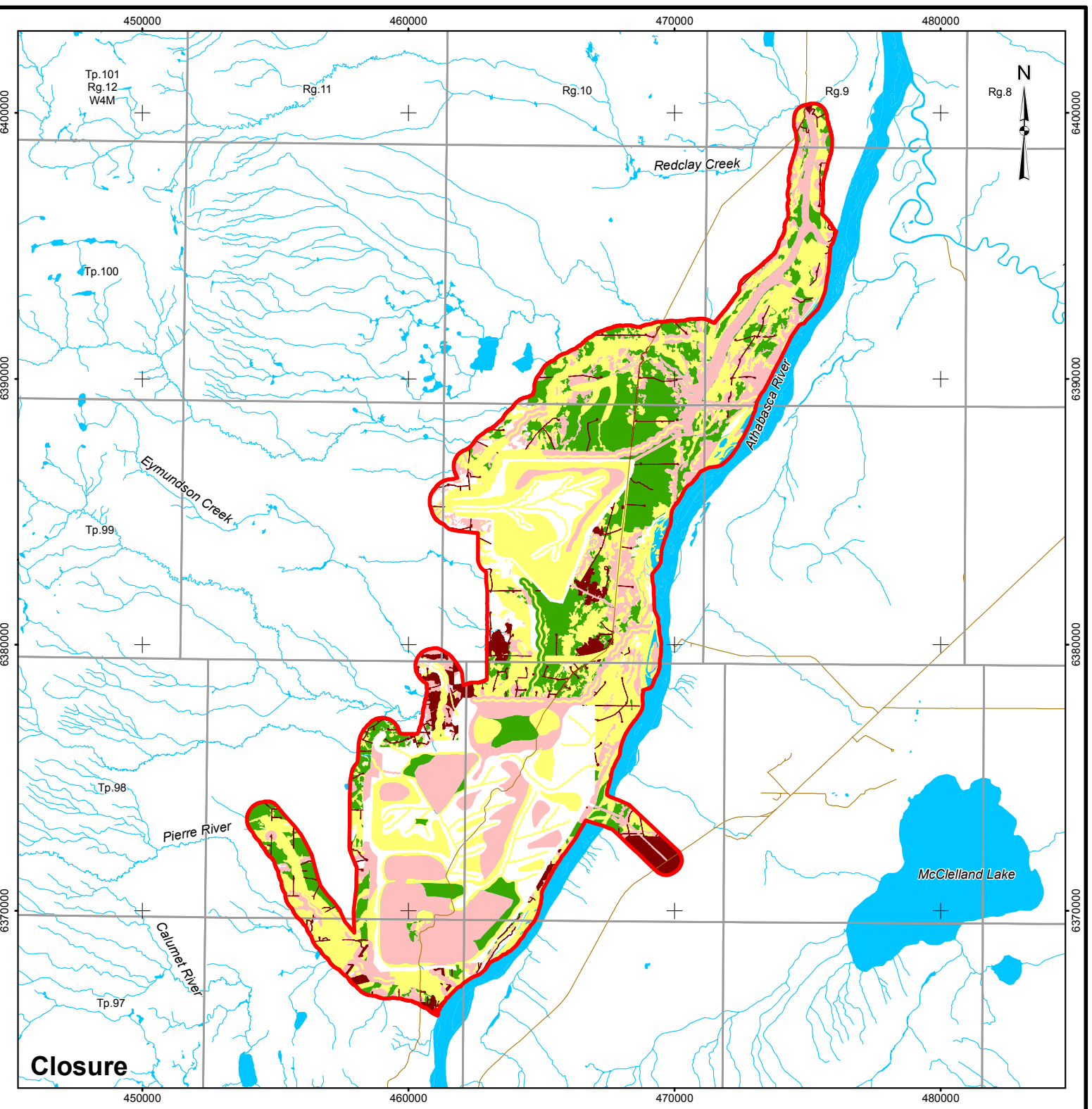
**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
 © GOVERNMENT OF ALBERTA 2013.  
 DATUM: NAD83 PROJECTION: UTM ZONE 12N

PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
CANADA WARBLER HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	CH	20 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	
	REVIEW	MGJ	27 May 2013	
				<b>FIGURE: 17</b>

I:\CLIENTS\SHELL\13-1346-0001\mapping\MXD\Wildlife Modelling\FINAL\1313460001\_WM\_018\_LSA-Nighthawk\_GIS.mxd



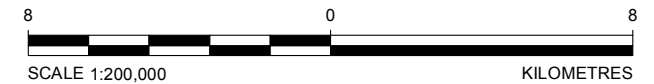
**Base Case**



**Closure**

**LEGEND**

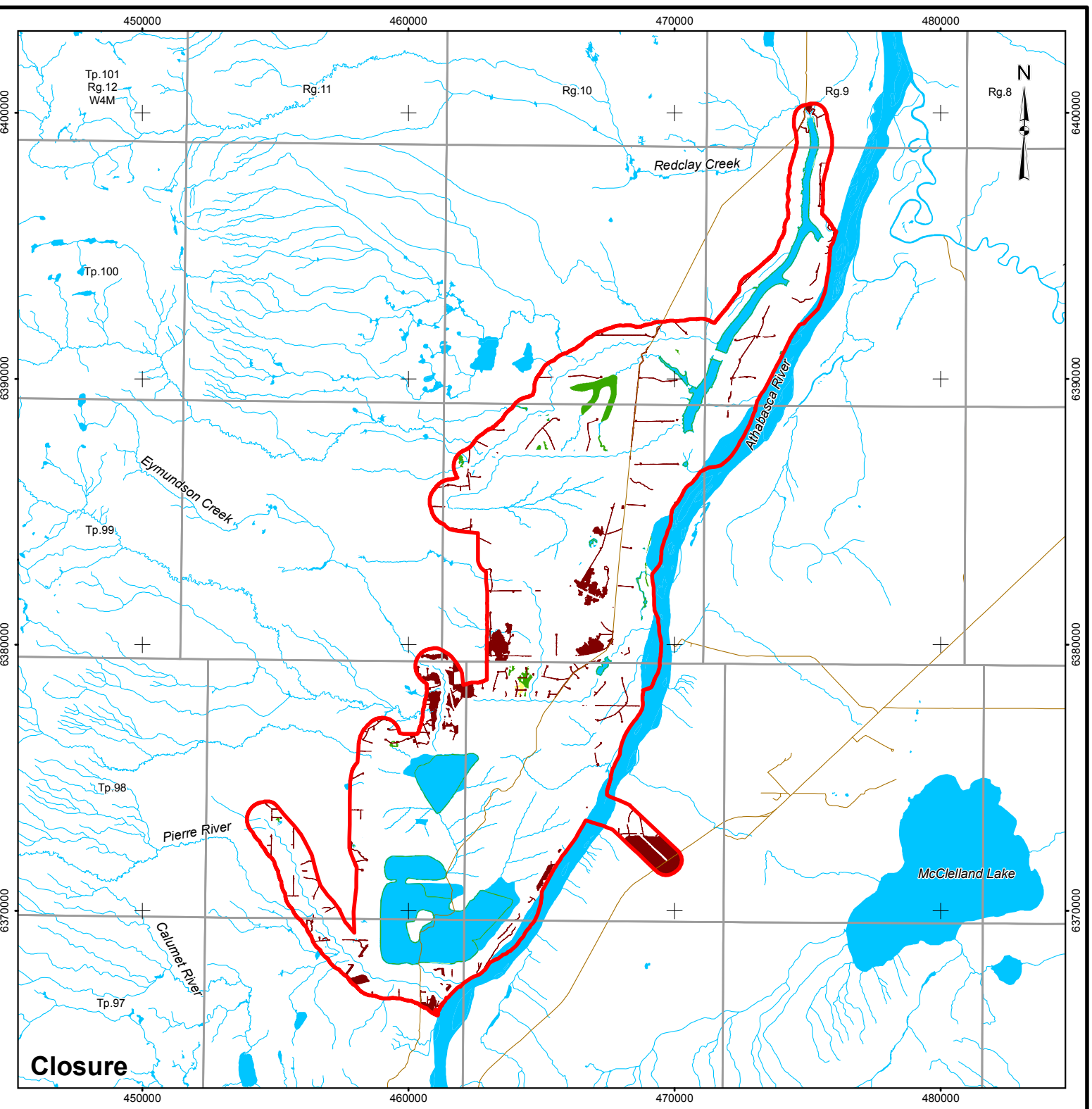
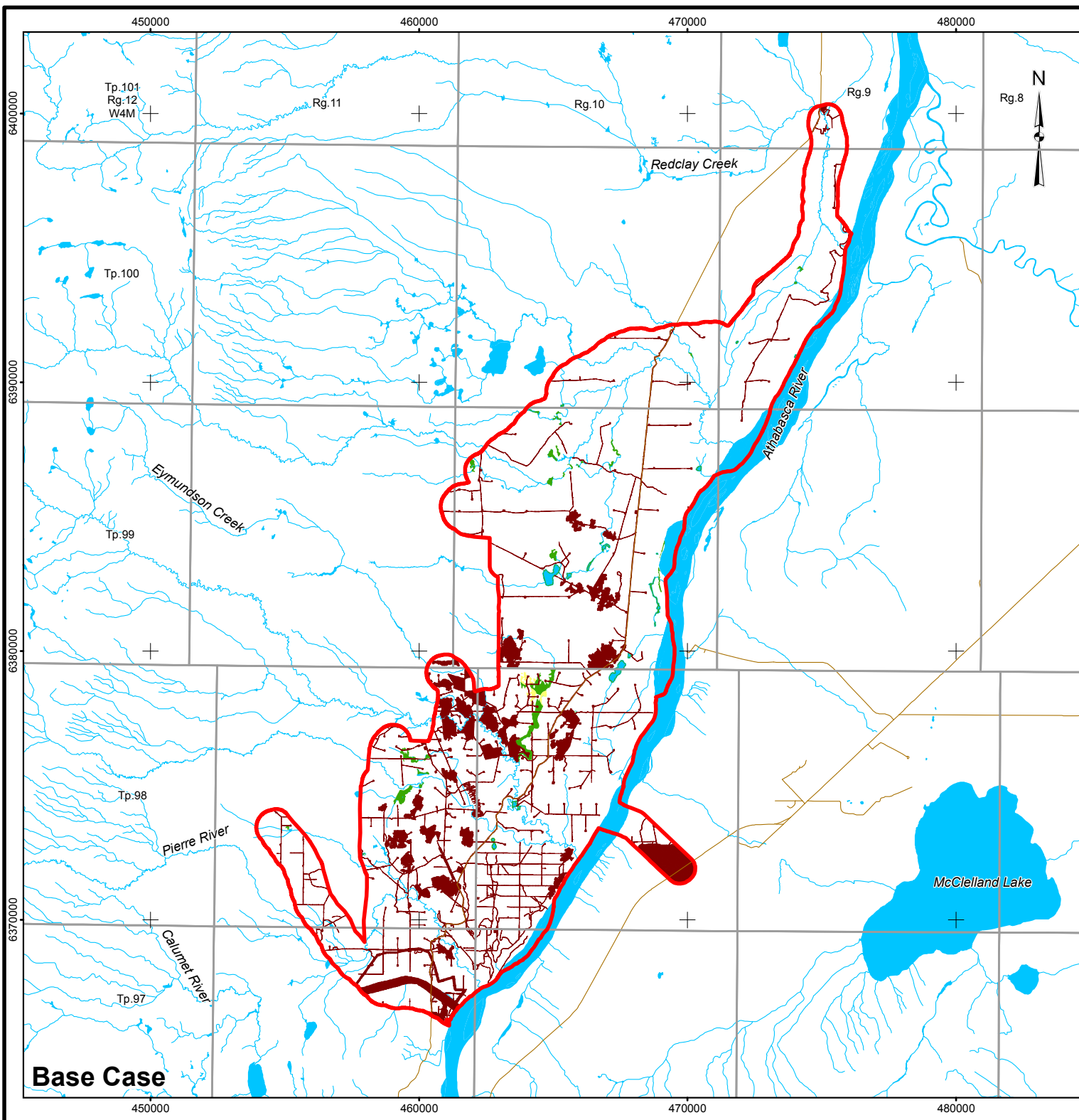
UNPAVED ROAD	<b>HABITAT SUITABILITY</b>
WATERCOURSE	HIGH
PIERRE RIVER MINE LOCAL STUDY AREA	MODERATE
OPEN WATER	LOW
<b>DISTURBED</b>	NIL
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

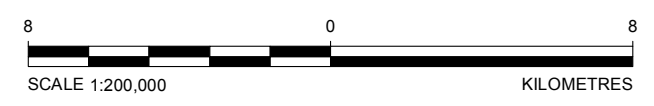
PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
<b>COMMON NIGHTHAWK HABITAT SUITABILITY IN THE LOCAL STUDY AREA</b>				
 Shell Canada Limited	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	CH	20 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	<b>FIGURE: 18</b>
REVIEW	MGJ	27 May 2013		

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**LEGEND**

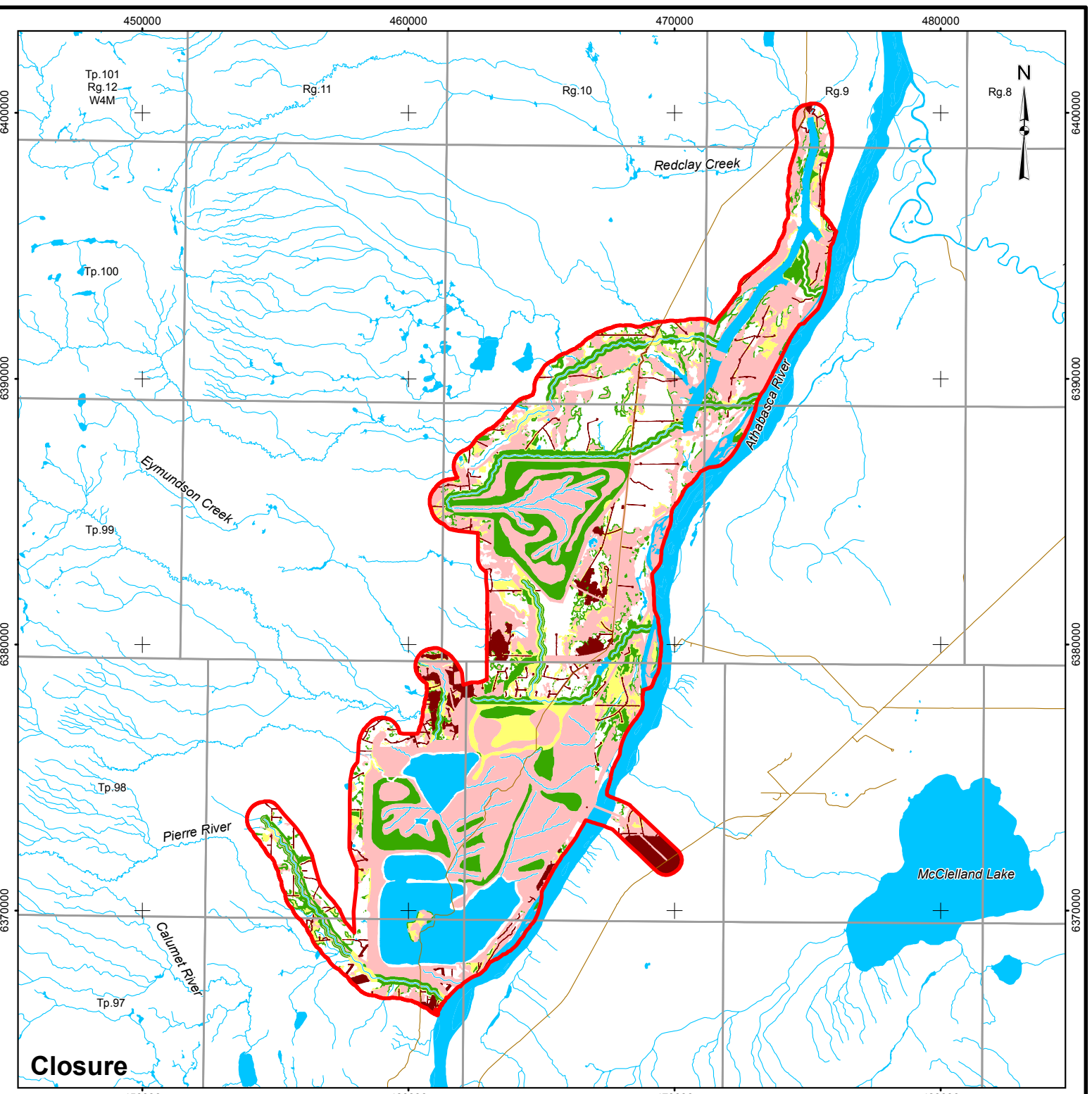
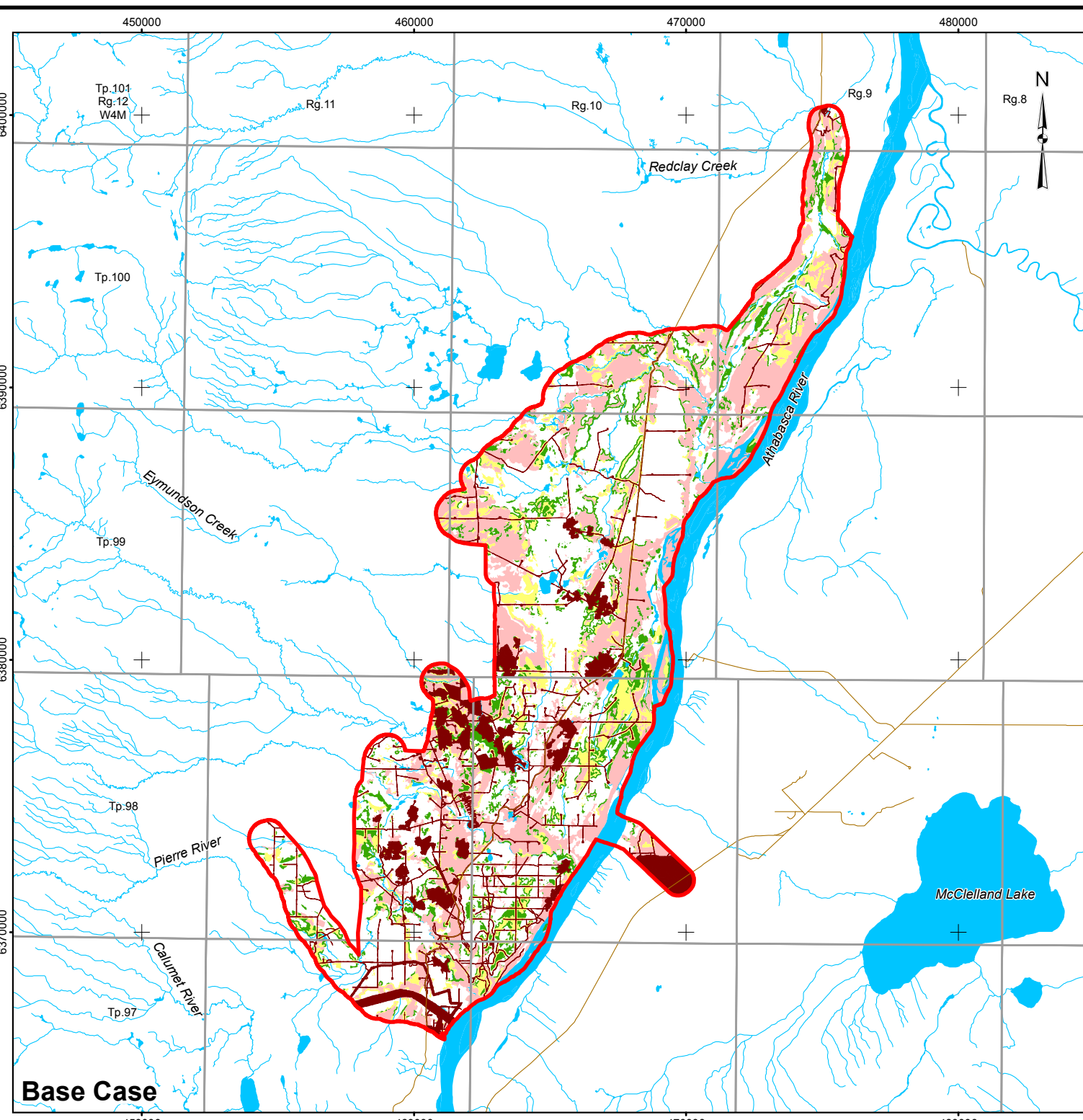
UNPAVED ROAD	<b>HABITAT SUITABILITY</b>
WATERCOURSE	HIGH
PIERRE RIVER MINE LOCAL STUDY AREA	MODERATE
OPEN WATER	NIL
<b>DISTURBED</b>	
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

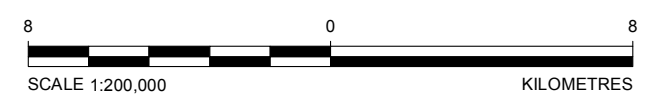
PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
HORNED GREBE HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	CH	20 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	<b>FIGURE: 19</b>
REVIEW	MGJ	27 May 2013		

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**LEGEND**

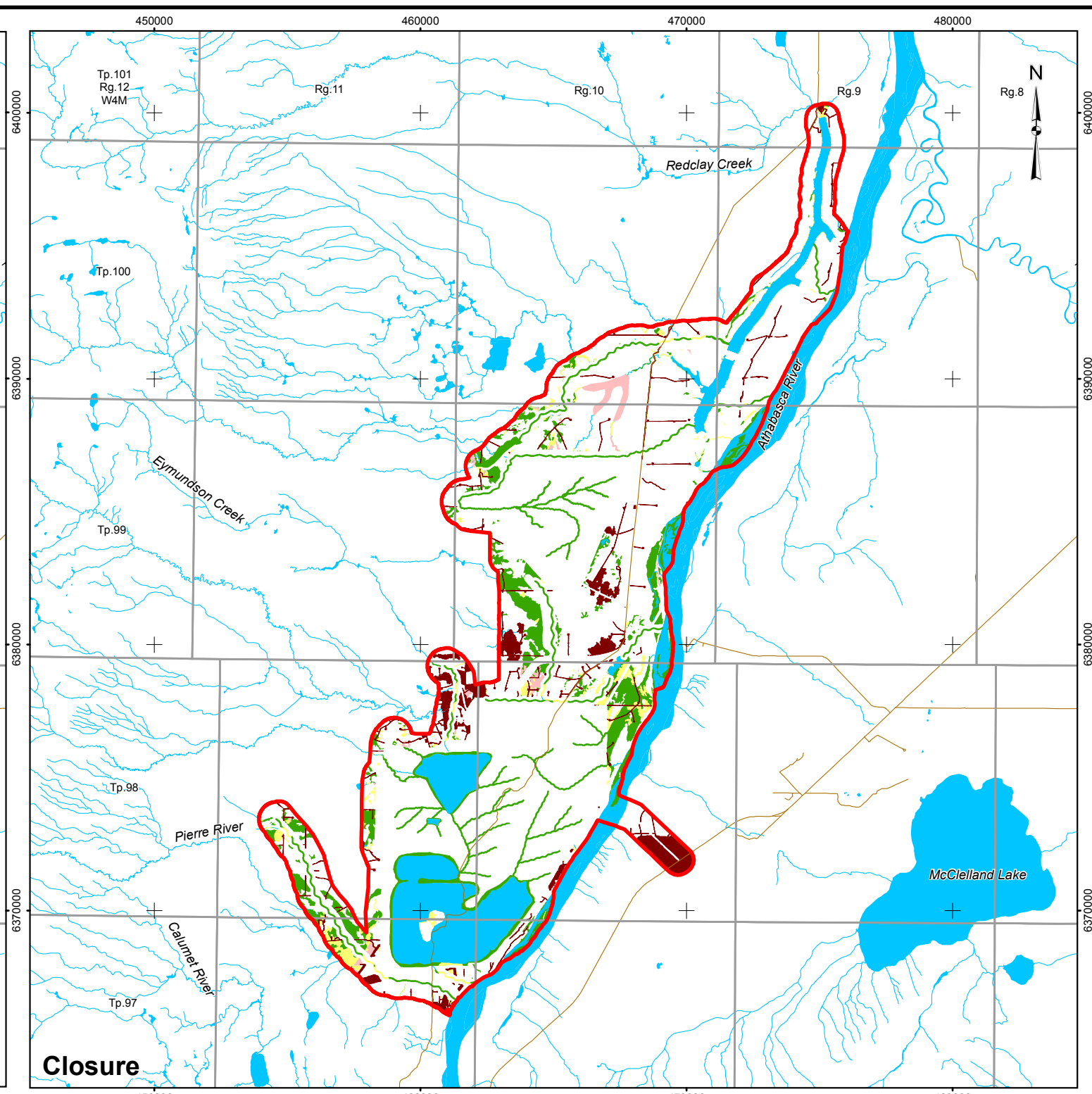
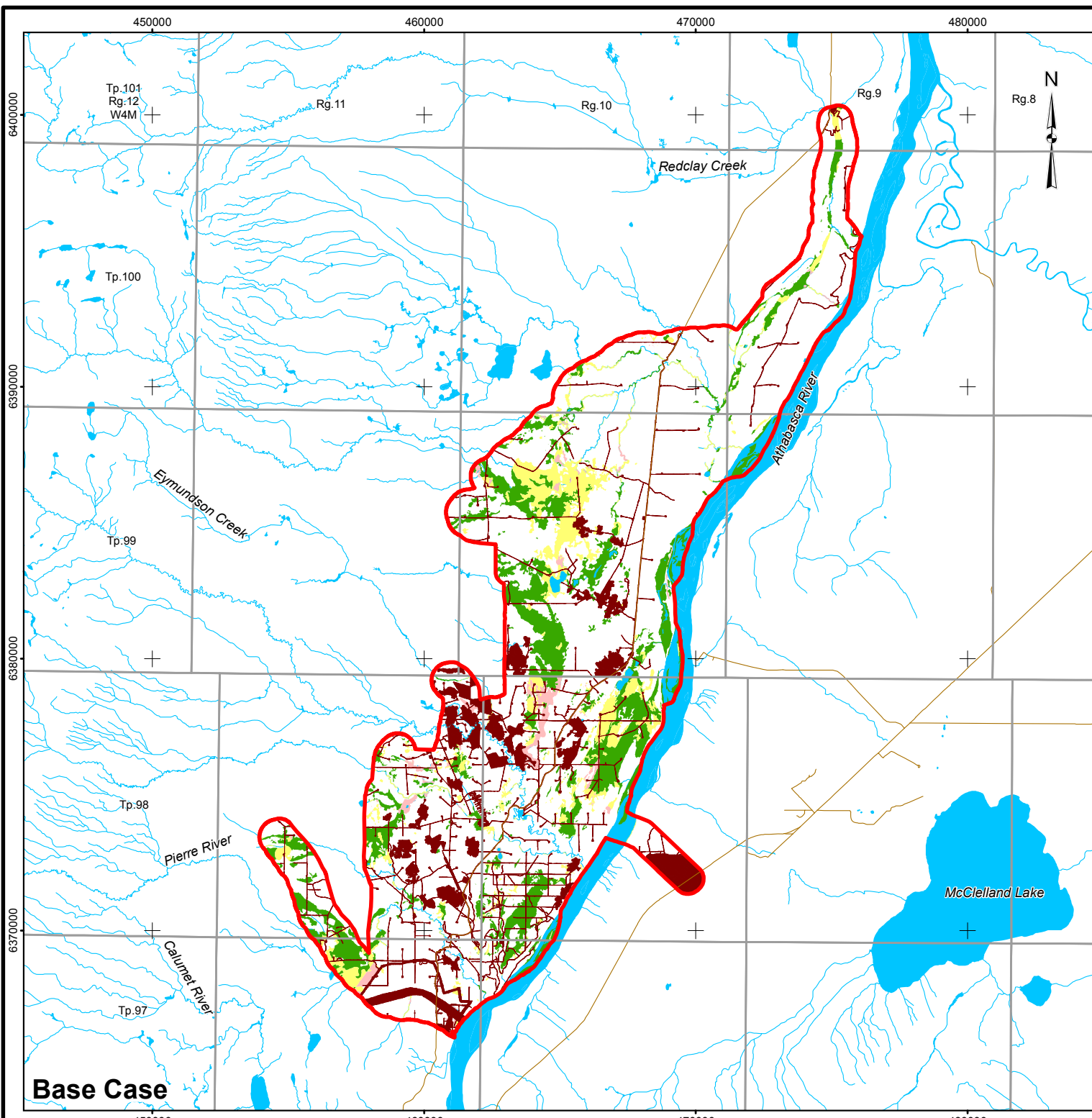
UNPAVED ROAD	<b>HABITAT SUITABILITY</b>
WATERCOURSE	HIGH
PIERRE RIVER MINE LOCAL STUDY AREA	MODERATE
OPEN WATER	LOW
<b>DISTURBED</b>	NIL
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
OLIVE-SIDED FLYCATCHER HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	GU	20 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	
	REVIEW	MGJ	27 May 2013	
				<b>FIGURE: 20</b>

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**LEGEND**

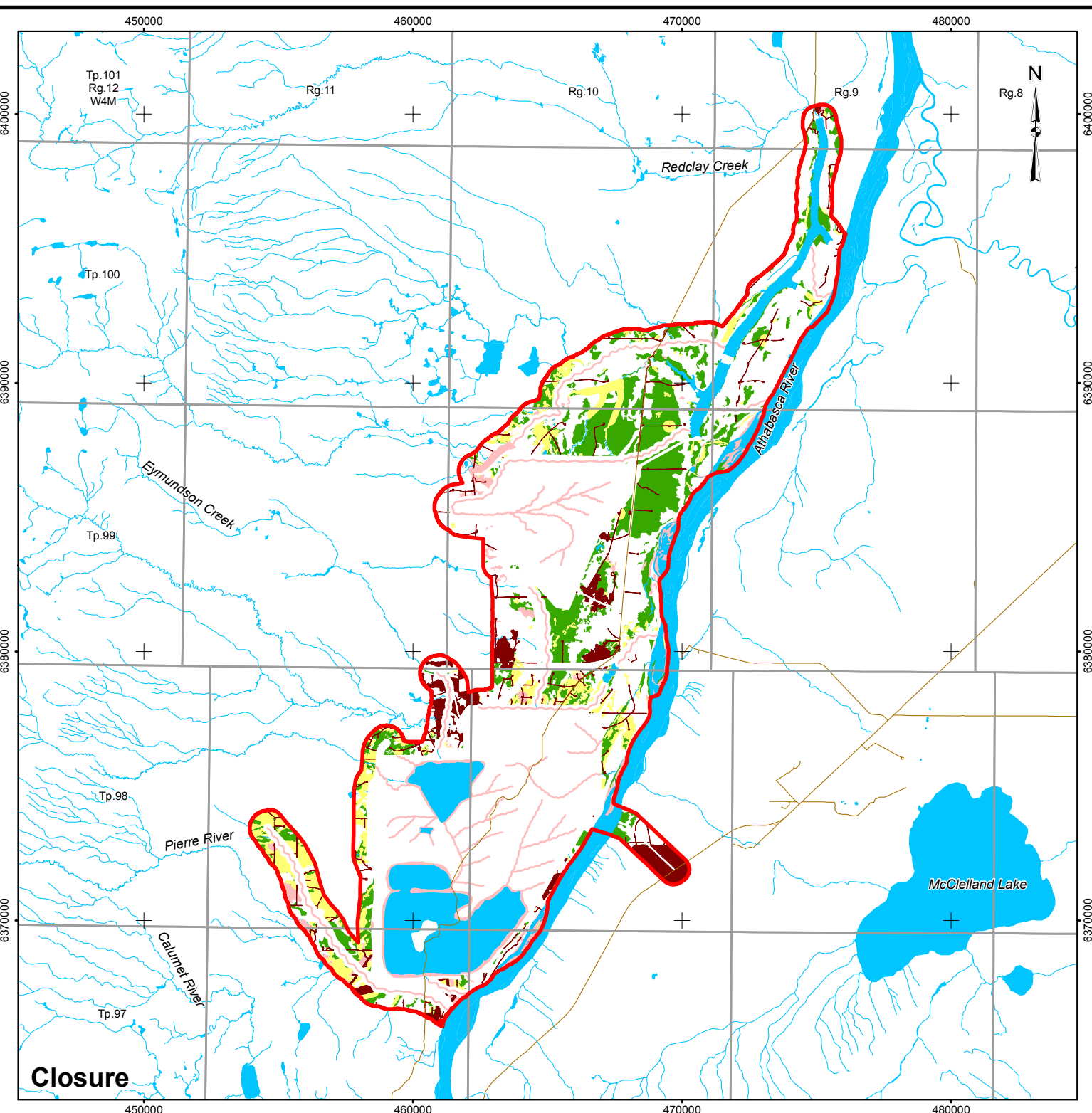
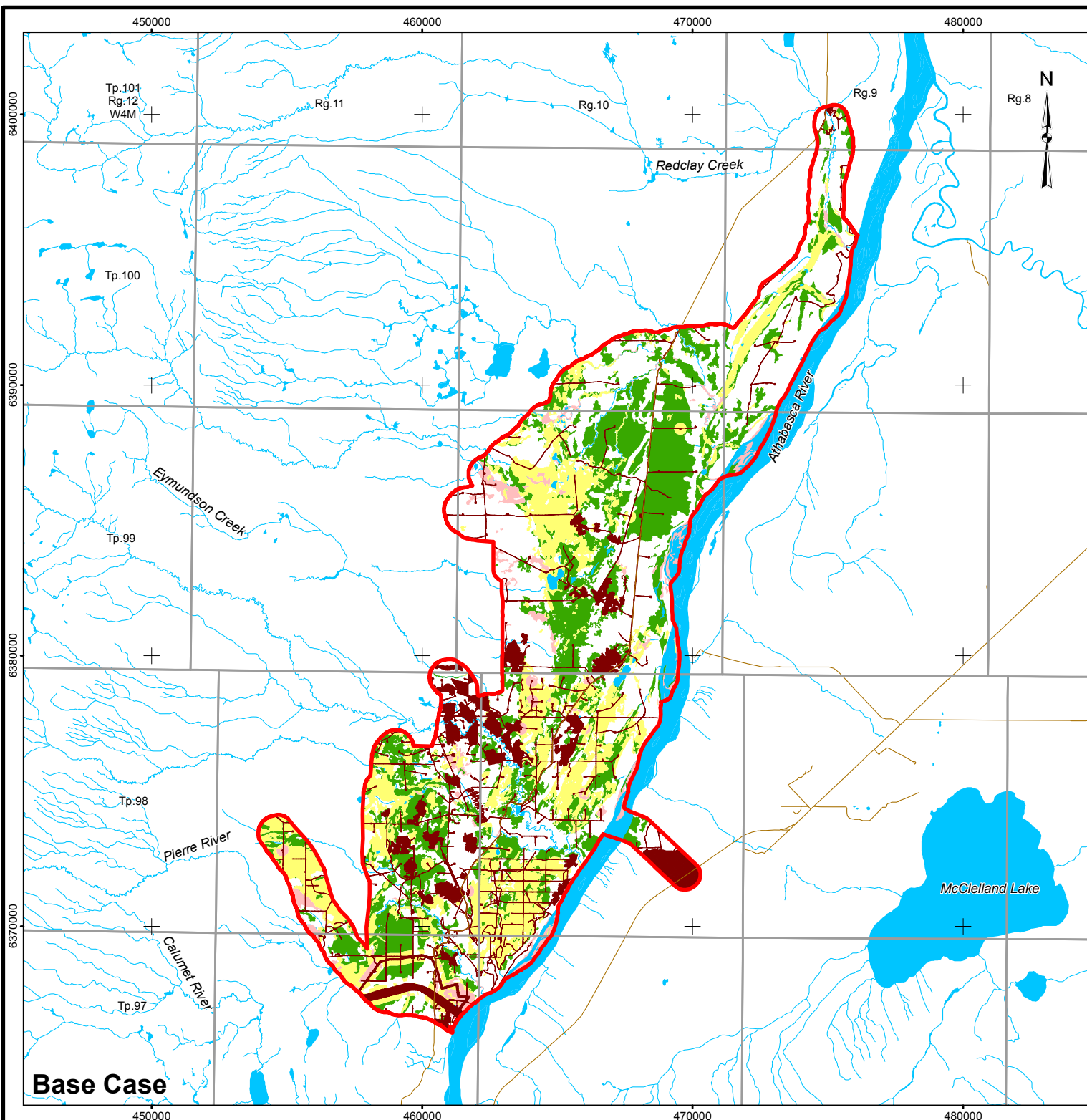
UNPAVED ROAD	<b>HABITAT SUITABILITY</b>
WATERCOURSE	HIGH
PIERRE RIVER MINE LOCAL STUDY AREA	MODERATE
OPEN WATER	LOW
<b>DISTURBED</b>	NIL
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
RUSTY BLACKBIRD HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	CH	20 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	
	REVIEW	MGJ	27 May 2013	
				<b>FIGURE: 21</b>

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**LEGEND**

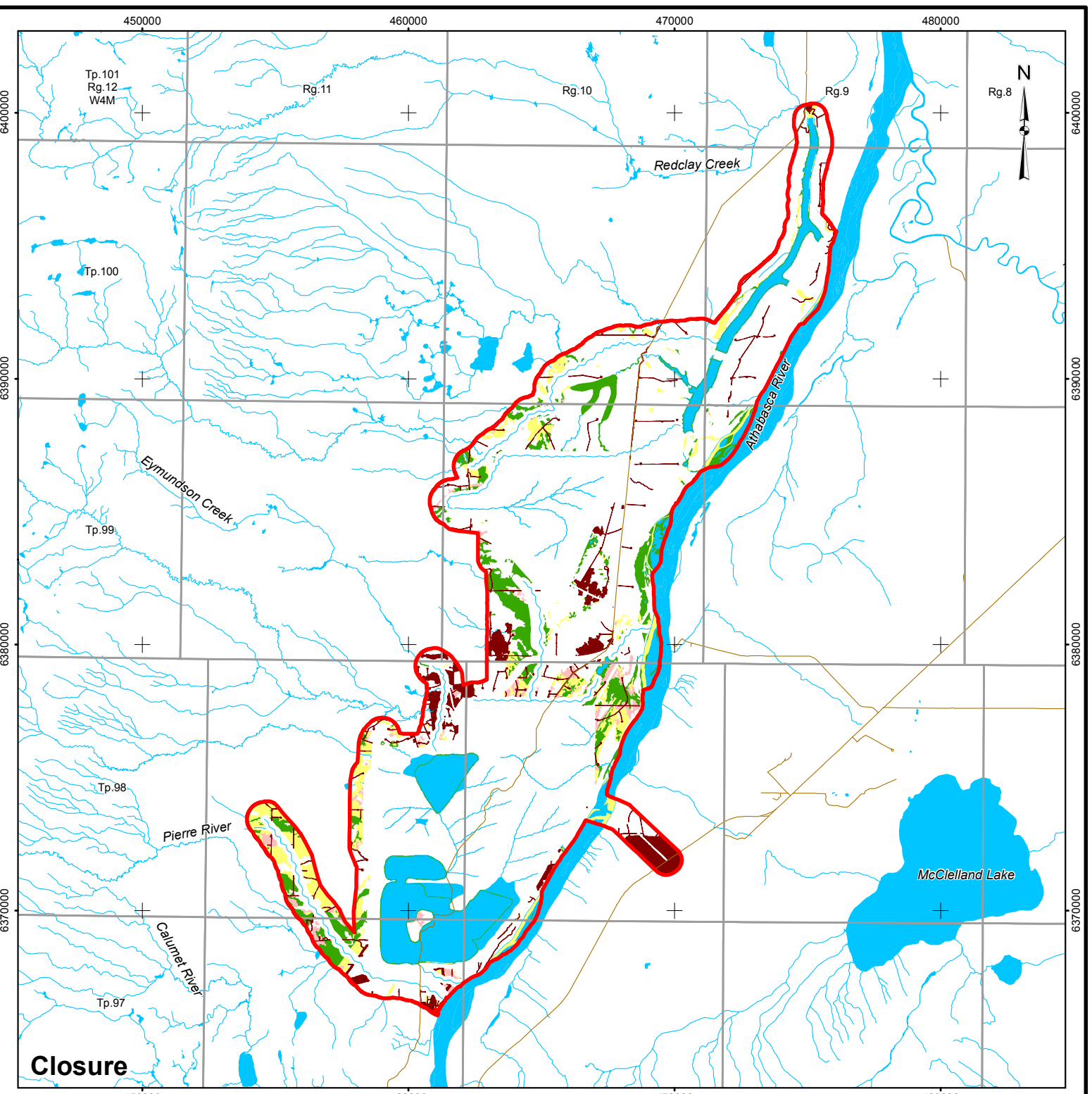
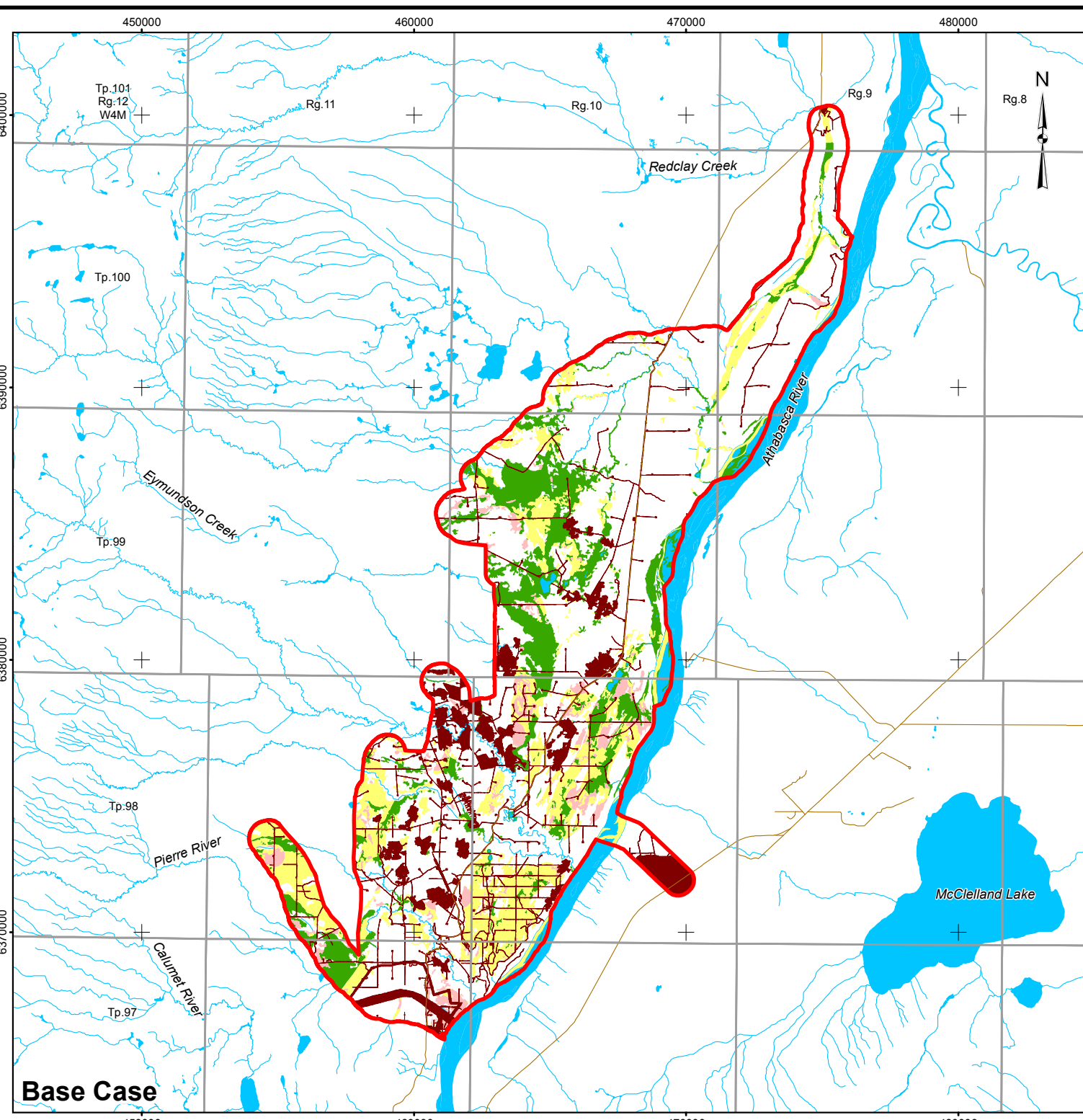
UNPAVED ROAD	<b>HABITAT SUITABILITY</b> HIGH
WATERCOURSE	MODERATE
PIERRE RIVER MINE LOCAL STUDY AREA	LOW
OPEN WATER	NIL
<b>DISTURBED</b>	
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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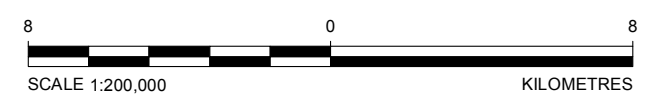
PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
SHORT-EARED OWL HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	CH	20 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	<b>FIGURE: 22</b>
REVIEW	MGJ	27 May 2013		

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**LEGEND**

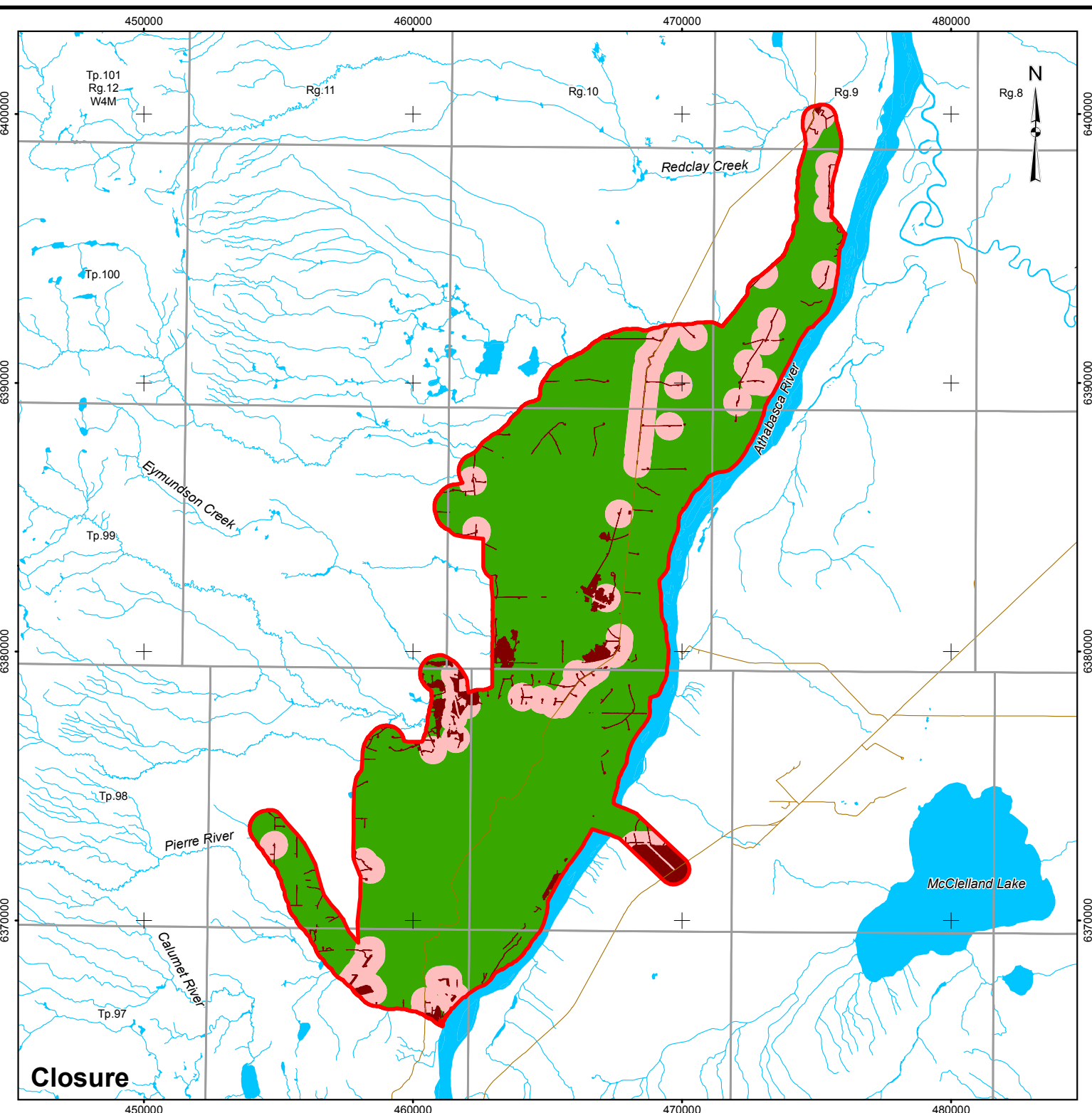
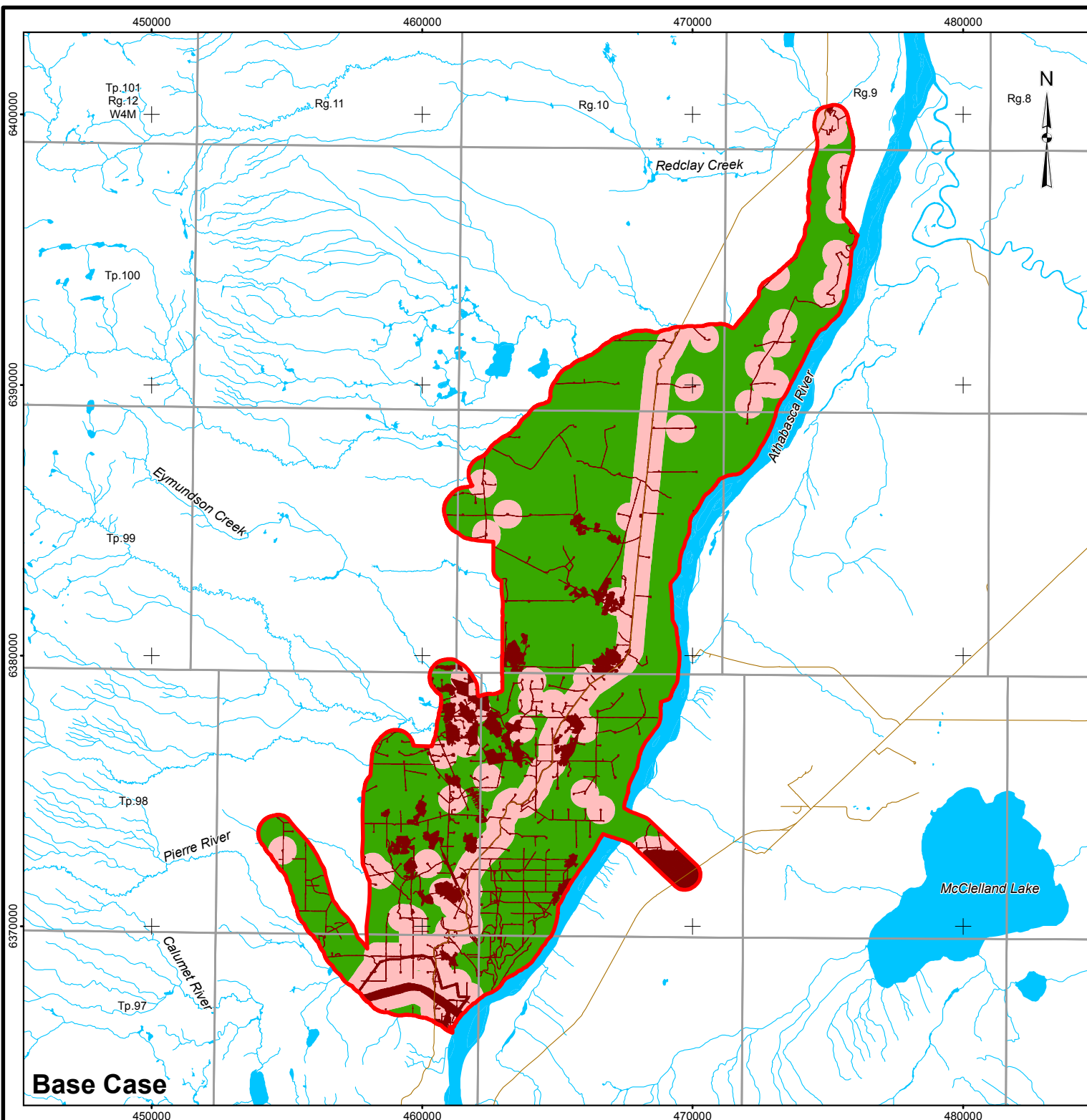
- UNPAVED ROAD
- WATERCOURSE
- PIERRE RIVER MINE LOCAL STUDY AREA
- OPEN WATER
- DISTURBED**
- EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE
- EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE
- HABITAT SUITABILITY**
- HIGH
- MODERATE
- LOW
- NIL



**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
WESTERN TOAD HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	CH	20 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	<b>FIGURE: 23</b>
REVIEW	MGJ	27 May 2013		

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**LEGEND**

- UNPAVED ROAD
- WATERCOURSE
- PIERRE RIVER MINE LOCAL STUDY AREA
- OPEN WATER

**HABITAT SECURITY**


- HIGH
- LOW
- NIL

**DISTURBED**

- EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE
- EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE

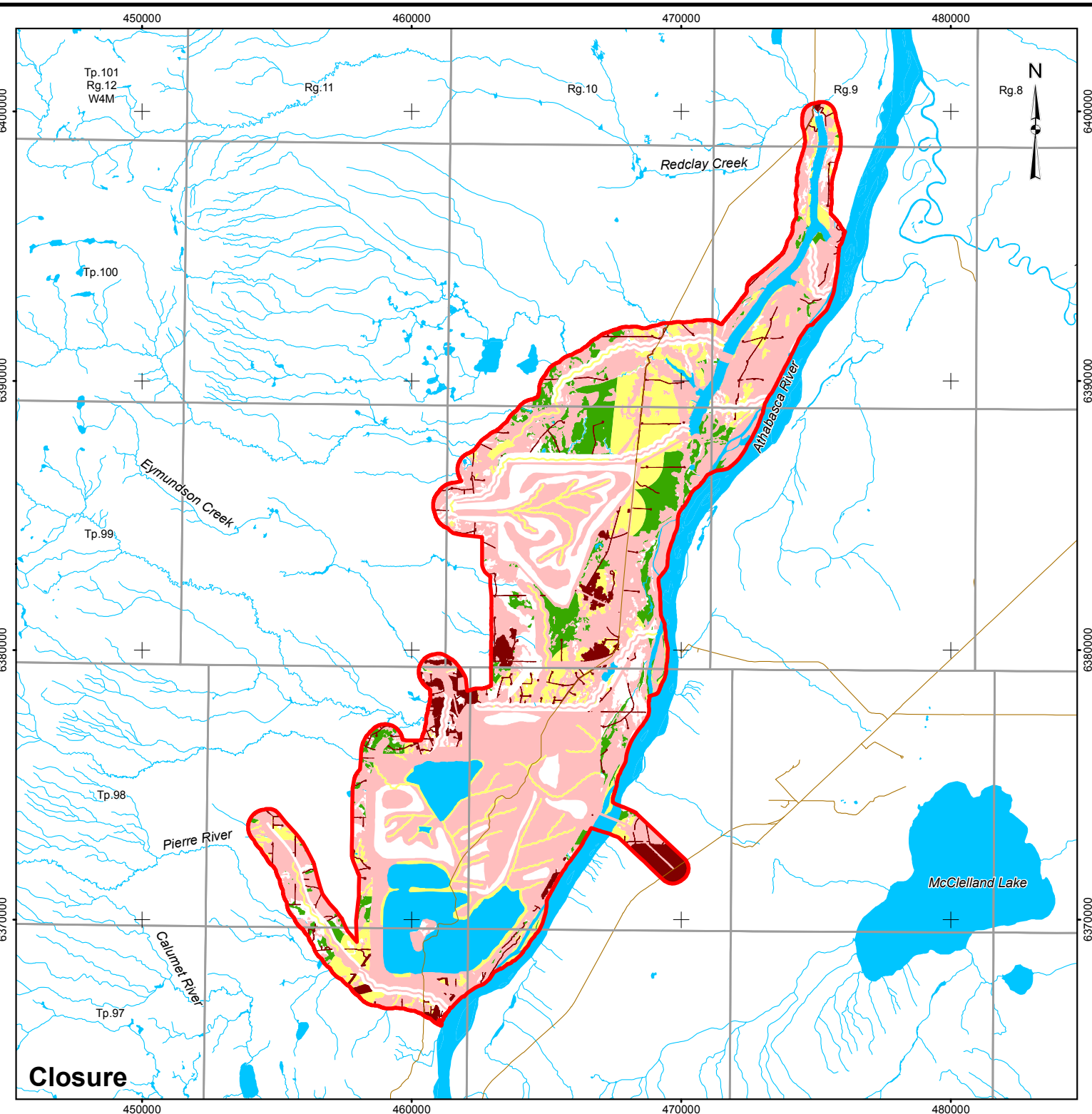
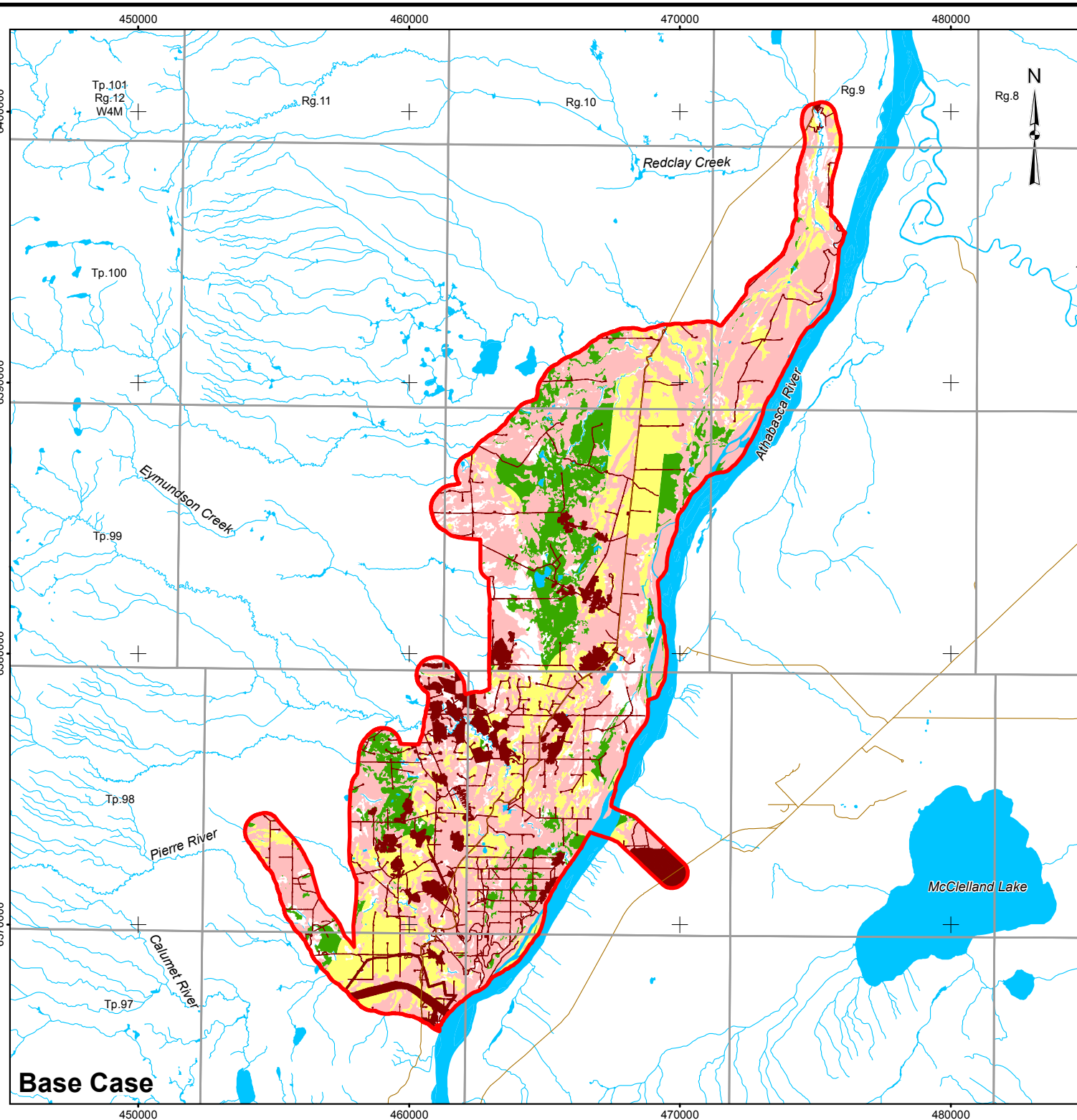


**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
WOLVERINE CORE SECURITY HABITAT IN THE LOCAL STUDY AREA				
 Shell Canada Limited	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	SB	25 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	
	REVIEW	MGJ	27 May 2013	
				<b>FIGURE: 24</b>

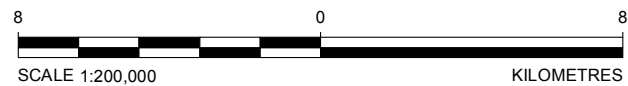


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**LEGEND**

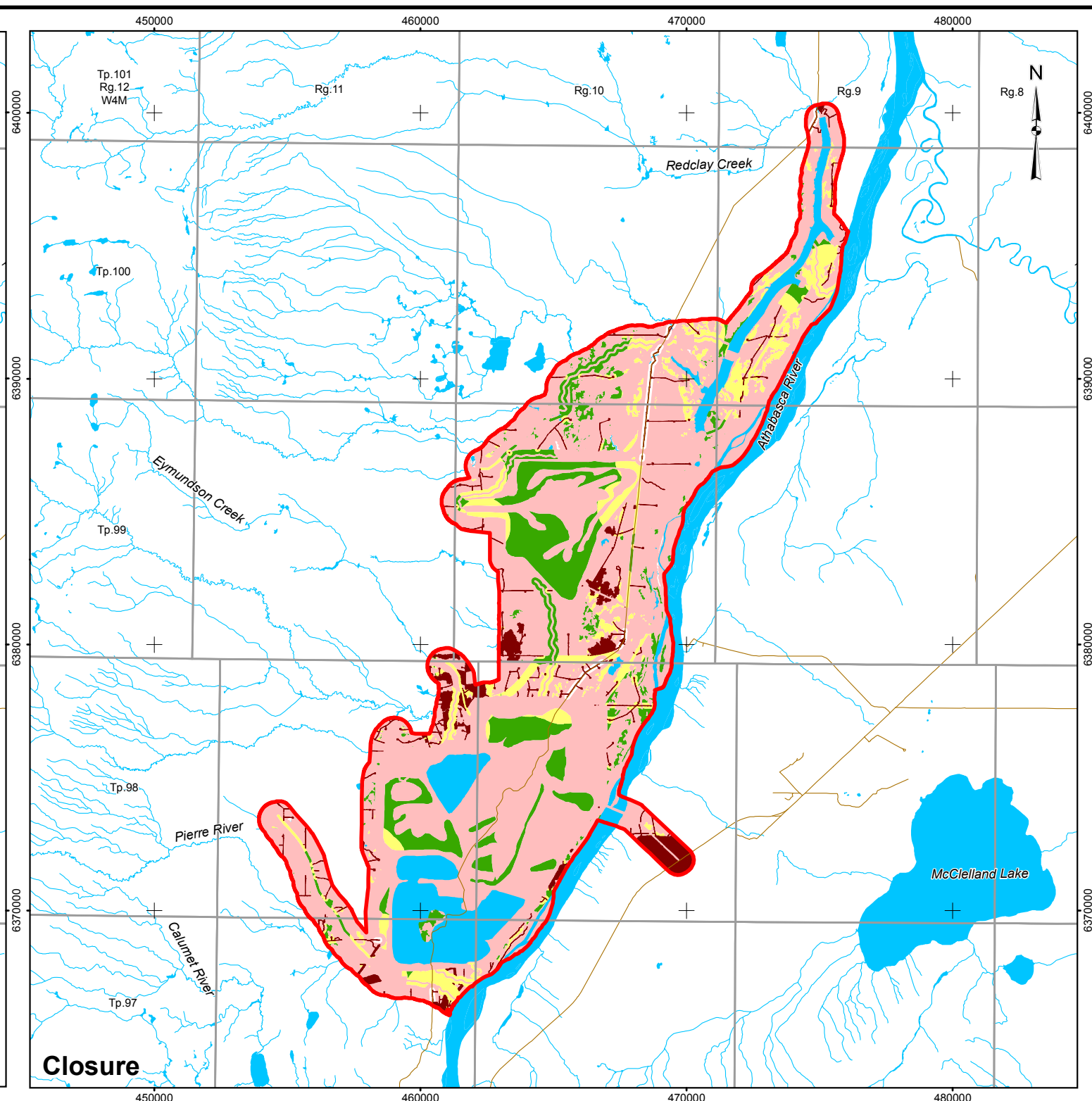
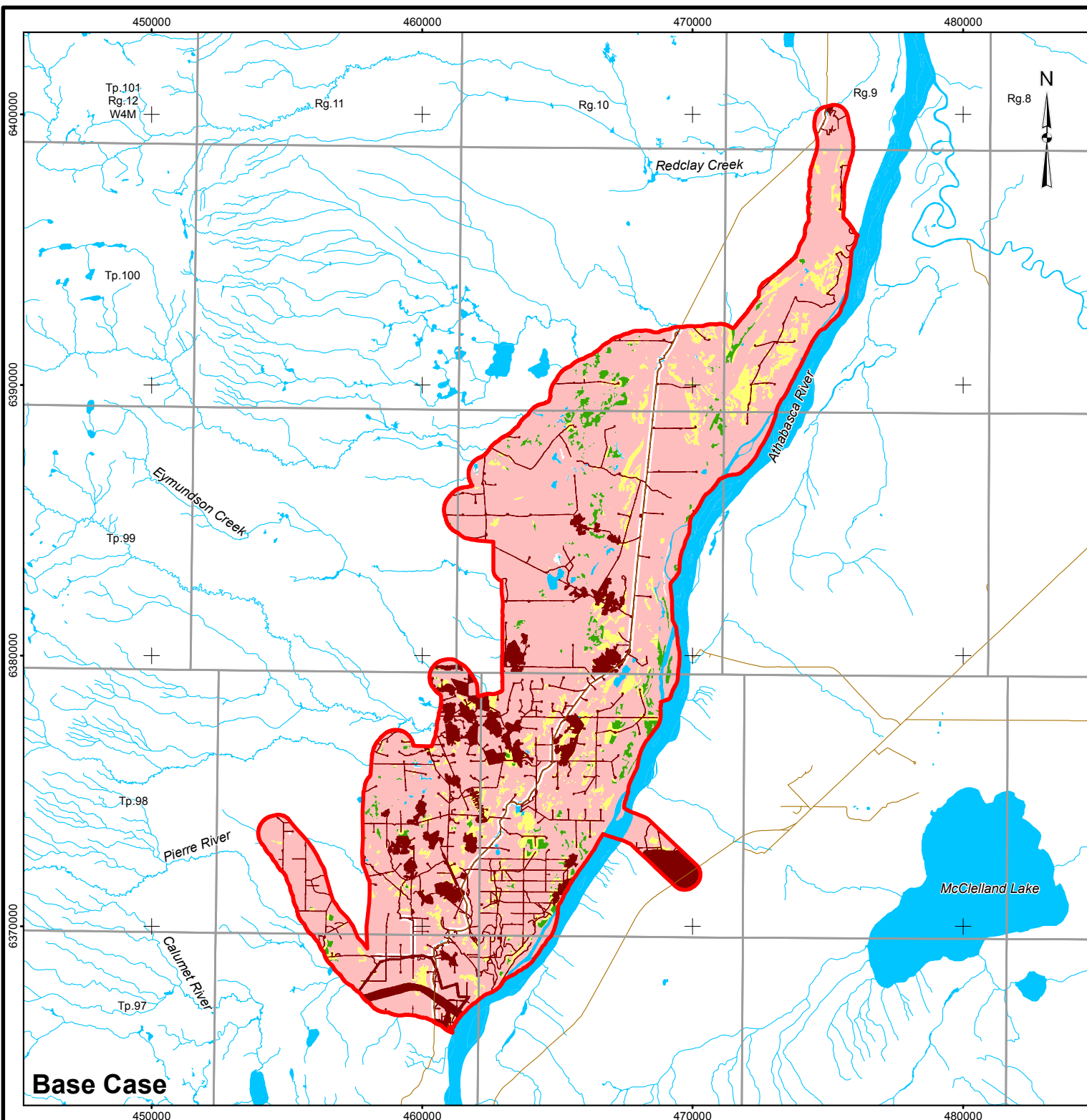
UNPAVED ROAD	<b>HABITAT SUITABILITY</b>
WATERCOURSE	HIGH
PIERRE RIVER MINE LOCAL STUDY AREA	MODERATE
OPEN WATER	LOW
<b>DISTURBED</b>	NIL
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



**REFERENCE**  
 ALBERTA DIGITAL BASE DATA OBTAINED FROM ALTALIS LTD.  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

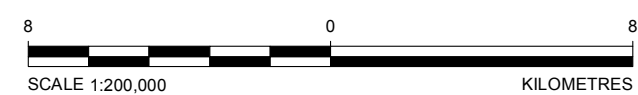
PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
WOOD BISON HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	SB	25 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	<b>FIGURE: 25</b>
REVIEW	MGJ	27 May 2013		

I:\CLIENTS\SHELL\13-1346-0001\mapping\MXD\Wildlife Modelling\FINAL\1313460001\_WM\_026\_LSA-WoodlandCaribou\_GIS.mxd



**LEGEND**

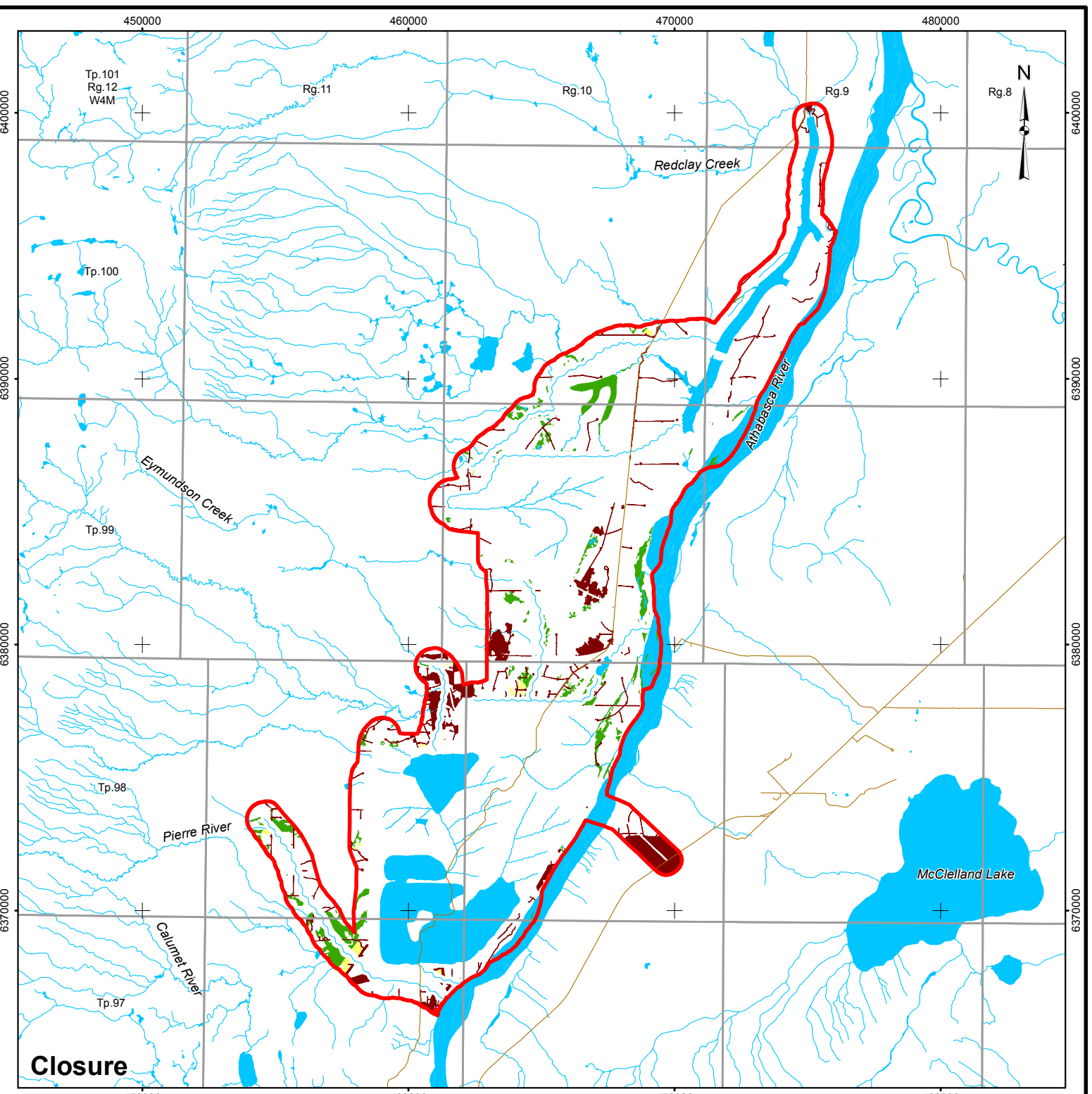
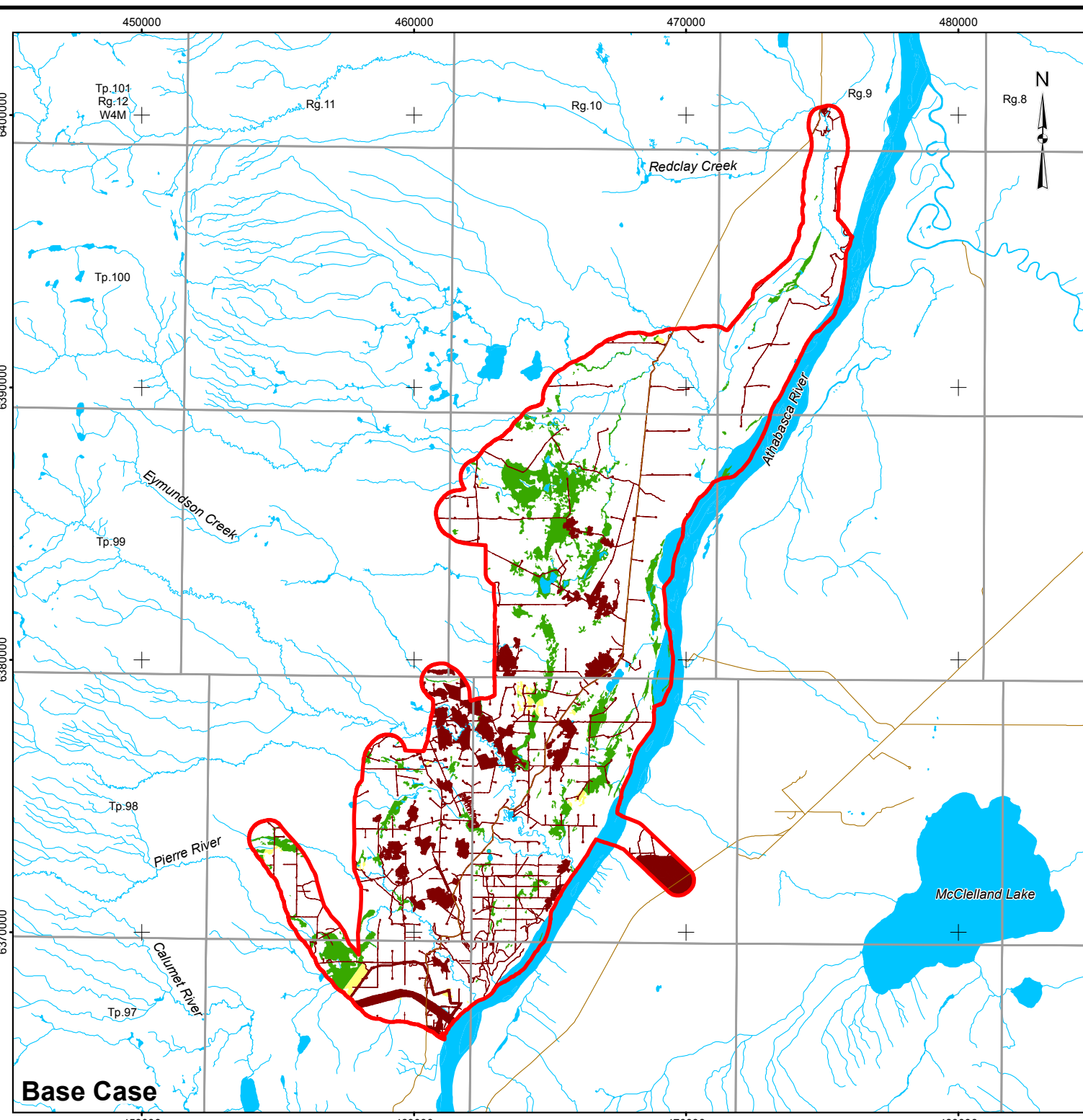
UNPAVED ROAD	<b>HABITAT SUITABILITY</b>
WATERCOURSE	HIGH
PIERRE RIVER MINE LOCAL STUDY AREA	MODERATE
OPEN WATER	LOW
<b>DISTURBED</b>	NIL
EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE	
EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE	



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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

PROJECT				
PIERRE RIVER MINE PROJECT				
TITLE				
WOODLAND CARIBOU HABITAT SUITABILITY IN THE LOCAL STUDY AREA				
	PROJECT	PROJECT NO.	FILE No.	
	DESIGN	BS	26 Apr 2013	SCALE AS SHOWN
	GIS	SB	25 Jun 2013	REV. 0
	CHECK	CY	27 May 2013	
	REVIEW	MGJ	27 May 2013	
				<b>FIGURE: 26</b>

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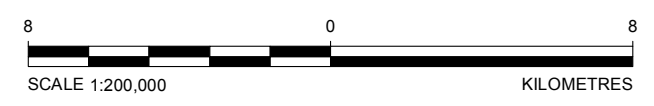


**LEGEND**

- UNPAVED ROAD
- WATERCOURSE
- PIERRE RIVER MINE LOCAL STUDY AREA
- OPEN WATER
- DISTURBED**
- EXISTING AND APPROVED URBAN AND INDUSTRIAL DISTURBANCE
- EXISTING AND APPROVED URBAN AND INDUSTRIAL LINEAR DISTURBANCE

**HABITAT SUITABILITY**

- HIGH
- MODERATE
- LOW
- NIL



**REFERENCE**  
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 DATUM: NAD83 PROJECTION: UTM ZONE 12N

PROJECT  
 PIERRE RIVER MINE PROJECT

TITLE  
**YELLOW RAIL HABITAT SUITABILITY  
 IN THE LOCAL STUDY AREA**

Shell Canada Limited

PROJECT	PROJECT NO.	FILE No.
DESIGN	BS	26 Apr 2013
GIS	SB	25 Jun 2013
CHECK	CY	27 May 2013
REVIEW	MGJ	27 May 2013

SCALE AS SHOWN REV. 0

**FIGURE: 27**