Cooper Creek Cedar Ltd.

Visual Impact Assessment
Deception Creek

CP 409 blocks 2, 4, 16
CP 412 block 15
CP 414 blocks 1, 3, 13, 14, 17

Prepared by:

timberland consultants

May 24, 2019

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Cooper Creek Cedar

Visual Impact Assessment – Project Information

CP: 409 blocks 2, 4, 16
CP: 412 block 15
CP: 414 blocks 1, 3, 13, 14, 17

Proposed Year of Harvest: 2019/2020

Type of Proposed Operation: Logging

Proposed Silviculture System: CC/RES

Block Area ha (no WTRAs):
Block 409-2: 35.8
Block 409-4: 12.7
Block 409-16: 14.1
Block 412-15: 29.3
Block 414-1: 36.5
Block 414-3: 13.0
Block 414-13: 23.3
Block 414-14: 34.2
Block 414-17: 20.3

Visual Resource Management (block : ha)	VLI	VSC:	VAC:	EVC:	EVQO:
409-2: 39.2					NVSA
409-4: 12.6					NVSA
409-4: 0.1	16	3	M	R	M
409-16: 14.1					NVSA
412-15: 2.3	17	4	M	P	M
412-15: 27.0					NVSA
414-1: 36.5					NVSA
414-3: 13.0					NVSA
414-13: 23.3					NVSA
414-14: 34.2					NVSA
414-17: 20.3					NVSA

Kootenay-Boundary Higher Level Plan Order	VSU#	Class: _
	16	3
	17	4

Foreground = 0-1km Midground = 1 – 5km Background = 5 –12km

Date Visual Landscape Inventory Completed:__Nov 2016__	DOES EVC EXCEED ESTABLISHED VQO?	**Yes ___**	**No** X

VIEWPOINTS & PHOTOGRAPH / SIMULATION INFORMATION

Number and name of viewpoints from which the proposal is visible and photos/simulations are taken	**VP #1** Hwy 31	**VP #2** Hwy 31	
Viewpoint importance (Major/Minor/Potential)	Minor	Minor	
Viewpoint co-ordinates (Lat./Long. or UTM inc. elevation (m)	x- 498813 y- 5576656 z-593m	x-497840 y- 5577959 z-606m	
Viewing distance (Foreground/Midground/Background)	420 m (Fore)	725 m (Fore)	
Viewing duration (High/Moderate/Low)	Low	Low	
Focal length of camera lens (digital equivalent mm)	simulation	simulation	
Direction of view (degrees true)	310^0	190^0	

1. ASSESSING BASIC VQO DEFINITION

Describe the level of impact that the proposed alteration, in combination with any existing non-VEG alterations, will have on the landscape from each viewpoint, using one of the following terms: ***Not visible, Not visually evident, Subordinate, Dominant, Out of scale***	**VP #1** *Not visually evident*	**VP #2** *Subordinate*				
Which basic VQO definition would the proposed alteration, in combination with any existing non-VEG alterations, meet from all the selected viewpoints and taking into account viewpoint importance, viewing distance and viewing duration? P ___ R ___ PR X M ___ MM ___						
If applicable, state reasons why the proposed alteration(s) does not achieve the basic definition of the established VQO from any of the selected viewpoints. **Not applicable – VQO of Modification (or better) is met.**						

2. ASSESSING VISUAL DESIGN

Have major lines of force been identified and used to develop the size and shape of the proposed operation? (If Yes, attach visual force analysis to this form.)	Yes __ No X
Has the proposed operation borrowed from the natural character of the landscape? **Blocks and WTRAs have been designed to follow natural landscape patterns.**	Yes X No ___
Have edge treatments been incorporated into the design of the proposed operation (feathered edges, irregular cutblock design, etc.)? **Blocks and WTRAs have been designed to have irregular boundaries that follow natural landscape patterns.**	Yes X No ___
Have "islands," or patches of trees, been maintained to mitigate visual impacts and other resource management objectives? **WTRAs have been established within all blocks to mitigate visual impacts as well as maintaining biodiversity.**	Yes X No ___
Are there any existing human-made alterations visible in the unit that exhibit poor design? If **Yes**, describe design deficiencies below:	Yes __ No X
If applicable, list any additional design techniques used and/or state reasons why certain design techniques could not be employed. **Un-naturally straight timber harvest boundary lines have been kept to a minimum.**	

3. ASSESSING NUMERICAL DATA

Complete either the clearcut or partial-cutting section below depending on the silviculture system used.

Percent Alteration Worksheet for Clearcutting

Use photograph or computer simulation output from each viewpoint for percent alteration calculations. See Appendix 8 of Visual Impact Assessment Guidebook (2nd edition, Jan 2001) for example of calculation.	VP #1	VP #2			
1. Total area of landform/VSU in perspective view as seen from each viewpoint (measured in cm^2)	86	162			
2. Visible ground area of *proposed* alteration(s) in perspective view as seen from each viewpoint (measured in cm^2)	0.8	0			
3. Visible ground area of all *existing* alterations in non-VEG state in perspective view as seen from each viewpoint (measured in cm^2)	0	1.8			
4. Total % alteration of the viewshed in perspective view as seen from each viewpoint	0.9%	1.1%			
Identify for each viewpoint which VQO will be achieved based on % alteration. See Table 3 (pg 25) in VIA Guidebook for % alteration guidelines.	R	R			

Which VQO would the proposed alteration, in combination with any existing non-VEG alterations, meet from all the selected viewpoints based on percent alteration only?

P ___ R X PR ___ M ___ MM ___ or Other _____

Partial-cutting Evaluation – Not applicable to CP 409, 412, 414 blocks in this VIA

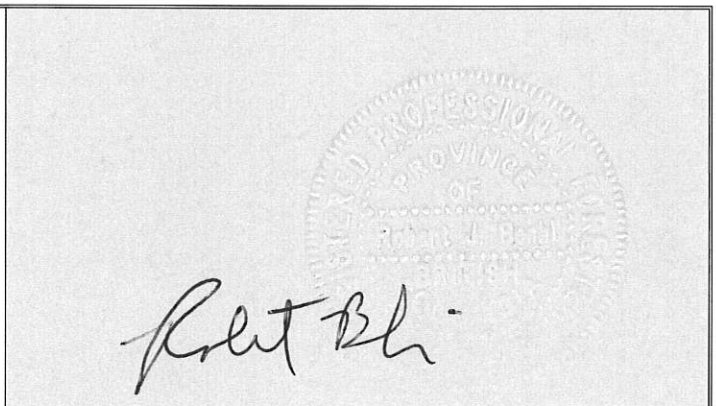
What percent volume or stems retention is proposed?	%Volume Remaining	% Stems Remaining
Which VQO would the proposed alteration, in combination with any existing non-VEG alterations, meet from all the selected viewpoints based on volume or stems remaining? (See Table 4 in VIA Guidebook (2nd edition, Jan 2001) for partial-cutting guidelines, if applicable) P ___ R ___ PR ___ M ___ MM ___		

VIA SUMMARY – CP 409 blks 2, 4, 16
CP 412 blk 15, CP 414 blks 1, 3, 13, 14, 17

Does the proposal, in combination with any existing non-VEG alterations, achieve the basic definition for the established VQO?	Yes X No ___
Have visual design concepts and principles been incorporated into block/road design? **Irregular Block Boundaries, WTRA Design, and minimal harvest area within visual polygons work in concert to ensure Visual Impacts will be minimized.**	Yes X No ___
Does the proposal, in combination with any existing non-VEG alterations, fall within the numerical ranges for the established VQO?	Yes X No ___

Given the three criteria listed above, does the proposal meet the established VQO from all the selected viewpoint(s)? **The proposal meets the established VQO based on the basic definition of Modification, percent alteration, and the size, shape and design of proposed blocks.** **Only small portions of blocks 409-4 and 412-15 fall within visual polygons.**	Yes X No ___

Completed By: Timberland Consultants (2001) Date Completed: May 24, 2019.

	
	Robert Borhi, RPF May 24, 2019 *I certify that the work described herein fulfils standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.*

NOTES:

1. Proposed alterations are assessed using three criteria (the first two being the most critical ones): (1) meeting basic definition and intent of VQO, (2) quality of design, and (3) scale of alteration.
2. Silvicultural systems leaving significant tree cover will be assessed using volume or stems remaining rather than by scale of alteration as outlined in *Visual Impacts of Partial Cutting* (1997).
3. Visual quality objectives must be achieved from all selected viewpoints.

ADDITIONAL CONSIDERATIONS

Has this visual impact assessment incorporated all known alterations proposed in the scenic area for the next 5 years (i.e., all operations proposed by the same or different licensees)? [In scenic areas where operating areas are shared among licensees, there should be co-ordination between licensees in preparing VIAs (i.e., existing and proposed cutblocks/roads, if visible from the same viewpoints, must be shown for all licensees). Potential benefits are that one VIA may satisfy the requirements of several licensees, and/or digital data may be shared between licensees when preparing the VIAs.] **Yes X No ___**

Comments: _____

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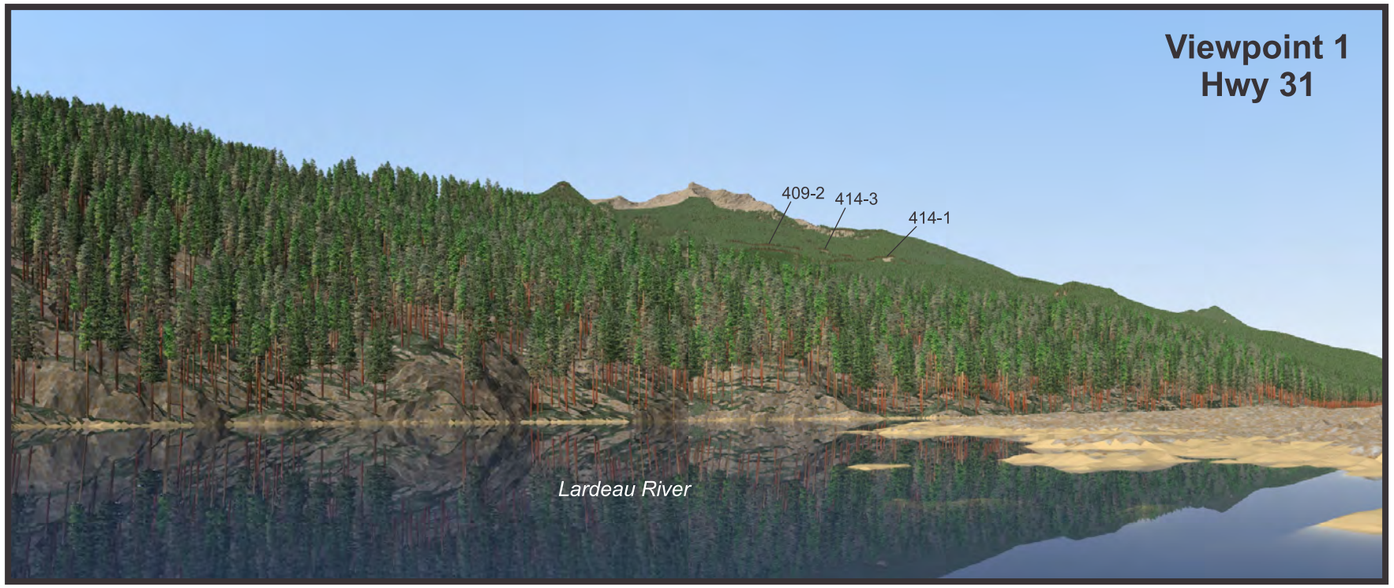
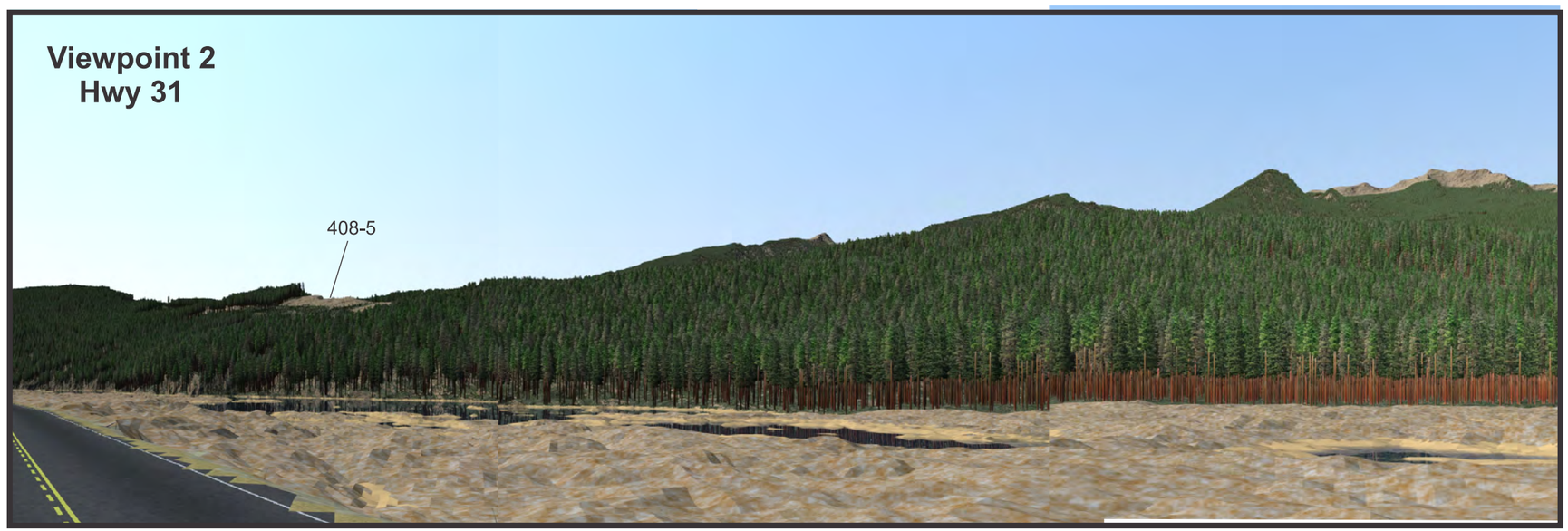
CP 409,412,414

Visual Impact Assessment





Prepared By:

timberland

Apr. 25th 2019

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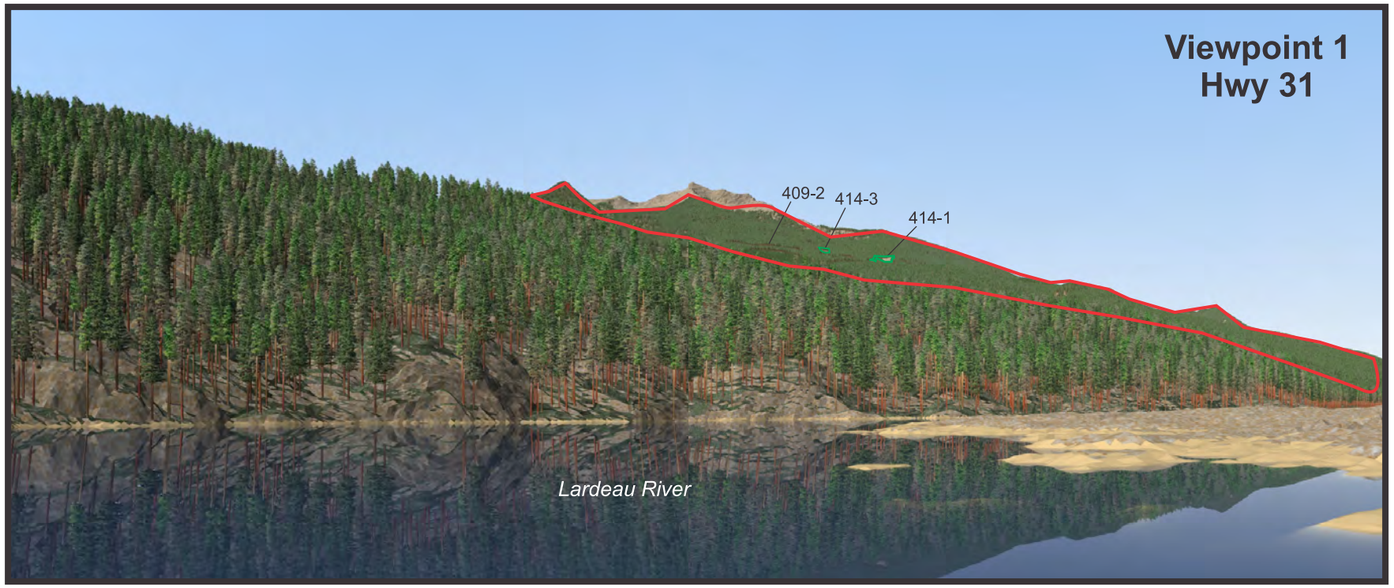
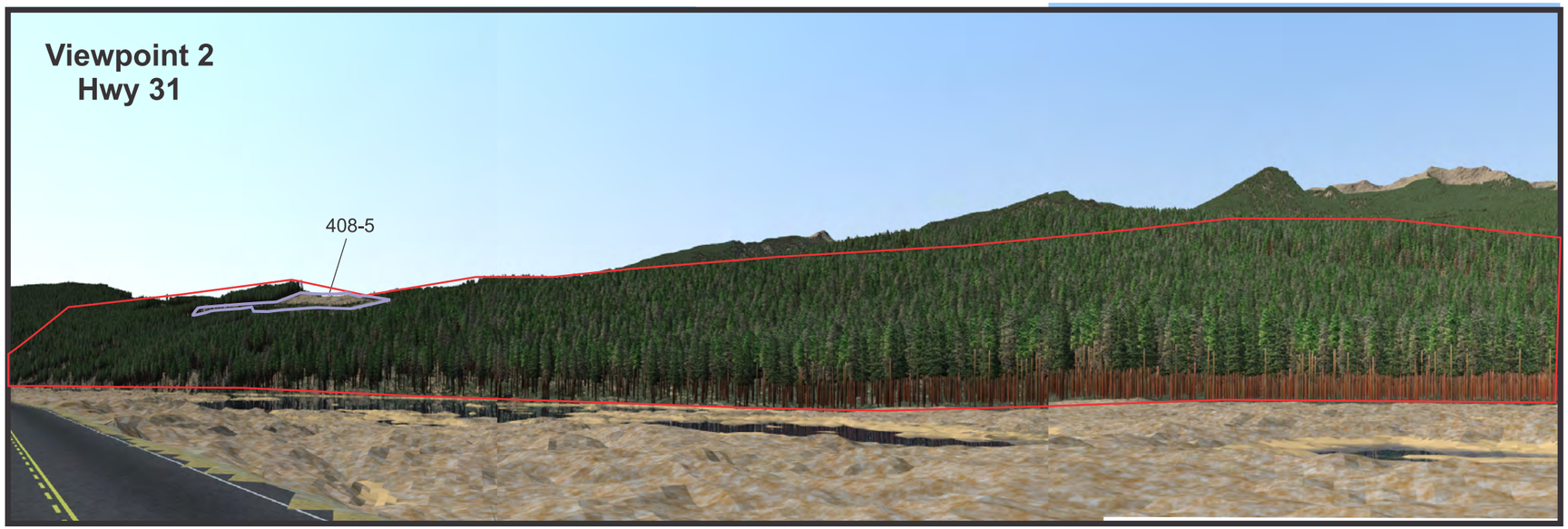
Calculations

Visual Impact Assessment



VLU 86cm²
Proposed Alteration: 0.8cm²
%Alteration:0.9%



VLU 162cm²

Proposed Alteration: 0.0cm²
Existing Condition: 1.8cm²
%Alteration:1.1%

Prepared By:

timberland

May 8th 2019

COOPER CREEK CEDAR

CP 409,412,414
VIA Overview Map

1:50,000

Legend

- CooperCreek_creeks
- Proposed Road
- Proposed Block
- VQO Linework
- Viewpoints
- HWY
- RES
- WTRA
- CCC Operating Area
- Harvested Area

N
W E
S

Date: 5/28/2019

timberland

412-6
412-5
414-1
414-3
409-2
409-4
412-15
414-14
414-13
409-16
414-17
408-6
408-5
408-1
408-4
408-7
408-3
408-10
VP1
VP2
M
PR
DUNCAN LAKE

488000 489000 490000 491000 492000 493000 494000 495000 496000 497000 498000 499000 500000 501000 502000 503000 504000 505000 506000 507000

5582000 5581000 5580000 5579000 5578000 5577000 5576000 5575000 5574000 5573000 5572000 5571000 5570000