

Planning Unit 093234

Forest Harvest Plan

1. Introduction

This Forest Harvest Plan (FHP) for Planning Unit 093234 includes maps and reports that clearly show and document the planned harvest area boundaries, roads and water crossings within the planning unit.

This plan is being submitted for appraisal, for a 5-year FHP approval under the 2013-14 Alberta-Pacific Forest Industries Inc. (Alberta-Pacific) Annual Operating Plan (AOP).

This FHP has been discussed with Alberta Environment and Sustainable Resource Development (ESRD); the plan has been sent in for approval in two separate submissions. The previous submission was approved on October 24, 2013. The Spatial Harvest Sequence (SHS) variance reporting in this submission will include the variance for the whole Planning Unit.

2. Planning Unit Specific Comments

Planning Unit 093234 is located northwest of Chipewyan Lake.

The planning unit is located in Forest Management Unit (FMU) S22. Alberta-Pacific has rights to D, D(C) and DC as deciduous landbase and CD and C as shared coniferous landbase.

Vanderwell Contractors (1971) Ltd. (Vanderwell) and the Community Timber Permit Program (CTPP) are allocated portions of the coniferous Annual Allowable Cut (AAC) from the C and CD cover groups.

The Planning Unit boundary has been revised downward from the original shape in the General Development Plan (GDP). The Bypassed stands in the southwest from the previous FHP submission will be addressed in a future plan.

The harvest design utilizes the 2006 SHS. The plan and SHS were designed to remove second pass timber within the area. This submission of the plan contains approved and layout blocks. The layout blocks and roads are being submitted for a five-year approval in this submission and are indicated in this document in **bold text**. Previously approved blocks and roads that have new information in this submission are indicated in Section 9 in ***bold italics***.

The conifer allocation within the townships of Planning Unit 093234 was determined as per the allocation identified in the Alberta-Pacific Forest Management Area (FMA) Area Timber Supply Analysis 2004 (revised September 2007) as part of the Alberta-Pacific Forest Management Plan (FMP) (revised September 2007). The SHS conifer stands in

Township 093-23-4 have been deferred due to limited market options for conifer volume sales at this time as well as to avoid disturbing regenerating blocks surrounding some of the SHS stands.

Integration

This FHP is in FMU S22 and has been provided for review to Vanderwell. Alberta-Pacific has received their agreement for this plan.

There are no active timber permits or licenses held by other users within this planning unit.

The detailed coniferous block and road design will be completed by the coniferous operator in the following Townships: 092-23-4, 092-24-4, 093-22-4 and 093-24-4. The variances to the coniferous SHS and coniferous profile reporting will also be completed by the coniferous operator during their planning process, in accordance with the approved Operating Ground Rules (OGRs). These blocks are labeled as Miscellaneous Timber Use (MTU) on the maps.

Cross-township coniferous stands were allocated to the township in which the larger portion of the stand was located, rather than splitting stands across the mapped township line. For example, block 09223436294 contains a stand that falls across the township line between 092-23-4 and 093-23-4. The block was designated as MTU because the greater portion of the stand was located in 092-23-4 where Alberta-Pacific does not have allocation to the conifer.

Watershed

No channelled watercourses or waterbodies within this planning unit have been surveyed as fish bearing or navigable.

All unsurveyed creeks have been buffered and crossed as though they were fish bearing.

Stand Structure

An average of 5% of the merchantable volume will be left in stand structure over the landscape. The structure will be left as layout patches, and as single trees and small clumps of timber at the operators' discretion.

Stand structure has been planned (delineated) in the larger blocks to create some larger (> 1 ha) residual areas and wind protection for coniferous stands. These areas are identified as Retention Areas (RAs) within the lists and on the maps. These blocks have a 9 at the end of the block number.

Debris Management

Some of the blocks in this unit are outside FireSmart Community Zones as identified by Alberta Environment and Sustainable Resource Development (ESRD). One or more of following debris management strategies apply for blocks within this planning unit:

- Methods described in the Forest and Prairie Protection Act and Regulations, and/or
- Thinly spread slash throughout the block, and/or
- Stump side processing.

The retention of debris piles will be utilized in addition to the above strategies, as per the Debris Disposal Policy included in the Northeast Alberta Operating Ground Rules (OGRs).

Blocks within FireSmart Community Zones will not utilize the retention of debris piles.

The deciduous utilization standard will be 15/10. The coniferous utilization standard will be 15/11.

Design Comments

During the layout phase of this operation, Alberta-Pacific looked for signs of insect or disease infestations. No significant damage was found.

3. Block Information

The following table summarizes the volumes within the CTP and Alberta-Pacific's FHP blocks.

Landbase Volume Summary

Company	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
CTP	82	3,634	9,027	0	12,661
Alberta-Pacific	889	175,633	801	19,116	195,550

The following blocks are outside a community FireSmart Zone, piling of debris will be used as a method of slash abatement within these blocks:

09322419191	09323415731	09323425751
09322419361	09323415851	09323427241
09322419441	09323416311	09323427691
09322419581	09323416531	09323428611
09322430321	09323416941	09323428731
09322430351	09323424211	09323434451
09323409571	09323424341	09323434671
09323409891	09323424531	09323434751

09323409961	09323424661	09323434821
09323410561	09323424681	09423403631
09323413161	09323424781	09423403681
09323415371	09323424951	09423403711
09323415411	09323425321	09423403761
09323415621	09323425721	09423403831

The previous entry into this plan was between 2005 and 2011. The blocks are shown on the maps in grey for reference only, since the forest inventory used to develop this plan has not been completely updated to include the previous harvest. These blocks have labels on the maps but are not included in the block lists.

Blocks that have already been harvested that were submitted and approved in the 2013 FHP also appear as grey on the maps and have been included in the block listing below.

Alberta-Pacific Deciduous FHP Block Listing

(Values Affected by Rounding)

Source Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
09223423561	F	INC		23	5,113	0	159	5,272
09223424411	F	INC		4	758	0	25	783
09223424711	T	INC		5	1,012	0	117	1,129
09223424741	F	INC		4	920	0	148	1,068
09223425771	F	INC		15	3,411	0	105	3,516
09223426131	F	INC		43	9,692	0	416	10,108
09223426781	F	INC		11	2,001	0	422	2,423
09223427781	F	INC		9	1,499	0	63	1,562
09223434971	F	INC		4	493	0	149	642
09223435151	F	INC		4	672	0	21	693
09223435461	F	INC		10	2,072	0	294	2,366
09223435861	F	INC		9	2,224	0	69	2,293
09223436341	F	INC		24	5,783	0	183	5,966
09223436361	F	INC		4	781	0	32	813
09322418251	F	INC		46	11,583	94	963	12,640
09322418381	F	INC		2	535	0	39	574
09322419191	F	INC		10	2,169	0	67	2,236
09322419331	F	INC		7	1,060	0	265	1,325
09322419361	F	INC		7	1,547	0	167	1,714
09322419441	F	INC		2	648	0	22	670
09322419581	F	INC		3	708	0	22	730
09322430321	F	INC		1	192	0	38	230
09322430351	F	INC		17	3,728	0	189	3,917
09323402171	F	INC		4	548	12	48	608

Alberta-Pacific Deciduous FHP Block Listing (Cont.)

(Values Affected by Rounding)

Source Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
09323402191	F	INC		14	2,367	0	98	2,465
09323402251	F	INC		7	837	0	72	909
09323403591	F	INC		3	230	0	152	382
09323403791	F	INC		19	3,155	0	118	3,273
09323409571	F	INC		4	512	0	209	721
09323409891	F	INC		3	521	0	23	544
09323409961	F	INC		31	5,244	0	366	5,610
09323410431	F	INC		3	339	0	41	380
09323410531	F	INC		5	613	0	78	691
09323410561	F	INC		12	1,594	0	206	1,800
09323410611	F	INC		3	442	0	14	456
09323410841	F	INC	U	14	2,147	0	84	2,231
09323410991	F	INC		19	3,295	0	215	3,510
09323412371	NF	INC		12	2,422	0	802	3,224
09323412791	F	FMA		4	1,065	0	119	1,184
09323412981	F	INC		33	6,985	166	1,554	8,705
09323413161	F	INC		13	2,947	0	141	3,088
09323413411	F	INC		5	1,269	0	156	1,425
09323413471	F	INC		11	2,061	0	167	2,228
09323413531	F	INC		20	4,541	107	881	5,529
09323413931	F	INC		11	2,387	0	708	3,095
09323414721	F	INC		2	395	0	18	413
09323414931	F	INC		2	467	0	68	535
09323415371	T	INC		55	10,760	0	643	11,403
09323415411	F	INC		1	171	0	75	246
09323415621	F	INC		4	425	0	57	482
09323415731	F	FMA		11	2,511	0	243	2,754
09323415851	F	INC		11	1,959	0	277	2,236
09323416311	F	INC		25	5,361	93	261	5,715
09323416531	F	INC		37	6,236	158	731	7,125
09323416941	F	INC		17	2,925	0	380	3,305
09323424211	F	INC		23	5,335	0	798	6,133
09323424341	F	INC		4	1,147	0	36	1,183
09323424531	F	INC		10	2,512	87	120	2,719
09323424661	F	INC		3	605	0	57	662
09323424681	F	INC		6	894	0	193	1,087
09323424781	F	INC		1	189	0	126	315
09323424811	F	FMA		5	1,074	0	447	1,521
09323424951	F	INC		23	4,418	0	1,301	5,719
09323425321	F	INC		8	1,757	0	284	2,041

Alberta-Pacific Deciduous FHP Block Listing (Cont.)

(Values Affected by Rounding)

Source Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
09323425721	F	INC		4	496	45	367	908
09323425751	F	INC		21	5,065	27	508	5,600
09323427241	F	INC		15	2,623	0	84	2,707
09323427691	F	INC		4	513	0	342	855
09323428611	F	INC		3	670	0	27	697
09323428731	F	INC		5	790	0	74	864
09323434451	F	INC		9	1,471	12	75	1,558
09323434671	F	INC		21	3,609	0	146	3,755
09323434751	F	INC		14	2,371	0	276	2,647
09323434821	F	INC		3	511	0	219	730
09423403631	F	INC		6	1,003	0	123	1,126
09423403681	F	INC		5	505	0	216	721
09423403711	F	INC		5	851	0	173	1,024
09423403761	F	INC		4	930	0	38	968
09423403831	F	INC		4	962	0	106	1,068
Total				889	175,633	801	19,116	195,550

The conifer within Blocks **09323412791**, 09323415731 and **09323424811** has been assigned White Spruce cover type. These blocks will have their conifer volume hauled and tracked as FMA chargeable to replace the conifer landbase volume in the Deciduous FHP blocks.

Retention Area Listing

(Values Affected by Rounding)

Block Id	Harvest Season	Status	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
02139			4	917	0	101	1,018
03329			3	457	0	14	471
03869			3	710	0	22	732
07379			3	604	0	380	984
10159			4	639	0	20	659
15919			4	702	0	34	736
18239			7	1,928	0	158	2,086
22199			11	2,146	0	79	2,225
24639			3	764	0	284	1,048
34679			12	2,553	0	79	2,632
Total			54	11,420	0	1,171	12,591

4. Access and Road Information

Land use agreements will be in place prior to use of any third party dispositions being used. Required watercourse crossings on the existing LOCs in the northern portion of the planning unit will be covered under the land use agreements.

The OSI North Road (LOC 033408) will be upgraded to facilitate operations, including the re-installation of watercourse crossings.

Planning Unit Temporary Road Information

Existing access has been utilized where possible to minimize the clearing of new Right of Way (RoW).

New access and channelled watercourse crossings will be reclaimed in order to restrict access. All terrain vehicle (ATV) access may be left to facilitate silviculture activities.

New access and channelled watercourse crossings will be reclaimed as per Section 11.3.4 of the OGRs. Road reclamation and abandonment details are listed in the AOP when the blocks and roads are scheduled.

Main Access and Crossings

Road No.	Class	Length (Km)	Construction Season	Crossing Location	Field Call	Navigability
02171	4W	0.22	Frozen			
02191	4W	0.44	Frozen			
02251	4W	0.16	Frozen			
03591	4W	0.14	Frozen			
03631	4W	0.78	Frozen			
03681	4W	0.10	Frozen			
03711	4W	0.55	Frozen			
03761	4W	0.67	Frozen			
03791	4W	1.05	Frozen			
03831	4W	0.49	Frozen	0373	NW	U
09571	4W	0.31	Frozen			
09891	4W	0.34	Frozen			
09961	4W	2.20	Frozen	1022	I	U
10431	4W	0.51	Frozen			
10531	4W	0.29	Frozen			
10561	4W	0.90	Frozen	1036 1046	E E	U U
10611	4W	0.06	Frozen			
10841	4W	1.02	Frozen			
10991	4W	1.10	Frozen	1422	E	U
12371	4S	0.55	Non-Frozen			
12791	4W	0.67	Frozen			
12981	4W	1.13	Frozen	1268	I	U

Main Access and Crossings (Cont.)

Road No.	Class	Length (Km)	Construction Season	Crossing Location	Field Call	Navigability
13161	4W	1.72	Frozen	1446	SP	U
				1456	NW	U
				1477	SP	U
13411	4W	0.40	Frozen			
13471	4W	0.75	Frozen			
13531	4W	1.05	Frozen			
13931	4W	0.05	Frozen			
14721	4W	0.79	Frozen	1168	E	U
				1177	E	U
14931	4W	0.24	Frozen			
15371	4S	1.89	Non-Frozen	1547	E	U
15411	4W	0.25	Frozen			
15621	4W	0.35	Frozen	1553	E	U
15731	4W	0.76	Frozen	1593	E	U
15851	4W	0.80	Frozen	1594	E	U
16531	4W	0.85	Frozen			
16941	4W	0.56	Frozen			
18251	4W	2.11	Frozen	1818	E	U
				1831	E	U
				1843	E	U
18381	4W	0.02	Frozen			
19191	4W	0.65	Frozen			
19331	4W	0.58	Frozen			
19361	4W	0.59	Frozen	1945	E	U
19441	4W	0.11	Frozen			
19581	4W	0.21	Frozen			
23561	4W	1.51	Frozen	2352	I	U
				2366		
24211	4W	0.91	Frozen			
24341	4W	0.38	Frozen			
24411	4W	0.24	Frozen			
24531	4W	0.92	Frozen			
24661	4W	0.46	Frozen			
24681	4W	0.73	Frozen			
24711	4S	0.55	Non-Frozen			
24741	4W	0.56	Frozen	2474	SP	U
24781	4W	0.71	Frozen			
24811	4W	1.51	Frozen			
24951	4W	1.23	Frozen	2496	E	U
25321	4W	0.36	Frozen			
25721	4W	0.14	Frozen			
25751	4W	1.54	Frozen			
25771	4W	1.64	Frozen	2676	I	U
26131	4W	2.14	Frozen			
26781	4W	0.25	Frozen			
27241	4W	2.23	Frozen			
27691	4W	1.18	Frozen	2759	E	U
27781	4W	0.78	Frozen			
28611	4W	0.16	Frozen			
28731	4W	0.57	Frozen			
30321	4W	0.61	Frozen			

Main Access and Crossings (Cont.)

Road No.	Class	Length (Km)	Construction Season	Crossing Location	Field Call	Navigability
30351	4W	0.73	Frozen	3033	E	U
34451	4W	1.69	Frozen			
34671	4W	3.08	Frozen	3459	E	U
34751	4W	0.39	Frozen			
34821	4W	0.35	Frozen			
34971	4W	0.50	Frozen			
35151	4W	0.22	Frozen			
35461	4W	1.41	Frozen			
35861	4W	0.79	Frozen			
36341	4W	1.58	Frozen	2698	E	U
				3621	I	U
				3632	E	U
36361	4W	0.45	Frozen			
Total Class 4W:		57.92				
Total Class 4S:		2.99				
Total Class 4P:		0.00				

Skid Trail Crossings

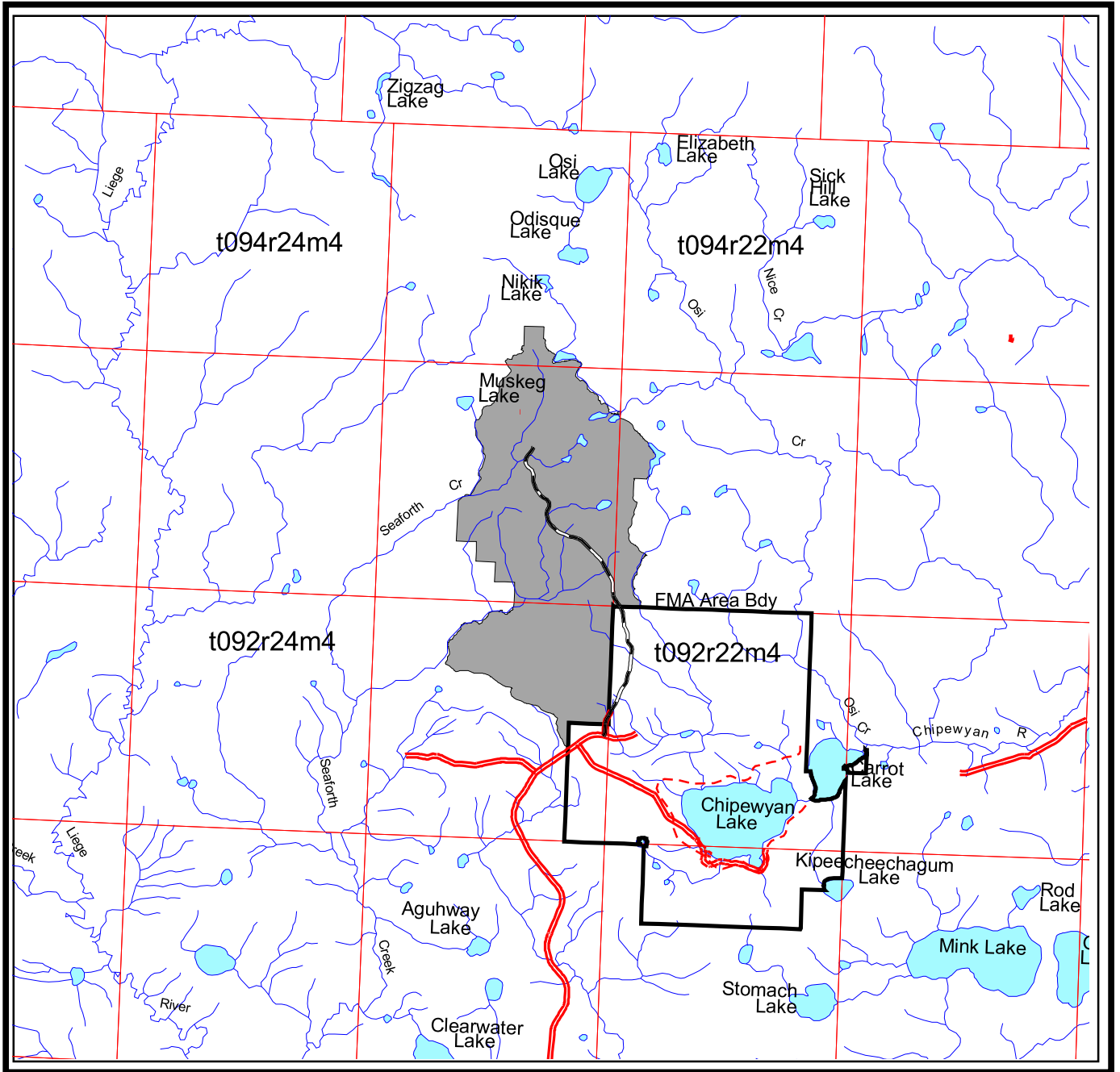
Road No.	Crossing Location	Base Info	Field Call	Navigability
09961	1014	UM	E	U

In the above tables, possible “Field Call” channelled watercourse classifications are ephemeral (E), intermittent (I), transitional (T), small permanent (SP), large permanent (LP), lake < 4 ha (SL), lake ≥ 4 ha (LL) beaver pond (B), spring (S), saturated soils (SS) or no channelled watercourse (NW). The “Navigability” rating identifies channelled watercourse as being potentially navigable (N) or potentially unnavigable (U) based on the possibility of traveling the stream with a vessel. The “Field Call” channelled watercourse classifications in the above table are based on Table 1 of the OGRs at the time, and during the conditions, when layout was conducted.

At the time of layout, some mapped indefinite streams were found in the field to have no watercourse located. The following winter roads will be built over these mapped indefinite streams but have no crossing indicated on the map: 02191, 16531, **24811**, **24951**, 27241, 28611 and 35861.

Planning Unit 093234

Access Map



1:250000



Alberta-Pacific
Forest Industries Inc.



5. Non Timber Values

Public Involvement

Copies of this harvest plan will be available for viewing at the Athabasca, Fort McMurray and Lac La Biche libraries, TimberNorth-Athabasca, the Alberta-Pacific Wabasca field office and the Alberta-Pacific mill site.

The Public Involvement for this plan was completed during the previous GDP review meetings.

No concerns have been identified through the public involvement process to date.

Aboriginal Consultation

The Aboriginal Consultation for this plan was completed during the previous year's GDP review meetings.

No concerns have been identified through the Aboriginal Consultation process to date.

Trappers

The holders of the following Registered Fur Management Areas (RFMA) have been contacted regarding harvesting activities within Planning Unit 093234:

- 0020
- 0025
- 2266

No concerns have been identified through the Trapper Consultation process to date.

Guides and Outfitters

The holders of the following permits within Wildlife Management Units (WMU) 518 and 531 have been notified of Alberta-Pacific's harvest plans within Planning Unit 093234:

- | | | |
|--------|--------|--------|
| - 0095 | - 0709 | - 0987 |
| - 0163 | - 0798 | - 0995 |
| - 0314 | - 0834 | - 0997 |
| - 0336 | - 0858 | - 1030 |
| - 0344 | - 0872 | - 1034 |
| - 0401 | - 0881 | - 1053 |
| - 0465 | - 0938 | - 1109 |
| - 0491 | - 0956 | - 1137 |

No concerns have been identified through the Guide and Outfitter Consultation process to date.

Forest Recreation Groups

There are currently no active forest recreation groups with interests within this planning unit.

Grazing Lease Operators

There are currently no grazing leases within this planning unit.

Historical Resources

No known historical resource sites are located within this unit. Lands on which historical resource sites are likely to occur will be checked prior to commencement of operations or post harvest.

Forest Aesthetics

There are no forest aesthetics concerns within this planning unit.

Land Use

As per a Land Status Automated System (LSAS) land standing report dated March 14, 2013 there are currently no dispositions within this planning unit that restrict harvesting timber.

The following disposition has been removed from the harvest design: ISP 040184.

SML 030012 has been reviewed and does not affect the harvest design.

Wildlife

This planning unit is within a key Caribou Range. Operations will adhere to the Alberta-Pacific wildlife plan submitted annually in the fall.

No areas of concentrated terrestrial lichens were identified during layout.

All known sensitive wildlife sites have been buffered according to section 7.7.6.2 of the OGRs. Some of these buffers have been placed into the following RAs: 09323410159, 09323415919, 09323422199, **09323434679**, **09423402139**, **09423403329** and **09423403869**.

The following blocks have been buffered according to section 7.1.1 of the OGR's:

09223424741

09323402191

Access and Access Management

Existing access has been utilized where possible to minimize the clearing of new RoW.

The following policies have been implemented to mitigate access management concerns:

- Temporary road systems will be “signed” as temporary and closed as soon as possible after the harvesting, hauling, and silviculture activities have been completed.

The following access control practices will also be implemented:

- Road systems will be signed as “Temporary Access - Logging in Progress.”
- If a significant delay occurs between harvesting and hauling, temporary access controls on roads will be utilized to prevent access by motorized vehicles. These controls may include the placement of logs on the road, snow berms, and/or removal of creek crossings.
- Slash rollback at strategic points (such as at the ends of the block or at the junction of the temporary road and permanent road) will be completed as soon as possible after logging to discourage access by all terrain or four wheel drive vehicles.

Since the planning unit falls within a key Caribou Range, the timing of operations will be completed as per the Alberta-Pacific FMP and OGR’s.

6. Integration with Affected Forest Companies

Vanderwell signed off September 30, 2013 regarding this plan.

CTPP Block Listing
(Values Affected by Rounding)

Block Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
06224	F	CTP		4	213	319	0	532
06424	F	CTP		10	1,052	1,003	0	2,055
06484	F	CTP		7	715	972	0	1,687
07384	F	CTP		4	144	1,081	0	1,225
07744	F	CTP		4	88	993	0	1,081
18134	F	CTP		6	323	1,318	0	1,641
18154	F	CTP		2	302	302	0	604
19544	F	CTP		1	59	138	0	197
24844	F	CTP		2	190	322	0	512
24924	F	CTP		1	24	3	0	27
25964	F	CTP		4	19	375	0	394
28584	F	CTP		5	57	504	0	561
30434	F	CTP		1	23	135	0	158
33614	F	CTP		15	50	1,294	0	1,344
36294	F	CTP		10	180	5	0	185

CTPP Block Listing (Cont.)

(Values Affected by Rounding)

Block Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
36474	F	CTP		2	138	206	0	344
36794	F	CTP		4	57	57	0	114
Total				82	3,634	9,027	0	12,661

7. Spatial Harvest Sequence Summary

The table below summarizes the variance (in area) from the SHS, for Alberta-Pacific harvesting. The variance for the conifer cover types exceeds the 20% allowable for acceptance under the OGRs. The primary causes for the variance are due to the lack of available market for coniferous timber at this time and for isolated structure left for wildlife adjacent to old blocks that could not be put into Retention Areas. Effort has been made to minimize variance wherever feasible.

SHS Tracking

SHS Tracking	Decid. Cover Type	Sw Cover Type	Sb Cover Type	Pj Cover Type	Total Cover Type
Total SHS in Planning Unit	2,408.3	285.9	14.6	69.2	2,778.0
FHP SHS Harvest ha.	2,069.4	88.0	7.3	38.1	2,202.8
Deleted SHS ha. (reportable)	154.7	39.9	0.0	2.6	197.2
Deferred SHS ha. (reportable)	2.9	122.5	5.5	24.5	155.4
Variance % ⁽¹⁾ (reportable)	6.5%	56.8%	37.7%	39.1%	12.7%
Addition ha.	3.4	0.0	0.0	0.0	3.4
Bypassed ha.	0.0	0.0	0.0	0.0	0.0
Total Harvest ha. ⁽²⁾	2,072.8	88.0	7.3	38.1	2,206.2

(1) Variance % is the Deleted and Deferred SHS ha. expressed as a percentage of the Total SHS in the Planning Unit.

(2) Total Harvest ha. is the sum of FHP SHS Harvest ha. and Additions ha.

8. Silviculture Information

The following table outlines the initial silviculture declarations for FHP blocks within Planning Unit 093234. Cover group balanced declarations will be submitted post harvest.

Alberta-Pacific Silviculture Declarations

Source Id	Area (ha)	Std_ Mod	Open_ Desig	Species_ Gr	Silv_ Harv
09223423561	22.8	D	CC	DE	CC
09223424411	3.9	D	CC	DE	CC
09223424711	4.7	D	AV	DE	CC
09223424741	4.5	D	CC	DE	CC
09223425771	15.1	D	CC	DE	CC
09223426131	42.7	D	CC	DE	CC
09223426781	11.0	D	CC	DE	CC
09223427781	8.7	D	CC	DE	CC
09223434971	3.6	D	CC	DE	CC
09223435151	4.0	D	CC	DE	CC
09223435461	9.7	D	CC	DE	CC
09223435861	9.4	D	CC	DE	CC
09223436341	24.3	D	CC	DE	CC
09223436361	4.4	D	CC	DE	CC
09322418251	46.2	D	CC	DE	CC
09322418381	2.2	D	CC	DE	CC
09322419191	10.5	D	CC	DE	CC
09322419331	7.0	D	AV	DE	CC
09322419361	7.1	D	CC	DE	CC
09322419441	2.4	D	CC	DE	CC
09322419581	2.8	D	CC	DE	CC
09322430321	1.3	D	CC	DE	CC
09322430351	17.1	D	CC	DE	CC
09323402171	3.6	D	CC	DE	CC
09323402191	14.5	D	CC	DE	CC
09323402251	7.2	D	CC	DE	CC
09323403591	2.6	DC	CC	MX	CC
09323403791	19.4	D	CC	DE	CC
09323409571	4.2	D	CC	DE	CC
09323409891	3.1	D	CC	DE	CC
09323409961	31.2	D	CC	DE	CC
09323410431	2.5	D	CC	DE	CC
09323410531	4.5	D	CC	DE	CC
09323410561	12.4	D	CC	DE	CC
09323410611	2.6	D	CC	DE	CC

Alberta-Pacific Silviculture Declarations (Cont.)

Source Id	Area (ha)	Std_ Mod	Open_ Desig	Species_ Gr	Silv_ Harv
09323410841	13.9	D	PC	DE	UP
09323410991	19.3	D	CC	DE	CC
09323412371	12.5	D	CC	DE	CC
09323412791	4.4	D	CC	DE	CC
09323412981	32.5	D	CC	DE	CC
09323413161	12.7	D	CC	DE	CC
09323413411	5.4	D	CC	DE	CC
09323413471	10.9	D	CC	DE	CC
09323413531	20.3	D	CC	DE	CC
09323413931	11.3	D	CC	DE	CC
09323414721	1.6	D	CC	DE	CC
09323414931	2.1	D	CC	DE	CC
09323415371	55.1	D	AV	DE	CC
09323415411	1.3	DC	CC	MX	CC
09323415621	3.9	D	CC	DE	CC
09323415731	11.5	D	CC	DE	CC
09323415851	11.3	D	CC	DE	CC
09323416311	24.7	D	CC	DE	CC
09323416531	36.8	D	AV	DE	CC
09323416941	17.5	D	CC	DE	CC
09323424211	22.7	D	CC	DE	CC
09323424341	4.4	D	CC	DE	CC
09323424531	10.1	D	CC	DE	CC
09323424661	3.0	D	CC	DE	CC
09323424681	6.2	D	CC	DE	CC
09323424781	1.3	D	CC	DE	CC
09323424811	5.5	DC	CC	MX	CC
09323424951	22.8	D	CC	DE	CC
09323425321	7.8	D	CC	DE	CC
09323425721	4.0	CD	CC	MX	CC
09323425751	21.1	D	AV	DE	CC
09323427241	15.2	D	CC	DE	CC
09323427691	3.7	DC	CC	MX	CC
09323428611	2.6	D	CC	DE	CC
09323428731	4.8	D	CC	DE	CC
09323434451	8.9	D	CC	DE	CC
09323434671	21.3	D	CC	DE	CC
09323434751	14.2	D	CC	DE	CC
09323434821	2.5	DC	CC	MX	CC
09423403631	6.1	D	CC	DE	CC

Alberta-Pacific Silviculture Declarations (Cont.)

Source Id	Area (ha)	Std_ Mod	Open_ Desig	Species_ Gr	Silv_ Harv
09423403681	5.0	DC	CC	MX	CC
09423403711	5.4	D	CC	DE	CC
09423403761	4.3	D	CC	DE	CC
09423403831	4.4	D	CC	DE	CC

In the above table, the codes for “Std_Mod”, “Open_Type”, “Species_Gr” and “Silv_Harv” are as per the Alberta Regeneration Information System (ARIS) domain codes. “AV” under “Open_Desig” is not an ARIS code but is used internally for the tracking of understorey avoidance blocks. If a block contains adequate amounts of Balsam Fir, so that fir is an acceptable coniferous regeneration species, a code of FA is used in the “Species_Gr”.

All deciduous blocks will be Leave for Natural (LFN). All coniferous blocks will be treated as per Appendix 4, of the FMP.

9. OGRs Variances Blocks

SHS Tracking

SHS Tracking	Decid. Cover Type	Sw Cover Type	Sb Cover Type	Pj Cover Type	Total Cover Type
Total SHS in Planning Unit	2,408.3	285.9	14.6	69.2	2,778.0
FHP SHS Harvest ha.	2,069.4	88.0	7.3	38.1	2,202.8
Deleted SHS ha. (reportable)	154.7	39.9	0.0	2.6	197.2
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Variance % ⁽¹⁾ (reportable)	6.5%	56.8%	37.7%	39.1%	12.7%
Addition ha.	3.4	0.0	0.0	0.0	3.4
Bypassed ha.	0.0	0.0	0.0	0.0	0.0
Total Harvest ha. ⁽²⁾	2,072.8	88.0	7.3	38.1	2,206.2

(1) Variance % is the Deleted and Deferred SHS ha. expressed as a percentage of the Total SHS in the Planning Unit.

(2) Total Harvest ha. is the sum of FHP SHS Harvest ha. and Additions ha.

The following blocks are outside a community FireSmart Zone, piling of debris will be used as a method of slash abatement within these blocks:

09322419191	09323415731	09323425751
09322419361	09323415851	09323427241
09322419441	09323416311	09323427691
09322419581	09323416531	09323428611
09322430321	09323416941	09323428731
09322430351	09323424211	09323434451
09323409571	09323424341	09323434671
09323409891	09323424531	09323434751
09323409961	09323424661	09323434821
09323410561	09323424681	09423403631
09323413161	09323424781	09423403681
09323415371	09323424951	09423403711
09323415411	09323425321	09423403761
09323415621	09323425721	09423403831

A mapped ephemeral was found to have a defined small permanent channel east of Block 09323410531. The creek was buffered to 30m in this location. However, further downstream the channel mellowed and was no longer a defined channel adjacent to Block 09323403591. At this point, it was buffered to lesser vegetation outside of the block boundary.

The following table identifies blocks greater than 7.0 ha that may exceed 5 % road disturbance once turnabouts are constructed.

Road Percent

Source Id	% Road Class	Comments
09322419191	6	Extra road required; Access to other blocks.
09322419361	6	Extra road required; Access to other blocks.
09323402191	5	Extra road required; Access to other blocks.
09323403791	5	Extra road required; Access to other blocks.
09323410561	5	Irregular shaped block.
09323412371	5	Extra road required; Access to other blocks.
09323434451	7	Extra road required; Access to other blocks.
09323434671	5	Extra road required; Access to other blocks.

The percent road class values have been achieved by rounding the road disturbance percent to the nearest whole number.

Block 09323403791 contains a patch >2ha in size with >600 st/ha of White Spruce understorey but the block is too narrow where the understorey is located and will most likely be removed by the road and landing areas. The understorey will not be protected by strips or avoidance technique.

Block **09323425751** is greater than 10ha and contains >2 ha clumps of ≥ 600 stems/ha of White Spruce understorey. However, due to terrain issues within the block and irregular block shape, it will not have high intensity understorey protection and will be harvested using avoidance methods.

Block **09223435461** was originally submitted as an understorey avoidance block but the plot data for the block shows only an average of 100 stems/ha of White Spruce understorey. This block does not require any understorey protection.

No understorey assessment will be submitted for these blocks.

Roads

Road 10991 uses an existing seismic line that runs parallel with a small permanent creek. The road is within 30m of the creek at grid location 1432, just off the Osi North Road.

Roads Close to Watercourses

Road No.	Grid Location	Base Info	Field Call	Distance of Watercourse From Road	Habitat Rating
13531	1363	LL	LL	200	U
<u>24711</u>	2461	SL	SL	200	U
24811	1377	LL	LL	200	U
	1378	SL	SL	200	U
25751	2546	SL	SL	200	U
	2576	LL	LL	200	U
<u>25771</u>	2695	SL	SL	200	U
30351	3044	SL	SL	200	U

The “Distance of Watercourse From Road” is the minimum distance allowed in Table 2 of the OGRs without ESRD approval. The roads listed are within those minimum distances. Please refer to the FHP map and layout block maps for more information.

In the above table, possible “Base Info” watercourse classifications are indefinite (E), intermittent (I), perennial (P), unmapped (UM), lake < 4 ha (SL) or lake ≥ 4 ha (LL). The possible “Field Call” watercourse classifications are intermittent (I), transitional (T), small permanent (SP), large permanent (LP), lake < 4 ha (SL), lake ≥ 4 ha (LL). The “Habitat Rating” identifies watercourses surveyed as fish bearing or potentially fish bearing (SF), surveyed as non-fish bearing (SN) or unsurveyed (U). The “Field Call” watercourse classifications in the above table are based on Table 1 of the OGRs at the time, and during the conditions, when layout was conducted.