

Appendix VI: Oil and Gas Documentation



April 7, 2000

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Procedure for Seismic and Road Footprint.

The seismic and road location data was acquired by Alberta-Pacific Forest Industries through Evergreen Consultants from Calgary, Alberta. Evergreen provides this data to Alberta-Pacific Forest Industries through a collection and maintenance contract for Land Use.

The seismic data is collected from Geophysical Final Plans submitted by companies engaged in seismic operations in the Alberta-Pacific FMA area. Seismic which predates the FMA, is assumed to be captured in the Alberta Government's "Access Layer" which has been used a base for the subsequent digitizing by Lorrnel of seismic and road layers. The road data prior to 1996 was captured from Surface Rights Plats, subsequently, this data is made spatial from surveys completed by companies operating on the FMA area.

There is an extremely limited verification or ground truthing program in place for this data. In addition, the data structure used does not employ significant advances in storage of spatial data such as ESRI's dynamic segmentation. This results in line geometry which is often off-set and mutually exclusive. A corridor with multiple uses is represented with multiple lines. Thus, at some point in the processing of this data, it must be generalized to gain any type of realistic empirical values. The generalization results in a product which deviates from the original accuracy. However, the original accuracy is loosely defined to be 1:50 000.

There are numerous ways to process this data into a product which can be suitable for spatial analyses. Previous experience with this data dealt with analyses where line geometry was not of paramount importance, rather, it was used to calculate total lengths of features and general spatial arrangement. Overlay analysis with this data will not produce results of high accuracy, however, it is most likely that this data set is the most accurate of its type at the moment. It should also be noted that there appears to be no directional bias in any of the data provided. That being, lines which are off set do not appear to be off set in any particular direction.

The Alberta Government has been in the process of using IRS (Indian Remote Sensing) satellite imagery to update its original "Access Layer". Although their methodology is

Timberline



evolving, this data, when and if completed, will represent a far better picture of the total land base withdrawal as a result of seismic and road infrastructure.

Notes

Significant processing must be applied to the data before it is possible to get any nearly acceptable results from it. This processing is done based on numerous assumptions.

There are 2 base data sets being used in this analysis. One with numerous types of "roads" related to industrial players, the other with "seismic". Some data representing one spatial feature is represented in each database and is not spatially inclusive. That being, at large scales, numerous lines represent the same features.







Not all lines are created equal.

Seismic lines vary in width, the data base infrequently includes a width for lines. When present, a generalized width is applied using the following criteria

Lines which had width values for "line_type" (beginning at the 1st column):

Description contained	Buffer Width
2m	1m
2.*	1.5m
3m	1.5m
3.*	2m
4m	2m
4.*	2.5m
5m	2.5m
5.*	3m
6m	3m
6.*	3.5m
7m	3.5m
7.*	4m
8m	4m
8.*	4.5m
9m	4.5m
9.*	5m
10m	5m

Lines with no width description at the start of the "line_type" column, but containing a geo physical operations approval number, where awarded a buffer width of 3m. For the most part, these lines represent seismic which have been added since the original Alberta Government's "Access Layer" was derived from air photos in the mid 1980's. Traditional seismic has been widely accepted to be 8m wide. In recent years, the exploration industry has been slowly moving towards lines not as wide as the traditional 8m, for this reason, these lines have been awarded a buffer width of 3m.

The remaining lines were awarded a buffer width of 4m. Most of these lines are contained in the original "Access Layer" and are traditional seismic. Items coded as trails have been removed from this data analysis because of obvious holes in the data. For a more complete picture of the anthropogenic footprint on the land base, the trails and roads found in the "Access Layer", should be buffered at an appropriate width and joined to the spatial layer provided. Timberline refers to the "Access layer" as "t_da".

Not all lines are created.





As mentioned, there is no significant ground truthing program in place. A geo physical plan approval does not mean that a line is actually cut. Therefore, the data base really is a spatial representation of existing historical lines and lines which have been approved.

Analysis of the Pipeline Agreement Roads revealed that there were 10% more road agreements than there were pipelines. An investigation of this found that roads agreed to and approved are sometimes not cut until the market dictates that it will be feasible. Also, some companies have a tendency to protect their interest by securing road approvals. However, more often than not, wells do exist at the terminus of these Pipeline Agreement Roads, this once again brings into question the accuracy of the data.

Procedure

Produce a roads layer of all MSL's (mineral surface lease), LOC's (lease of occupation), PLA's (pipeline agreement). Visual inspection reveals that the PLA data is more accurate than the data on actual pipelines distributed by the AEUB.

Generalize the data by cleaning at tolerance levels which have been found to reduce the most extraneous data while keeping the spatial integrity of the original data set at acceptable levels.



Spatial overlap is a problem. The seismic layer is not mutually inclusive with the roads layer. The lack of stringent protocol results in a seismic line which is also an LOC in the road layer, being represented by 2 lines with different geometry. By a long process of trial and error, it was discovered that the vast majority of the lines could be accounted for with a buffer represented by a 180m swath.



The seismic was buffered at 90m, and intersected with the roads. This process flagged the road segments which could be double counted. The flagged segments were then removed from the roads data set. This process results in a roads layer which is fragmented at intersections with the seismic layer. While this type of processing does not make sense from a cartographic point of view, it has been selected as the method of choice to deal with overlapping spatial data at different scales. It produces a conservative estimate of what the spatial extent of the road network is, with these data sets.



The final processing includes a buffering of the roads layer at 7.5m which represents a 15m swath for each road in the data set. The seismic layer is then buffered at the derived widths. The spatial extents are contained with the "inside" value = 100.

The two coverages have not been joined into one.

I trust this will meet your requirements.

I would happy to accommodate any questions you may have with the data provided.

Yours Sincerely,

Jack O'Neill





April 11, 2000

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Addendum Revised Procedure for Road Footprint.

Timberline reviewed the data provided on April 7, 2000 and decided that it did not meet the requirements. As a result, and after further investigation, it has been decided that they will proceed with only the Pipeline Agreement Roads. This data is used as an approximation for the pipelines which are present on the FMA area. This decision will result in a product which reduces the potential road footprint on the FMA area which is described by the raw data.

MSL roads and LOC roads have been eliminated. PLA roads (the most accurate view of the exisiting pipeline network) have been buffered at 10m. This width was decided on after consultation and recommendation by Alberta-Pacific Planning Forester Don Pope. There has been no processing done to reduce the effects of spatial overlap with the seismic data provided. This should not be too significant for.

The PLA data has been cleaned before buffering, a description can be found in the previously provided document (seis_roads_tsa.doc) under Procedure. Descriptive photos of this process are provided below.

The buffered data set (buf_pla_fmu) has been ftp'd to the Timberline ftp public domain server.





Original PLA



I trust this will meet your requirements.

I would be happy to accommodate any questions you may have with the data provided.

Yours Sincerely,

Jack O'Neill



March 23, 2000

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Procedure for well footprint.

The well point location data was acquired by Alberta-Pacific Forest Industries through Lorrnel Consultants from Calgary, Alberta. Lorrnel provides this data to Alberta-Pacific Forest Industries as a broker.

The dataset includes top and bottom hole locations for all wells which have been granted a licence status through Alberta Energy since the records have been kept. Further details on the source data can be obtained through Lorrnel Consultants.

The location of well sites and the subsequent regeneration of those sites into some sort of vegetation poses many interesting challenges. This requires some degree of analytical interpretation to deal with the data and its shortcomings.

Notes

• Not all well sites are created equal.

The size footprint of well sites is not consistent. I conducted a study and discovered that all the AVI classified as "CIW" averaged out to a size of .9766 ha. Therefore, I have proceeded under the assumption that well sites are .977 ha in size. It is widely believed that well sites are about 120m X 120m or 1.44 ha, and, this may be the case as recent technology is allowing for the creation of more wells on each pad. However, the vast majority of well pads on the FMA have been created for conventional extraction and the larger pads are just now becoming standard.

Many of the older well sites are now classified as "SC". There is no way to ascertain through AVI if they were once well sites.

Another challenge with the data set is that some well sites are duplicates from a spatial perspective and not mutually exclusive. In fact, I found that 5.2% of the well points were in duplicate locations. Many others (especially the multi-head pads), are located adjacent



to each other and slightly off-set. This opens potential for double counting of the spatial extent. Using informed GIS processing, the double counting potential is eliminated.

• Not all well sites are created.

There appears to be no program in place to ground truth the well data set. It is cumulative, so a well from the 1950's is the same as a well from the 1990's from a geometric perspective. It is possible that a well from the 1970's is present in the data set but not on the AVI. The AVI has been given precedence in most circumstances.

• Not all AVI classified as "CIW" has a well site in the well site database.

Polygons classified as "CIW" or in the modifiers as "CL", which did not have a well site from the well data base, were dropped from the well footprint. This eliminated most of the "CL" which were not well sites and probably eliminated some polygons which were classified as "CIW" but were not.

Approach

AVI acquired from Alberta-Pacific Forest Industries on March 8, 2000 was used as a base. Polygons classified as "CIW" or in modifier 1 or 2 as "CL" were extracted and overlayed with the well data set. Only polygons which had a well point in them were retained.

Polygons for the remaining well points were generated via AML at an area of .9770.63 ha. Well points which generated areas which overlapped are not double counted through the inherent topology generation of ArcInfo.

A study area representing the FMU's of interest was supplied by Bryan Oke from Timberline Forest Inventory Consultants. Generated well pads in the FMU areas were only kept if they had a final drill date later than 1984. This accounts for currency shortcomings of the current AVI, but introduces the possibility that some of these well sites do not exist (see note: Not all well sites are created).

The generated well sites were used to create well pad areas for all areas outside of the FMU coverage and the existing AVI data set. There was no date restriction used for these sites.

I have provided a source field in the data set which describes the data used for creation.



Additional

Some areas have a high density of well sites. These cluster areas have some generated sites and some AVI locations. AVI overlapping generated sites have preference. When not mutually exclusive, generated well sites are present as well. There are 5 instances of overlapping generated areas with AVI, in all 5 cases, there are 2 well points in the original dataset which are offset.

Some "CL" areas may not look like they are well sites. In these cases, one or more well sites fell into the "CL" polygon.

I would happy to accommodate any questions you may have with the data provided.

Yours Sincerely,

Jack O'Neill





Appendix VII: Millar Western Regenerated Stand Inventory Documentation



1 RSI Development Overview

Millar Western Forest Products is a coniferous quota holder in L3 and as such is interested in the condition of the conifer harvest blocks. The harvesting history in L3 has generated large amounts of cutovers thus elevating regenerated conifer cutblock condition a significant issue for Millar Western. As a recent quota holder, Millar Western had no inventory that described cutblock condition across the FMA in a form that was suitable to determine growth trajectory and prescribe potential treatments. Alberta Vegetation Inventory (AVI) format was not designed to address regenerated stand condition under about 20 years of age. To address this deficiency, in 1997, Millar Western developed a Regenerated Stand Inventory (RSI) program.

The RSI was designed to provide detailed polygon specific information on cutovers that could be used to describe the current condition, replace or update the AVI polygons and be used to generate appropriate follow-up silviculture treatments. Formalized protocols using AVI certified interpreters were used to maintain AVI consistency and data integrity. The RSI protocol was applied to all cutover blocks harvested in 1994 or earlier in L3J (approximately 16,800 ha) and in the Clearwater River operating area (approximately 3,200 ha).

The process began with stratification of cutover areas into homogenous polygons using AVI standards with the exception that a one hectare minimum polygon size was used. Following the stratification process certified AVI interpreters aircalled each polygon from a helicopter to assign AVI type attributes. The use of aircalls for every polygon addressed the AVI weakness in regenerated stands. A greater accuracy in species, heights and stocking can be determined from aircalls compared to AVI photo-interpretation. Additional information such as stems per hectare ranges, free-to-grow status and four layers were attributed.

Final steps involved digital loading of the spatial and attribute strings, the assignment of SRMS block information and followed by field checks to verify accuracy. A final coverage of the RSI updated areas was created for later incorporation into AVI.

2 Overview of RSI Application in L3 Timber Supply

Regenerated Stand Inventory provides greater accuracy and more up to date information on cutover areas than the L3 AVI. This superior information was incorporated as part of a process to assign strata and age to regenerated conifer areas within the L3J timber supply process. The final phases of the RSI was completed in June of 2001, but the interpretation was completed in the winter of 1998/99. Therefore, up to 4 summers of silvicultural treatments were potentially applied after the RSI interpretation was completed. To capture the impacts of these treatments, information from Millar



Western's Silviculture Information System (SIS) was used to update affected areas. The general rule for incorporating the 2 data sets was that RSI information was used to assign timber supply strata to harvested areas and these strata were modified by a series of rules based on SIS data where treatments were applied after the RSI date (Figure 1).additional



Figure 1. AVI, RSI and SIS data use and integration flow chart.

The line work used to describe the current condition of harvested areas was derived from both RSI and SIS data. AVI information was used to fill missing attribute information such as TPR or pre-harvest species. The end result was that harvested areas could be defined from 3 possible data sources or combinations of sources. Straight RSI, straight SIS, or a combination of RSI modified with SIS. The RSI and SIS data was merged into a single coverage describing the conifer harvest blocks. The resulting coverage was cut into the landbase netdown coverage in a later and separate process. The general rule for landbase creation was RSI replaced AVI and SIS both modified RSI and replaced AVI information. Details on the conifer harvest block update process can be found in <u>Harvest Block Update Process</u>, The Forestry Corp., June 7, 2002.

Prepared by: Ted Gooding – Forestry Corp – January 2003

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Appendix VIII: Results of Sliver Removal Process

Sliver polygon removal polygon statistics

		Before Sliver	· Removal	After Sliver	Removal	% Differen	e
Table Index	A14J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	281,712	973,774	205,101	973,774	-27.19%	na
1.b	Average Area	na	54.17	na	69.84	na	28.94%
1.c	Polygon Area Classes						
1.c1	0 - 1	162,479	31,369	85,568	30,082	47.34%	4.10%
1.c2	1 – 5	72,318	184,289	72,542	184,710	-0.31%	-0.23%
1.c3	5 - 10	24,812	174,064	24,864	174,420	-0.21%	-0.20%
1.c4	10 - 25	15,959	242,291	15,978	242,581	-0.12%	-0.12%
1.c5	25 - 50	4,225	144,073	4229	144,211	-0.09%	-0.10%
1.c6	50 - 100	1,374	92,242	1375	92,314	-0.07%	-0.08%
1.c7	> 100	545	105,446	545	105,457	0.00%	-0.01%
	Sub-section-total	281,712	973,774	205,101	973,774	27.19%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	49,185	163,711	36,319	163,730	26.16%	-0.01%
2.b	Deciduous / Coniferous	8,837	22,959	6,465	22,956	26.84%	0.01%
2.c	Coniferous / Deciduous	7,780	19,472	5,602	19,468	27.99%	0.02%
2.d	Coniferous	162,071	625,318	123,300	625,291	23.92%	0.00%
2.e	Non-Forested	53,839	142,313	33,415	142,329	37.94%	-0.01%
	Section-total	281,712	973,774	205,101	973,774	27.19%	0.00%

Sliver polygon removal polygon statistics

		Before Sliver	Removal	After Sliver F	Removal	% Difference	
Table Index	A5J FMU	Count (#)	Count (#) Area (ha)		Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	342,912	1,139,773	259,352	1,139,773	-24.37%	na
1.b	Average Area	na	51	na	66	na	29.81%
1.c	Polygon Area Classes						
1.c1	0 - 1	189,921	42,854	105,959	41,320	-44.21%	-3.58%
1.c2	1 – 5	99,312	245,951	99,658	246,668	0.35%	0.29%
1.c3	5 - 10	29,059	202,967	29,082	203,141	0.08%	0.09%
1.c4	10 - 25	18,034	271,306	18,061	271,685	0.15%	0.14%
1.c5	25-50	4,467	151,542	4,473	151,757	0.13%	0.14%
1.c6	50 - 100	1,498	101,384	1,498	101,408	0.00%	0.02%
1.c7	> 100	621	123,769	621	123,794	0.00%	0.02%
	Sub-section-total	342,912	1,139,773	259,352	1,139,773	-24.37%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	77,525	266,369	58,527	266,403	-24.51%	0.01%
2.b	Deciduous / Coniferous	11,810	31,385	9,105	31,381	-22.90%	-0.01%
2.c	Coniferous / Deciduous	10,255	26,562	7,771	26,560	-24.22%	-0.01%
2.d	Coniferous	187,348	647,052	145,260	647,011	-22.47%	-0.01%
2.e	Non-Forested	<u>5</u> 5,904	168,402	38,646	168,415	-30.87%	0.01%
	Section-total	342,842	1,139,769	259,309	1,139,769	-24.36%	0.00%

		Before Sl	iver	After Sliv	ver		
		Removal		Removal		% Differe	ence
Table Index	S7J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	215,271	334,065	131,022	334,065	-39.14%	na
1.b	Average Area	na	9.97	na	14.43	na	44.68%
1.c	Polygon Area Classes						
1.c1	0 - 1	153,594	27,077	69,123	26,285	-55.00%	2.93%
1.c2	1 – 5	45,921	106,191	46,104	106,576	-0.40%	-0.36%
1.c3	5 - 10	9,625	66,828	9,653	67,025	-0.29%	-0.29%
1.c4	10 - 25	4,940	73,045	4,949	73,179	-0.18%	-0.18%
1.c5	25 - 50	922	30,608	924	30,676	-0.22%	-0.22%
1.c6	50 - 100	211	14,281	211	14,286	0.00%	-0.04%
1.c7	> 100	58	16,034	58	16,037	0.00%	-0.02%
	Sub-section-total	215,271	334,065	131,022	334,065	-39.14%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	50,406	75,493	30,361	75,520	-39.77%	0.04%
2.b	Deciduous / Coniferous	,	,	,	,		
		7,495	8,592	4,237	8,586	-43.47%	-0.07%
2.c	Coniferous / Deciduous	6 6 4 5	7 272	2 740	7 266	12 600/	0.000/
2 d	Coniferous	110.029	1,372	5,748 72,400	1,300	-43.00%	-0.08%
2.u 2.e	Non-Forestad	30 797	181,845 60 763	73,490 19 186	60 788	-38.72%	-0.02%
2.0	Section total	215.271	334,065	131.022	334.065	-39.14%	0.0470

		Before Sl	iver	After Sliv	ver		
		Removal		Removal		% Differe	ence
Table Index	L2J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	237,080	303,715	119,803	303,715	-49.47%	na
1.b	Average Area	na	6.89	na	12.04	na	74.66%
1.c	Polygon Area Classes						
1.c1	0 - 1	183,844	24,427	66,313	23,540	-63.93%	-3.63%
1.c2	1 - 5	38,937	90,164	39,149	90,584	0.54%	0.47%
1.c3	5 - 10	8,744	61,004	8,775	61,233	0.35%	0.38%
1.c4	10 - 25	4,470	65,917	4,481	66,118	0.25%	0.30%
1.c5	25 - 50	832	27,927	832	27,951	0.00%	0.09%
1.c6	50 - 100	206	13,237	206	13,245	0.00%	0.06%
1.c7	> 100	47	21,040	47	21,043	0.00%	0.01%
	Sub-section-total	237,080	303,715	119,803	303,715	-49.47%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	72,625	74,967	33,497	74,974	-53.88%	0.01%
2.b	Deciduous / Coniferous	,	,	,	,		
		11,678	9,856	4,790	9,856	-58.98%	0.00%
2.c	Coniferous / Deciduous	12 (42	11.000	5 200	11.000	(1.000/	0.010/
2 d	Coniferous	13,042	151.000	5,309	11,000	-01.08%	0.01%
∠.u	Connerous	108,051	151,009	59,807	150,999	-44.65%	-0.01%
2.e	Non-Forested	51,084	56,884	16,400	36,886	-4/.24%	0.00%

		Before Sl	iver	After Sliv	ver		
		Removal		Removal		% Differe	ence
Table Index	L3J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	408,914	588,573	212,670	588,573	-47.99%	na
1.b	Average Area	na	8.72	na	15.26	na	74.99%
1.c	Polygon Area Classes						
1.c1	0 - 1	311,636	41,537	114,980	40,046	-63.10%	-3.59%
1.c2	1 – 5	69,280	162,038	69,623	162,727	0.50%	0.43%
1.c3	5 - 10	15,976	111,329	16,018	111,628	0.26%	0.27%
1.c4	10 - 25	9,202	137,795	9,224	138,107	0.24%	0.23%
1.c5	25 - 50	2,066	69,646	2068	69,667	0.10%	0.03%
1.c6	50 - 100	575	37,695	578	37,858	0.52%	0.43%
1.c7	> 100	179	28,535	179	28,540	0.00%	0.02%
	Sub-section-total	408,914	588,573	212,670	588,573	-47.99%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	75,401	62,723	27,678	62,719	-63.29%	-0.01%
2.b	Deciduous / Coniferous	23,687	18,523	9,241	18,516	-60.99%	-0.03%
2.c	Coniferous / Deciduous	20,747	18,476	8,323	18,481	-59.88%	0.03%
2.d	Coniferous	227,278	409,718	137,625	409,713	-39.45%	0.00%
2.e	Non-Forested	61,801	79,134	29,803	79,145	-51.78%	0.01%
	Section-total	408,914	588,573	212,670	588,573	-47.99%	0.00%

		Before Sl	iver	After Sliv	ver		
		Removal		Removal		% Differe	ence
Table Index	L8J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	59,594	126,136	40,697	126,136	-31.71%	na
1.b	Average Area	na	4.20	na	6.15	na	46.44%
1.c	Polygon Area Classes						
1.c1	0 - 1	39,403	7,161	20,452	6,920	-48.10%	-3.36%
1.c2	1 – 5	13,602	33,165	13,636	33,221	0.25%	0.17%
1.c3	5 - 10	3,775	26,317	3,793	26,439	0.48%	0.46%
1.c4	10 - 25	2,237	33,303	2,238	33,328	0.04%	0.08%
1.c5	25-50	441	14,636	441	14,620	0.00%	-0.11%
1.c6	50 - 100	110	7,182	111	7,235	0.91%	0.73%
1.c7	> 100	26	4,372	26	4,373	0.00%	0.02%
	Sub-section-total	59,594	126,136	40,697	126,136	-31.71%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	14,338	30,120	9,537	30,124	-33.48%	0.01%
2.b	Deciduous / Coniferous	<u> </u>	, -	- ,	,		
		1,573	2,506	1,125	2,506	-28.48%	-0.01%
2.c	Coniferous / Deciduous	1 201	2 4 4 4	020	2 4 4 4	27 400/	0.020/
2 d	Coniferous	1,281	2,444	930	2,444	-27.40%	0.02%
2.u	Connerous	30,665	70,141	22,242	70,136	-27.47%	-0.01%
2.e	Non-Forested	11,737	20,925	6,863	20,925	-41.53%	0.00%

		Before Sli	iver	After Sliv	ver		
		Removal I		Removal		% Differ	ence
Table Index	L11J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	570,818	1,047,763	376,725	1,047,763	-34.00%	na
1.b	Average Area	32	32.33	47	47.10	na	45.66%
1.c	Polygon Area Classes						
1.c1	0 - 1	386,852	73,610	192,107	71,171	-50.34%	-3.31%
1.c2	1 – 5	134,372	314,183	134,892	315,256	0.39%	0.34%
1.c3	5 - 10	29,616	205,668	29,702	206,213	0.29%	0.27%
1.c4	10-25	15,532	230,524	15,572	231,090	0.26%	0.25%
1.c5	25-50	3,278	110,797	3280	110,819	0.06%	0.02%
1.c6	50 - 100	939	61,317	943	61,541	0.43%	0.37%
1. c 7	> 100	229	51,663	229	51,673	0.00%	0.02%
	Sub-section-total	570,818	1,047,763	376,725	1,047,763	-34.00%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	106,731	174,616	68,351	174,678	-35.96%	0.04%
2.b	Deciduous / Coniferous	14,916	18,151	9,844	18,137	-34.00%	-0.08%
2.c	Coniferous / Deciduous	10,534	11,893	6,531	11,884	-38.00%	-0.07%
2.d	Coniferous	354,558	673,923	239,924	673,854	-32.33%	-0.01%
2.e	Non-Forested	84,079	169,180	52,075	169,209	-38.06%	0.02%
	Section-total	570,818	1,047,763	376,725	1,047,763	-34.00%	0.00%

Sliver polygon removal polygon statistics

		Before Sliver	Removal	After Sliver	· Removal	% Difference	
Table Index	S7J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	106,833	112,895	57,010	112,895	-46.64%	na
1.b	Average Area	na	a 1.06	na	1.98	na	87.39%
1.c	Polygon Area Classes						
1.c1	0 - 1	84,295	5 12,419	34,324	11,935	-59.28%	-3.90%
1.c2	1 – 5	17,373	39,401	17,496	39,643	0.71%	0.62%
1.c3	5 - 10	3,348	3 23,201	3,366	23,320	0.54%	0.51%
1.c4	10 - 25	1,505	5 21,787	1,510	21,850	0.33%	0.29%
1.c5	25 - 50	255	5 8,443	256	8,451	0.39%	0.10%
1.c6	50 - 100	41	2,704	42	2,756	2.44%	1.91%
1.c7	> 100	16	6 4,939	16	4,940	0.00%	0.01%
	Sub-section-total	106,833	112,895	57,010	112,895	-46.64%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	42,309	45,709	21,100	45,747	-50.13%	0.08%
2.b	Deciduous / Coniferous	4,359	3,783	2,113	3,783	-51.53%	0.00%
2.c	Coniferous / Deciduous	4,937	3,401	2,316	3,403	-53.09%	0.03%
2.d	Coniferous	40,757	41,073	23,200	41,047	-43.08%	-0.06%
2.e	Non-Forested	14,471	18,929	8,281	18,915	-42.78%	-0.07%
	Section-total	106,833	112,895	57,010	112,895	-46.64%	0.00%

		Before Sl	iver	After Sliv	ver		
		Removal		Removal		% Differ	ence
Table Index	S11J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	228,635	332,548	154,945	332,548	-32.23%	na
1.b	Average Area	na	8.39	na	12.26	na	46.14%
1.c	Polygon Area Classes						
1.c1	0 - 1	161,547	32,024	87,577	31,058	45.79%	3.02%
1.c2	1 – 5	52,160	119,771	52,393	120,275	-0.45%	-0.42%
1.c3	5 - 10	9,886	68,004	9,922	68,256	-0.36%	-0.37%
1.c4	10-25	4,264	61,877	4,273	62,015	-0.21%	-0.22%
1.c5	25 - 50	606	20,089	607	20,106	-0.17%	-0.08%
1.c6	50 - 100	125	8,328	126	8,382	-0.80%	-0.65%
1.c7	> 100	47	22,456	47	22,456	0.00%	0.00%
	Sub-section-total	228,635	332,548	154,945	332,548	32.23%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	59,687	91,561	40,692	91,624	31.82%	-0.07%
2.b	Deciduous / Coniferous	10,011	13,102	6,950	13,103	30.58%	-0.01%
2.c	Coniferous / Deciduous	6,881	9,408	4,854	9,410	29.46%	-0.02%
2.d	Coniferous	122,621	158,174	84,102	158,126	31.41%	0.03%
2.e	No Sp1	29,435	60,302	18,347	60,285	37.67%	0.03%
	Section-total	228,635	332,548	154,945	332,548	32.23%	0.00%

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Sliver polygon removal polygon statistics

		Before Sliver	Removal	After Sliver H	Removal	% Difference	1
Table Index	S18J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	259,760	538,138	149,305	538,138	-42.52%	na
1.b	Average Area	na	10.82 l	na	18.11	na	67.31%
1.c	Polygon Area Classes						
1.c1	0 - 1	184,729	26,327	74,055	25,398	-59.91%	-3.53%
1.c2	1 – 5	49,287	120,075	49,461	120,438	0.35%	0.30%
1.c3	5 - 10	14,222	99,859	14,245	100,018	0.16%	0.16%
1.c4	10 - 25	8,536	128,686	8,555	128,963	0.22%	0.21%
1.c5	25 - 50	2,077	70,952	2,078	70,961	0.05%	0.01%
1.c6	50 - 100	694	46,706	696	46,821	0.29%	0.25%
1.c7	> 100	215	45,533	215	45,539	0.00%	0.01%
	Sub-section-total	259,760	538,138	149,305	538,138	-42.52%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	72,304	125,689	40,838	125,707	-43.52%	0.01%
2.b	Deciduous / Coniferous	14,092	19,814	7,338	19,814	-47.93%	0.00%
2.c	Coniferous / Deciduous	16,134	20,141	7,398	20,142	-54.15%	0.01%
2.d	Coniferous	114,622	280,628	70,792	280,626	-38.24%	0.00%
2.e	Non-Forested	42,608	91,863	22,939	91,846	-46.16%	-0.02%
	Section-total	259,760	538,136	149,305	538,136	-42.52%	0.00%

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		Before Sl	iver	After Sliv	/er		
		Removal		Removal		% Differ	ence
Table Index	S12-S13J FMU	Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	293,508	803,548	220,679	803,548	-24.81%	na
1.b	Average Area	na	2.74	na	3.64	na	33.00%
1.c	Polygon Area Classes						
1.c1	0 - 1	172,985	38,362	99,877	37,230	-42.26%	-2.95%
1.c2	1 – 5	82,104	197,810	82,319	198,240	0.26%	0.22%
1.c3	5 - 10	21,081	147,014	21,122	147,264	0.19%	0.17%
1.c4	10 - 25	12,780	193,154	12,799	193,421	0.15%	0.14%
1.c5	25 - 50	3,286	111,690	3289	111,791	0.09%	0.09%
1.c6	50 - 100	985	66,202	986	66,276	0.10%	0.11%
1.c7	> 100	287	49,316	287	49,326	0.00%	0.02%
	Sub-section-total	293,508	803,548	220,679	803,548	-24.81%	0.00%
	2 Area By Broad Cover Group						
2.a	Deciduous	69,301	195,474	53,133	195,525	-23.33%	0.03%
2.b	Deciduous / Coniferous	8,281	17,721	6,530	17,716	-21.14%	-0.03%
2.c	Coniferous / Deciduous	6,061	12,249	4,752	12,247	-21.60%	-0.01%
2.d	Coniferous	162,763	462,368	124,415	462,326	-23.56%	-0.01%
2.e	Non-Forested	47,102	115,736	31,849	115,733	-32.38%	0.00%
	Section-total	293,508	803,548	220,679	803,548	-24.81%	0.00%

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Appendix IX: AVI Netdown Database Data Dictionary



	2003 AVI Netdown Database	Database Name	
ALBERTA PACIFIC	(Version 3.0)	FMU_gis	<u>F Br</u> est Inveniory Consultants

Originator:	Created by Timberline Forest Inventory Consultants.	
Point of	For further information contact	Glen Foley
Contact:		Timberline Forest Inventory Consultants.
		Phone: (780) 425-8826
		Dave Cheyne
		Alberta-Pacific Forest Industries Inc
		Phone: (780) 525-8261
Format of	Arc Info / Visual Fox Pro	
Data		

Description	
Theme	Alberta Vegetation Inventory (AVI) Attribute Data; 2003 Netdown
Keywords:	Attributes
Abstract:	The AVI attribute data describes the contents of the AVI forest polygons
	captured through photo interpretation and field checks. Also
	incorporated is the additional information integrated throughout the
	2003 netdown process.
Purpose:	To provide a complete data directory structure.
Supplemental	Information presented in these tables are directly associated with
Info:	Alberta Pacific's 2003 netdown document.
Cross	Database contains several of the AVI items as well as other redefined
Reference:	items required in the netdown procedure.
Place	Alberta-Pacific Forest Industries Inc. Timberline Forest Inventory
Keywords:	Consultants; Forest Management Area (FMA); 2003 netdown.



Table Index	Defined Item Name	Туре	Width	Decimal
1	AREA	Numeric	20	5
2	LINK_KEY	Numeric	11	0
3	POLY_NUM	Numeric	10	0
4	AP_OPER	Character	10	0
5	FMUJ	Character	4	0
6	PNT	Character	80	0
7	HARVESTABL	Character	3	0
8	PNT1	Character	12	0
9	HARV1	Character	12	0
10	PNT2	Character	12	0
11	HARV2	Character	12	0
12	PNT3	Character	12	0
13	HARV3	Character	12	0
14	PROTECT	Character	6	0
15	NSR	Character	4	0
16	PUNUM	Character	6	0
17	ENTRYYEAR	Numeric	4	0
18	OIL_AP	Character	9	0
19	OIL_GOV	Character	3	0
20	WBUF	Numeric	2	0
21	OIL	Character	3	0
22	PRI_LND	Character	3	0
23	PER_PRI	Numeric	6	2
24	IRP	Character	3	0
25	PSP	Character	3	0
26	SLOPE	Character	5	0
27	FIRE	Character	5	0
28	FIRE_YEAR	Numeric	4	0
29	FIRE2002	Character	5	0
30	MOF	Character	3	0
31	GRAZING	Character	5	0
32	ABO_RES	Character	5	0
33	ECO_RES	Character	5	0
34	PARK	Character	3	0
35	CARIBOU	Character	10	0
36	MOOSE	Character	10	0
37	SEASON	Character	3	0
38	Q_HOLDER	Numeric	2	0
39	Q_CC_LB	Character	2	0
40	Q_CC_YR	Numeric	4	0
41	Q_OPU	Character	16	0
42	SOURCE	Character	15	0

Entity and Attribute Information







Table Index	Defined Item Name	Туре	Width	Decimal
43	YEAR CUT	Numeric	4	0
44	RSTRATA	Character	10	0
45	AVI CC	Character	16	0
46	G_CC_LB	Character	3	0
47	G_CC_YR	Numeric	4	0
48	AVI_YR	Numeric	4	0
49	AVI_LB	Character	4	0
50	F	Character	2	0
51	MU	Numeric	2	0
52	MGR	Character	2	0
53	OPUNIT	Character	2	0
54	MOIST_REG	Character	1	0
55	DENSITY	Character	1	0
56	HEIGHT	Numeric	2	0
57	SP1	Character	2	0
58	SP1_PER	Numeric	2	0
59	SP2	Character	2	0
60	SP2_PER	Numeric	2	0
61	SP3	Character	2	0
62	SP3_PER	Numeric	2	0
63	SP4	Character	2	0
64	SP4_PER	Numeric	2	0
65	SP5	Character	2	0
66	SP5_PER	Numeric	2	0
67	STRUC	Character	1	0
68	STRUC_VAL	Numeric	2	0
69	ORIGIN	Numeric	4	0
70	TPR	Character	1	0
71	INITIALS	Character	2	0
72	NFL	Character	3	0
73	NFL_PER	Numeric	2	0
74	NAT_NON	Character	3	0
75	ANTH_VEG	Character	3	0
76	ANTH_NON	Character	3	0
77	MOD1	Character	2	0
78	MOD1_EXT	Numeric	1	0
79	MOD1_YR	Numeric	4	0
80	MOD2	Character	2	0
81	MOD2_EXT	Numeric	1	0
82	MOD2_YR	Numeric	4	0
83	DATA	Character	1	0
84	DATA_YR	Numeric	4	0
85	UMOIST_REG	Character	1	0
86	UDENSITY	Character	1	0
87	UHEIGHT	Numeric	2	0





Table Index	Defined Item Name	Туре	Width	Decimal
88	USP1	Character	2	0
89	USP1 PER	Numeric	2	0
90	USP2	Character	2	0
91	USP2_PER	Numeric	2	0
92	USP3	Character	2	0
93	USP3 PER	Numeric	2	0
94	USP4	Character	2	0
95	USP4 PER	Numeric	2	0
96	USP5	Character	2	0
97	USP5_PER	Numeric	2	0
98	USTRUC	Character	1	0
99	USTRUC_VAL	Numeric	2	0
100	UORIGIN	Numeric	4	0
101	UTPR	Character	1	0
102	UINITIALS	Character	2	0
103	UNFL	Character	3	0
104	UNFL_PER	Numeric	2	0
105	UNAT_NON	Character	3	0
106	UANTH_VEG	Character	3	0
107	UANTH_NON	Character	3	0
108	UMOD1	Character	2	0
109	UMOD1_EXT	Numeric	1	0
110	UMOD1_YR	Numeric	4	0
111	UMOD2	Character	2	0
112	UMOD2_EXT	Numeric	1	0
113	UMOD2_YR	Numeric	4	0
114	UDATA	Character	1	0
115	UDATA_YR	Numeric	4	0
116	FMU	Character	6	0
117	DENSITY_PE	Numeric	3	0
118	DECIMAL_HT	Numeric	2	0
119	STEMS_HA	Numeric	5	0
120	MOIST_CODE	Numeric	2	0
121	MOD3	Character	2	0
122	MOD3_EXT	Numeric	2	0
123	MOD3_YR	Numeric	4	0
124	INT_TPR	Character	1	0
125	UDENSITY_P	Numeric	3	0
126	UDECIMAL_H	Numeric	2	0
127	USTEMS_HA	Numeric	5	0
128	UMOIST_COD	Numeric	2	0
129	UMOD3	Character	2	0
130	UMOD3_EXT	Numeric	2	0
131	UMOD3_YR	Numeric	4	0
132	UINT TPR	Character	1	0





Table Index	Defined Item Name	Туре	Width	Decimal
133	CON	Numeric	11	0
134	DEC	Numeric	11	0
135	CGRP	Character	10	0
136	UCON	Numeric	11	0
137	UDEC	Numeric	11	0
138	UCGRP	Character	10	0
139	LEADCON	Character	10	0
140	ULEADCON	Character	10	0
141	SECCON	Character	10	0
142	USECCON	Character	10	0
143	ST_NUM	Numeric	11	0
144	UST_NUM	Numeric	11	0
145	NET_ST_NUM	Numeric	11	0
146	STRATA	Character	10	0
147	USTRATA	Character	10	0
148	NET_STRATA	Character	12	0
149	NET_DEN	Character	6	0
150	STATE	Character	6	0
151	USTATE	Character	6	0
152	NET_STATE	Character	6	0
153	ST_USED	Character	6	0
154	NHA	Numeric	18	6
155	PRIHA	Numeric	18	6
156	EX1	Character	10	0
157	OEX2	Character	10	0
158	UEX2	Character	10	0
159	EX2	Character	10	0
160	EX3	Character	10	0
161	HORZHA	Numeric	8	6
162	LANDBASE	Character	5	0
163	TOWNSHIP	Character	9	0
164	NET_SEASON	Character	6	0
165	NET_INVENT	Character	5	0
166	PLAN_UNIT	Character	9	0
167	CURR_AGE	Numeric	11	0
168	P_AGE	Numeric	11	0
169	UCURR_AGE	Numeric	11	0
170	UP_AGE	Numeric	11	0
171	NET_P_AGE	Numeric	11	0
172	CC_YR	Numeric	11	0
173	CC_LB	Character	10	0
174	HAR_COV	Numeric	11	0
175	ISOL_FLAG	Numeric	11	0
176	NET_LABEL	Character	75	0
177	SW_SPH	Numeric	18	6





Table Index	Defined Item Name	Туре	Width	Decimal
178	DU_LEADCON	Character	2	0
179	NET_DU	Character	1	0
180	NET_CGRP	Character	3	0

1. AREA – GIS	1. AREA – GIS Area Field	
Code	Description	
######	Area in m ²	

2. LINK_KEY – Primary key used to join spatial coverages with database files.		
Code	Description	
######	Unique Key	

3. POLY_NUM – Alberta-Pacific AVI Unique Polygon Identifier.	
Code	Description
######	Township, Range, Meridian and Polygon Number

4. AP_OPER – Alberta-Pacific Operating Unit.		
Code	Description	
XXX	Operating unit	

5. FMUJ – Alberta-Pacific Forest Management Unit.	
Code	Description
XXX	FMU Code (a1, a2, a3, a4, etc)

6. PNT – Protected Notation.	
Code	Description
PNT#####	PNT number – Stringing overlapping PNTs together

7. HARVESTABL – Protective Notation Harvest Status.	
Code	Description
NO	PNT is Not Harvestable
(())	PNT is Potentially Harvestable and/or No PNT Status

8. PNT1 – First Protective Notation.		
Code	Description	
PNT#####	PNT number of first PNT	

9. HARV1 – First Protective Notation Harvest Status.	
Code	Description
YES	PNT is Harvestable
Maybe (Y)	Likely the PNT is Harvestable



Maybe (N)	Likely the PNT is Not Harvestable
NO	PNT is Not Harvestable

10. PNT2 – Second Protective Notation.	
Code	Description
PNT#####	PNT number of second PNT where two or more overlap

11. HARV2 – Second Protective Notation Harvest Status.	
Code	Description
YES	PNT is Harvestable
Maybe (Y)	Likely the PNT is Harvestable
Maybe (N)	Likely the PNT is Not Harvestable
NO	PNT is Not Harvestable

12. PNT3 – Third Protective Notation.	
Code	Description
PNT#####	PNT number of third PNT where three overlap

13. HARV3 – Third Protective Notation Harvest Status.	
Code	Description
YES	PNT is Harvestable
Maybe (Y)	Likely the PNT is Harvestable
Maybe (N)	Likely the PNT is Not Harvestable
NO	PNT is Not Harvestable

14. PROTECT – Protected areas.	
Code	Description
(())	Null value
LIEGE	Liege
BOREAL	Boreal Sites
RIVBRK	River Breaks
NOMATE	Nominated

15. NSR – Natural Sub-Region.	
Code	Description
BFCM	Boreal forest – Central Mixedwood
BFDM	Boreal forest – Dry Mixedwood
BFSA	Boreal forest – Sub Arctic
BFBH	Boreal forest – Boreal Highlands
FHLF	Foothills – Lower Foothills
FHUF	Foothills – Upper Foothills
CSAP	Canadian Shield







16. PUNUM – Alberta Pacific Planning Unit Number.		
Code	Description	
XXXXXX	Six digit planning unit number	

17. ENTRYYEAR – Year of Entry; Planning Unit	
Code	Description
#####	Year

18. OIL_AP- Proposed Oil Sands Deletions Identified By Alberta-Pacific	
Code	Description
(())	Null value
2001-2006	Developments expected to go ahead with next 5 years
2007-2011	Developments expected to go ahead in 5 to 10 years
2012-2016	Developments expected to go ahead in 10 to 15 years
out	Area already developed

19. OIL_GOV – Potential Oil Sands Deletion Area Identified By Alberta Gov SRD	
Code	Description
(())	Null value
gov	Inside potential development area

20. WBUF – Water Buffer.	
Code	Description
0	Null value
2	Internal polygons (polygons surrounded by water buffers)
3	Ground rule buffers (lakes, large/small permanent)

21. OIL – Oil and Gas Activity.	
Code	Description
(())	Null value
OIL	Oils and gas activity. (e.g. gasline, pipeline, access road, oil pad)

22. PRI_LND– Private land identifier.	
Code	Description
(())	Null value
PRI	Private land identified

23. PER_PRI– Private land reduction	
Code	Description
0	Null value
#	Number indicates the percentage reduction to be applied.







24. IRP– Big Bend Integrated Resource Plan: Restricted Harvesting Buffers		
Code	Description	
(())	Null value	
IRP	Inside buffer	

25. PSP – Permanent sample plot buffer.	
Code	Description
(())	Null value
PSP	Inside PSP buffer

26. SLOPE – Slope greater than 45%	
Code	Description
(())	Slope < 45%
SLOPE	Slope > 45%

27. FIRE – Fire update.	
Code	Description
(())	Null value
FIRE	Fire has occurred since last inventory update

28. FIRE_YEAR – Fire Year.		
Code	Description	
(())	Null value	
####	The year the fire occurred	

29. FIRE2002 – Fire update for the 2002 Season.		
Code	Description	
(())	Null value	
FIREX	Fire has occurred in 2002	

30. MOF – Maintain our Forest Blocks.	
Code	Description
(())	Null value
MOF	Area designated as MOF

31. GRAZING – Grazing Depositions.		
Code	Description	
(())	Null value	
GRAZE	Grazing Deposition	




32. ABO_RES – Aboriginal Reserve	
Code	Description
(())	Null value
ABRES	Aboriginal Reserve

33. ECO_RES – Ecological Reserve	
Code	Description
(())	Null value
ECRES	Ecological Reserve

34. PARK – Parks, natural and wilderness areas.	
Code	Description
(())	Null value
ER	Ecological Reserve
NP	National Park
NA	Natural Area
PP	Provincial Park
WA	Wilderness Area
WP	Wilderness Park

35. CARIBOU – Caribou Zones.	
Code	Description
(())	Null value
CARIBOU	Caribou habitat

36. MOOSE – Moose Zones.	
Code	Description
(())	Null value
MOOSE	Moose habitat

37. SEASON – Summer Ground Classification.	
Code	Description
(())	Null value
SUM	Area designated as summer ground

38. Q_HOLDER – Quota Holders Existing Cutblocks.	
Code	Description
0	Null value
1	Millar cutblocks
2	Vanderwell cutblocks
3	Alberta Plywood cutblocks
4	MTU cutblocks





39. Q_CC_LB – Quota Holders Cutblock Landbase Designation.		
Code	Description	
(())	Null value	
"D"	Deciduous Strata	
"C"	Coniferous Strata	

40. Q_CC_YR – Quota Holders Existing Cutblock Harvest Year		
Code	Description	
####	Year in which the cut block was harvested.	

41. Q_OPU – Quota Holders Operating Unit	
Code	Description
0	Null

42. SOURCE – Source of Quota Holder Cutblock Information	
Code	Description
(())	Null
"TEXT"	Text describing source of cutblock information.

43. CUT_YEAR – Harvest Year for RSI/SIS Cutblocks Identified by Millar Western		
Code	Description	
0	Null value	
####	Year in which the cut block was harvested.	

44. RSTRATA – Unique Code for RSI/SIS Stratum Identified by Millar Western	
Code	Description
AW	Deciduous Type – Natural
AW-S-O	Deciduous Type – Natural
AW-S-C-S	Deciduous Type – Natural
AW-PJ	Deciduous Type – Natural
AWS-S	Deciduous/Coniferous Types - Natural
AWPJ	Deciduous/Coniferous Types - Natural
SAW-S	Coniferous/Deciduous Types - Natural
SW-C-FM	Coniferous Types - Natural
SW-C-G	Coniferous Types - Natural
SW-O	Coniferous Types - Natural
SB-C-FM	Coniferous Types - Natural
SB-C-G	Coniferous Types - Natural
SB-O	Coniferous Types - Natural
PJ-C-G	Coniferous Types - Natural
PJ-O-C-FM	Coniferous Types - Natural
AW-U-FM	Deciduous Type with understory – Natural
AW-U-G	Deciduous Type with understory – Natural
AW-S-U-S	Deciduous Type with understory – Natural





45. AVI_CC – Existing Cutblocks Identified in AVI	
Code	Description
0	Null value
1	Area designated harvested in AVI

46. G_CC_LB – GDP Landbase	
Code	Description
(())	Null value
"D"	Deciduous
"C"	Coniferous

47. G_CC_YR – GDP Cutblock Harvest Year	
Code	Description
####	Year in which the cutblock was harvested

48. AVI_YR – GDP Cutblock Harvest Year	
Code	Description
####	Year in which the cutblock was harvested

49. AVI_LB – GDP Landbase	
Code	Description
(())	Null value
"D"	Deciduous
"С"	Coniferous

50. F – Provincial forest.	
Code	Description
L	Lac La Biche
А	Athabasca
S	Slave Lake

51. MU – Management Unit.	
Code	Description
XX	Management unit code

52. MGR – Manager.	
Code	Description
	Default
J	Alberta Pacific





53. OPUNIT – Operating Unit (FMU Subdivisions)	
Code	Description
#	Operating unit

54. MOIST_REG – <i>Moisture_regime:</i> A general description of the moisture quality.	
Code	Description
d	Dry – rapidly drained substratum
m	Mesic – moderately well drained substratum
W	Wet – poorly drained to flooded where the water table is usually at or near
	the surface, or the land is covered by shallow water.
a	Aquatic – permanent deep water areas where the pre-dominant growth
	medium is water and the vegetation is characterized by hydrophytic
	vegetation (emergent) that grows in or at the surface of the water.

55. DENSITY *Crown_closure:* Percentage area covered by projection of the tree crowns to the ground.

Code	Description
А	6-30%
В	31 - 50%
С	51 - 70%
D	71 – 100%

56. HEIGHT – <i>Stand_height or Shrub_height:</i> Average height of the leading species of		
trees or plants (shrub) in meters.		
Code	Description	
1 – 40	Stand height is measured and recorded to the nearest metre.	

57. SP1 – Speci	57. SP1 – <i>Species type 1:</i> – Dominant species based on crown closure.	
Code	Description	
А	Aspen	
Aw	Trembling Aspen – Populus tremuloides	
Bw	Paper (white) Birch – Betula papyrifera	
Fa	Alpine Fir – Abies lasiocarpa	
Fb	Balsam Fir – Abies balsamea	
Fd	Douglas Fir – Pseudotsuga menziesii	
La	Alpine Larch – Larix lyallii	
Lt	Tamarack – Larix laricina	
Lw	Western Larch – Larix occidentalis	
Р	Pine	
Pa	White-bark Pine – Pinus albicaulis	
Pb	Balsam Poplar – Populus balsamifera	
Pf	Limber Pine – Pinus flexilis	





Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

58. SP1_PER – Species 1 Percentage within stand based on crown closure to closest 10%.	
Code	Description
0-10	0-100 percent

59. SP2 – <i>Species_type 2:</i> – Second dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

60. SP2_PER -	Species 2 Percentage within stand based on crown closure to closest 10%.
Code	Description
0-5	0-50 percent

61. SP3 – <i>Species_type 3:</i> – Third dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii





Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

62. SP3_PER -	Species 3 Percentage within stand based on crown closure to closest 10%.
Code	Description
0 – 3	0-30 percent

63. SP4 – <i>Species type 4:</i> Fourth dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

64. SP4_PER – Species 4 Percentage within stand based on crown closure to closest 10%.	
Code	Description
0-2	0-20 percent

65. SP5 – Species_type 5: Fifth dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides





Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Ра	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
P1	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

66. SP5_PER – Species 5 Percentage within stand based on crown closure to closest 10%.	
Code	Description
0-2	0-20 percent

67. STRUC – <i>Layer_type:</i> Classification of stand structure.	
Code	Description
BLANK	single story or a non-forest polygon
С	Complex – Complex structured stands are those where multiple layers
	form a pattern or mosaic that cannot be described using the criteria for
	multi-layer or horizontal structured stands. These stands are often
	patterns of different heights that are intermixed throughout the stand.
Н	Horizontal – Indicates a horizontal relationship between the sub-stands
	instead of a two-story or complex structure. Patches of different species
	of trees are two small to classify as a single stand are amalgamated
	together as one.
М	Multi-layer canopy – Stands in which two or more distinct layers are
	visible. Most have only two layers. Generally, the two layers are
	intermixed, i.e., when viewed vertically, one layer is above the other. The
	average height of the top layer must differ from the average height of the
	lower layer by 3m or more.

68. STRUC_VA	L – Layer Modifier: Percentage area of stand covered by Horizontal	
layer, or difference between the midpoint of upper layer to midpoint of lower layer for		
complex stands.		
Code	Description	

0-9

0-90 percent



69. ORIGIN – Year of the stand origin.		
Code	Description	
0 – 9999	Year	

70. TPR – Potential timber productivity of a stand based height and age of dominant and co-dominant trees of the leading species

Code	Description
F	Fair
G	Good
М	Medium
U	Unproductive

71. INITIALS – Interpreter_initials: Initials of person that interpreted the stand.	
Code	Description
AA-ZZ	Any 2 alphanumeric characters that represent the interpreter's initials.

72. NFL – Non forest code: A layer where the major component is naturally non-forested.	
A layer containing $\geq 6\%$ plant cover but $< 6\%$ tree cover.	
Code	Description
BR	Bryophyte – mosses and/or bryophytes
HF	Herbaceous (Forbs) - natural herbaceous plant cover dominated by forbs
	(not graminoids). Forbs included aquatic plants living in shallow water.
HG	Herbaceous (Grassland) - natural meadow and grassland and/or sedges,
	graminoids predominant.
SC	closed shrub (crowns of most shrubs interlocking)
SO	open shrub (crowns of most shrubs not touching each other)

73. NFL_PER-	Shrub_closure: Shrub crown closure within the stand to the nearest %10.	
Attribute information is required when the NFL is SO or SC.		
Code	Description	
0 – 10	0-100 percent	

74. NAT_NON	<i>– Nat_non_veg_code:</i> Natural cover types that have < 6% plant cover.
Code	Description
NMB	Recent Burn including snag modifier and snag density (to date no
	recovery of vegetation) if present.
NMC	Cutbank
NMR	Rock Barren
NMS	Sand
NWF	Flooded – areas periodically inundated with water
NWI	Permanent Ice/Snow
NWL	Seasonally thaws: Lakes, ponds
NWR	River



75. ANTH_VEG – <i>Anth veg code:</i> A vegetated stand where the vegetation has been	
influenced by m	an, usually in areas that have been planted with cultivated species.
Code	Description
CA	Annual Crops – cultivated farmland, or farmland planted with annual crop
	species.
CIP	Pipelines, transmission lines, airstrips, microwave tower sites that have
	been seeded to perennial grasses.
CIW	Geophysical activities including well sites that have been seeded to
	perennial grasses.
СР	Perennial Forage Crops – reclaimed lands, farmland planted with
	cultivated grasses and/or legumes. These lands are used primarily for
	grazing livestock or may have the cultivated species harvested at least
	once a year. These lands contain $< 10\%$ crown closure of woody cover
	(shrubs). These lands also included pastures that have been irrigated or
	otherwise treated to improve their productivity.
CPR	Rough Pasture – similar to improved pasture (CP) with > 10% woody
	cover. Normally, this pasture has not been irrigated, fertilized or
	cultivated to improve productivity. An open or closed shrub notation
	must be added to indicate the height, extent and type of shrub cover.

76. ANTH_NON – Anth non veg code: A layer where the major component is	
anthropogenic non-vegetated created by man.	
Code	Description
AIE	Peat Extractions
AIF	Farmsteads
AIG	Gravel pits including borrow pits
AIH	Permanent right of way; roads, highways, railroads, dam sites, reservoirs.
AII	Industrial (plant sites), sewage lagoons.
AIM	Surface mines
ASC	Cities, towns, villages, hamlets
ASR	Ribbon development, rural recreation, rural stores and isolated housing
	subdivisions, cottages, rural residential, acreage owners, (agriculture is
	not the primary source of income).

77. MOD1 – <i>Modifier_code:</i> A condition or treatment providing additional information	
about the origin or condition of the cover type.	
Code	Description
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill





IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

78. MOD1_EX	Γ – <i>Modifier_extent:</i> Percentage based indication of what portion of stand
by crown closur	e is affected by the condition or treatment.
Code	Description
0-5	0-50 percent

79. MOD1 YR – <i>Modifier</i> year – Year that condition or treatment took place where	
known.	
Code	Description
0 – 9999	Year

80. MOD2 – <i>Modifier code:</i> A condition or treatment providing additional information	
about the origin or condition of the cover type.	
Code	Description
BT	Broken tops
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall





81. MOD2_EXT – *Modifier_extent:* Percentage based indication of what portion of stand by crown closure is affected by the condition or treatment.

Code	Description
0-5	0-50 percent

82. MOD2 YR – <i>Modifier year</i> : Year that condition or treatment took place where	
known.	
Code	Description
0 – 9999	Year

83. DATA – <i>Existing_data_code:</i> Data gathered from other existing sources that aided in	
the interpretation of the stand.	
Code	Description
А	Air call
С	Cruise data
F	Interpreter plot
Ι	Interpreted TPR
L	Large-scale photography
Р	PSP
S	Supplementary photography
V	Volume plot

84. DATA1_YR – <i>Existing data year:</i> Year associated with external data source.	
Code	Description
0 – 9999	Year

85. UMOIST_REG – <i>Moisture_regime:</i> A general description of the moisture quality.	
Code	Description
d	Dry – rapidly drained substratum
m	Mesic – moderately well drained substratum
W	Wet – poorly drained to flooded where the water table is usually at or near
	the surface, or the land is covered by shallow water.
a	Aquatic – permanent deep water areas where the pre-dominant growth
	medium is water and the vegetation is characterized by hydrophytic
	vegetation (emergent) that grows in or at the surface of the water.

86. UDENSITY <i>Crown_closure:</i> Percentage of ground area covered by the vertical	
projection of the tree crowns to the ground.	
Description	
6-30%	
31 - 50%	
51 - 70%	
71 - 100%	





87. UHEIGHT – *Stand_height or Shrub_height:* Average height of the leading species of trees or plants (shrub) in meters.

Code	Description
1 - 40	Stand height is interpreted or determined through field measurements and
	recorded to the nearest metre.

88. USP1 – *Species_type 1:* – Dominant species based on crown closure of the overstory

layer.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Ра	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

 89. USP1_PER - Species 1 Percentage within stand based on crown closure to closest 10%.

 Code
 Description

 0-10
 0-100 percent

90. USP2 – <i>Species_type 2:</i> – Second dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis





Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

91. USP2_PER – Species 2 Percentage within stand based on crown closure to closest	
10%.	
Code	Description
0-5	0-50 percent

92. USP3 – Species type 3: – Third dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Рј	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

93. USP3_PER	- Species 3 Percentage within stand based on crown closure to closest
10%.	
Code	Description
0-3	0-30 percent

94. USP4 – Species type 4: Fourth dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides





Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

95. USP4_PER – Species 4 Percentage within stand based on crown closure to closest	
10%.	
Code	Description
0-2	0-20 percent

96. USP5 – Species type 5: Fifth dominant species based on crown closure.	
Code	Description
А	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Ра	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
P1	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca





97. USP5_PER – Species 5 Percentage within stand based on crown closure to closest	
10%.	
Code	Description
0 - 2	0-20 percent

98. USTRUC –	98. USTRUC – <i>Layer type:</i> Classification of stand structure.	
Code	Description	
BLANK	single story or a non-forest polygon	
С	Complex – Complex structured stands are those where multiple layers	
	form a pattern or mosaic that cannot be described using the criteria for	
	multi-layer or horizontal structured stands. These stands are often	
	patterns of different heights that are intermixed throughout the stand.	
Н	Horizontal – Indicates a horizontal relationship between the sub-stands	
	instead of a two-story or complex structure. Patches of different species	
	of trees are two small to classify as a single stand are amalgamated	
	together as one.	
М	Multi-layer canopy – Stands in which two or more distinct layers are	
	visible. Most have only two layers. Generally, the two layers are	
	intermixed, i.e., when viewed vertically, one layer is above the other. The	
	average height of the top layer must differ from the average height of the	
	lower layer by 3m or more.	

99. USTRUC_VAL – *Layer_Modifier:* Percentage area of stand covered by Horizontal layer, or difference between the midpoint of upper layer to midpoint of lower layer for complex stands.

Code	Description
0-9	0-90 percent

100. UORIGIN – Year of the stand origin.	
Code	Description
0 – 9999	Year

101. UTPR – Potential timber productivity of a stand based height and age of dominant and co-dominant trees of the leading species

Code	Description
F	Fair
G	Good
М	Medium
U	Unproductive

102. UINITIALS – <i>Interpreter_initials:</i> Initials of person that interpreted the stand.	
Code	Description
AA-ZZ	Any 2 alphanumeric characters that represent the interpreter's initials.







103. UNFL - Non_forest_code: A layer where the major component is naturally non-	
forested. A layer containing $\geq 6\%$ plant cover but $< 6\%$ tree cover.	
Code	Description
BR	Bryophyte – mosses and/or bryophytes
HF	Herbaceous (Forbs) - natural herbaceous plant cover dominated by forbs
	(not graminoids). Forbs included aquatic plants living in shallow water.
HG	Herbaceous (Grassland) - natural meadow and grassland and/or sedges,
	graminoids predominant.
SC	closed shrub (crowns of most shrubs interlocking)
SO	open shrub (crowns of most shrubs not touching each other)

104. UNFL_PER- Shrub closure: Shrub crown closure within the stand to the nearest		
10%. Attribute information is required when the NFL is SO or SC.		
Code	Description	
0 - 10	0-100 percent	

105. UNAT_NON – <i>Nat non veg code:</i> Natural cover types that have < 6% plant cover.	
Code	Description
NMB	Recent Burn including snag modifier and snag density (to date no
	recovery of vegetation) if present.
NMC	Cutbank
NMR	Rock Barren
NMS	Sand
NWF	Flooded – areas periodically inundated with water
NWI	Permanent Ice/Snow
NWL	Seasonally thaws: Lakes, ponds
NWR	River



106. UANTH_	VEG – <i>Anth_veg_code:</i> A vegetated stand where the vegetation has been
influenced by man, usually in areas that have been planted with cultivated species.	
Code	Description
CA	Annual Crops – cultivated farmland, or farmland planted with annual crop
	species.
CIP	Pipelines, transmission lines, airstrips, microwave tower sites that have
	been seeded to perennial grasses.
CIW	Geophysical activities including well sites that have been seeded to
	perennial grasses.
СР	Perennial Forage Crops – reclaimed lands, farmland planted with
	cultivated grasses and/or legumes. These lands are used primarily for
	grazing livestock or may have the cultivated species harvested at least
	once a year. These lands contain $< 10\%$ crown closure of woody cover
	(shrubs). These lands also included pastures that have been irrigated or
	otherwise treated to improve their productivity.
CPR	Rough Pasture – similar to improved pasture (CP) with > 10% woody
	cover. Normally, this pasture has not been irrigated, fertilized or
	cultivated to improve productivity. An open or closed shrub notation
	must be added to indicate the height, extent and type of shrub cover.

107. UANTH_NON – Anth non veg code: A layer where the major component is	
anthropogenic non-vegetated created by man.	
Code	Description
AIE	Peat Extractions
AIF	Farmsteads
AIG	Gravel pits including borrow pits
AIH	Permanent right of way; roads, highways, railroads, dam sites, reservoirs.
AII	Industrial (plant sites), sewage lagoons.
AIM	Surface mines
ASC	Cities, towns, villages, hamlets
ASR	Ribbon development, rural recreation, rural stores and isolated housing
	subdivisions, cottages, rural residential, acreage owners, (agriculture is
	not the primary source of income).

108. UMOD1 – <i>Modifier_code:</i> A condition or treatment providing additional information	
about the origin or condition of the cover type.	
Code	Description
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill





IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

109. UMOD1_I	EXT – <i>Modifier_extent:</i> Percentage based indication of what portion of	
stand by crown closure is affected by the condition or treatment.		
Code	Description	
0-5	0-50 percent	

110. UMOD1_YR – <i>Modifier year</i> – Year that condition or treatment took place where	
known.	
Code	Description
0 – 9999	Year

111. UMOD2 – <i>Modifier code:</i> A condition or treatment providing additional information	
about the origin or condition of the cover type.	
Code	Description
BT	Broken tops
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall





112. UMOD2_EXT – <i>Modifier extent:</i> Percentage based indication of what portion of		
stand by crown closure is affected by the condition or treatment.		
Code	Description	
0-5	0-50 percent	

113. UMOD2 YR – <i>Modifier year</i> : Year that condition or treatment took place where	
known.	
Code	Description
0 – 9999	Year

114. UDATA – <i>Existing data code:</i> Data gathered from other existing sources that aided	
in the interpretation of the stand.	
Code	Description
А	Air call
С	Cruise data
F	Interpreter plot
Ι	Interpreted TPR
L	Large-scale photography
Р	PSP
S	Supplementary photography
V	Volume plot

115. UDATA_	R – <i>Existing_data_year:</i> Year associated with external data source.
Code	Description
0 – 9999	Year

116. FMU – Alberta-Pacific Forest Management Unit / Operating Compartment Code.		
Code	Description	
XXX	FMU/Operating Compartment Code (a1a, a1b, a1c, etc)	

117. DENSITY_PE - Density Percentage	
Code	Description
1 – 100%	Percentage of ground area covered by the vertical projection of the tree crowns to the ground.





118. DECIMAL_HT – *Decimal Height*: height expressed to one tenth of a meter. Applicable only if the vegetated layer is less than 1 meter in height. If it is a forest vegetated layer, a data source of "A" or "F" (see documentation for "AVI Database", Table Name "avi21") must be specified as well.

Code	Description
0-9	Tenth of a meter.

119. STEMS_H	IA – Stems per Hectare
Code	Description
1 – 99999	Estimated total of stems per hectare.

120. MOIST_CODE – A general description of the moisture quality.	
Code	Description
0	Very Xeric - (moist_reg = d)
1	$Xeric - (moist_reg = d)$
2	Sub Xeric - (moist_reg = d)
3	Submesic - (moist_reg = m)
4	Mesic - (moist_reg = m)
5	Subhydric - (moist_reg = m)
6	Hydric - (moist_reg = w)
7	Subhydric - (moist_reg = w)
8	Hydric - (moist_reg = a)

121. MOD3 – <i>Modifier_code</i> : A condition or treatment providing additional information	
about the origin or condition of the cover type.	
Code	Description
BT	Broken tops
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall





122. MOD3_EXT – <i>Modifier_extent:</i> Indication of what portion of stand by crown		
closure is affected by the condition or treatment.		
Code	Description	Description: MOD3 =
		SN
		Snag Density (per 100
		ha)
0	Nil -	< 5
1	Light – 1% - 25% loss of crown closure or land	5 – 99
	area affected	
2	Moderate -26% - 50% loss of crown closure or	100 - 299
	land area affected	
3	Heavy – 51% - 75% loss of crown closure or	300 - 499
	land area affected	
4	Severe – 76% - 94% loss of crown closure or	500 - 700
	land area affected	
5	Entire – entire closure or land area is affected	700

 123. MOD3_YR - Modifier_year - Year that condition or treatment took place where known.

 Code
 Description

 0 - 9999
 Year

124. INT_TPR – Interpreted TPR – Potential timber productivity of a stand based		
on height and age of dominant and co-dominant trees of the leading species.		
AVI 2.2 Standards		
Code Description		
I Interpreted		

125. UDENSITY_P – Density Percentage (understorey)		
Code	Description	
1 – 100%	Percentage of ground area covered by the vertical projection of the understorey tree crowns to the ground.	

126. UDECIMAL_H – Decimal Height – Collect to one tenth of a meter for stands less		
than 5 meters and for stands that have been identified as either planted or shrubs.		
(understorey)		
Code Description		
0-9	Tenth of a meter.	

127. USTEMS	HA – Stems per Hectare (understorey)
Code	Description
1 – 99999	Estimated total of understorey stems per hectare.





128. UMOIST_COD – A general description of the moisture quality. (understorey)	
Code	Description
0	Very Xeric - (moist_reg = d)
1	$Xeric - (moist_reg = d)$
2	Sub Xeric - (moist_reg = d)
3	Submesic - (moist_reg = m)
4	Mesic - (moist_reg = m)
5	Subhydric - (moist_reg = m)
6	Hydric - (moist_reg = w)
7	Subhydric - (moist_reg = w)
8	Hydric - (moist_reg = a)

129. UMOD3 – Modifier_code: A condition or treatment providing additional information		
about the origin or condition of the cover type. (understorey)		
Code	Description	
BT	Broken tops	
BU	Burn/partial burn	
CC	Clearcut/partial cut	
CL	Clearing	
DI	Disease	
DT	Discoloured/dead tops	
GR	Developed for grazing domestic livestock	
IK	Insect kill	
IR	Irrigated	
PL	Planted and/or seeded	
SC	Seedbed prepared	
SI	Site Improved	
SN	Snags	
ST	Scattered timber	
TH	Thinned	
UK	Unknown kill	
WE	Weather	
WF	Windfall	

130. UMOD3_EXT – <i>Modifier_extent</i> : Indication of what portion of stand by crown			
closure is affect	closure is affected by the condition or treatment.		
Code	Description	Description: UMOD3 =	
		Snag Density (per 100	
		ha)	
0	Nil -	< 5	
1	Light – 1% - 25% loss of crown closure or	5 – 99	
	land area affected		
2	Moderate – 26% - 50% loss of crown closure	100 - 299	
	or land area affected		





3	Heavy – 51% - 75% loss of crown closure or land area affected	300 - 499
4	Severe – 76% - 94% loss of crown closure or land area affected	500 - 700
5	Entire – entire closure or land area is affected	700

131. UMOD3_YR - Modifier_year - Year that condition or treatment took place where
known. (understorey)CodeDescription0-9999Year

 132. UINT_TPR - Interpreted TPR - Potential timber productivity of a stand based on height and age of dominant and co-dominant trees of the leading species. (understorey) AVI 2.2 Standards

 Code
 Description

 I
 Interpreted

133. CON – Percentage coniferous crown closure in overstory.		
Code	Description	
##	Sum of conifer crown closure percentages in overstory (0-10)	

134. DEC – Percentage deciduous crown closure in overstory.		
Code	Description	
##	Sum of deciduous crown closure percentages in overstory	

135. CGRP – Cover group assigned based upon crown closure percentages in overstory (0-	
10)	
Code	Description
D	Deciduous
С	Coniferous
DC	Deciduous/Coniferous
CD	Coniferous/Deciduous

136. UCON– Percentage coniferous crown closure in understory.	
Code	Description
##	Sum of conifer crown closure percentages in understory (0-10)

137. UDEC – Percentage deciduous crown closure in understory.		
Code	Description	
##	Sum of deciduous crown closure percentages in understory (0-10)	

138. UCGRP– Cover group assigned based upon crown closure percentages in understory		
Code	Description	
D	Deciduous	





С	Coniferous
DC	Deciduous/Coniferous
CD	Coniferous/Deciduous

139. LEADCON – Leading conifer species in overstory layer	
Code	Description
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Ра	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
P1	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
(())	No Conifer Species

140. ULEADCON – Leading conifer species in understory layer	
Code	Description
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
(())	No Conifer Species



141. SECCON – Second leading conifer species.	
Code	Description
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
(())	No Conifer Species

142. USECCON – Second leading conifer species.	
Code	Description
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
(())	No Conifer Species

143. ST_NUM – Unique number identifier associated overstory stratum.	
Code	Description
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural



4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

144. UST_NUM – Unique number identifier associated understory stratum.	
Code	Description
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural



13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

145. NET_ST	NUM – Unique number identifier associated stratum selected to manage
Code	Description
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural





22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

146. STRATA – Unique code for overstory stratum.		
Code	Description	
Aw-comp	Deciduous Type – Natural	
Aw-S-O	Deciduous Type – Natural	
Aw-S-C-N	Deciduous Type – Natural	
Aw-S-C-S	Deciduous Type – Natural	
Aw-Pj	Deciduous Type – Natural	
AwS-N	Deciduous/Coniferous Types - Natural	
AwS-S	Deciduous/Coniferous Types - Natural	
MxPj	Coniferous/Deciduous Types - Natural	
SAw-N	Coniferous/Deciduous Types - Natural	
SAw-S	Coniferous/Deciduous Types - Natural	
Lt	Coniferous Types - Natural	
Sw-O	Coniferous Types - Natural	
Sw-C-FM	Coniferous Types - Natural	
Sw-C-G	Coniferous Types - Natural	
Sb-O	Coniferous Types - Natural	
Sb-C-FM	Coniferous Types - Natural	
Sb-C-G	Coniferous Types - Natural	
Pj-O-C-FM	Coniferous Types - Natural	
Pj-C-G	Coniferous Types - Natural	
Aw-U-FM	Deciduous Type with understory – Natural	
Aw-U-G	Deciduous Type with understory – Natural	
Aw-S-U-N	Deciduous Type with understory – Natural	
Aw-S-U-S	Deciduous Type with understory – Natural	
NFCC	Non forested cutblocks	
NFALL	Non forested natural disturbance	
NFV	Non-forested Vegetated	
AV	Anthropogenic Vegetated	
ANV	Anthropogenic Non-vegetated	
NNV	Naturally Non-vegetated	



147. USTRATA – Unique code for understory stratum.		
Code	Description	
Aw-comp	Deciduous Type – Natural	
Aw-S-O	Deciduous Type – Natural	
Aw-S-C-N	Deciduous Type – Natural	
Aw-S-C-S	Deciduous Type – Natural	
Aw-Pj	Deciduous Type – Natural	
AwS-N	Deciduous/Coniferous Types - Natural	
AwS-S	Deciduous/Coniferous Types - Natural	
MxPj	Coniferous/Deciduous Types - Natural	
SAw-N	Coniferous/Deciduous Types - Natural	
SAw-S	Coniferous/Deciduous Types - Natural	
Lt	Coniferous Types - Natural	
Sw-O	Coniferous Types - Natural	
Sw-C-FM	Coniferous Types - Natural	
Sw-C-G	Coniferous Types - Natural	
Sb-O	Coniferous Types - Natural	
Sb-C-FM	Coniferous Types - Natural	
Sb-C-G	Coniferous Types - Natural	
Pj-O-C-FM	Coniferous Types - Natural	
Pj-C-G	Coniferous Types - Natural	
Aw-U-FM	Deciduous Type with understory – Natural	
Aw-U-G	Deciduous Type with understory – Natural	
Aw-S-U-N	Deciduous Type with understory – Natural	
Aw-S-U-S	Deciduous Type with understory – Natural	
NFCC	Non forested cutblocks	
NFALL	Non forested natural disturbance	
NFV	Non-forested Vegetated	
AV	Anthropogenic Vegetated	
ANV	Anthropogenic Non-vegetated	
NNV	Naturally Non-vegetated	

148. NET_STRATA – Unique code for layer selected to manage -overstory or understory	
stratum	
Code	Description
Aw-comp	Deciduous Type – Natural
Aw-S-O	Deciduous Type – Natural
Aw-S-C-N	Deciduous Type – Natural
Aw-S-C-S	Deciduous Type – Natural
Aw-Pj	Deciduous Type – Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural







SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory – Natural
Aw-U-G	Deciduous Type with understory – Natural
Aw-S-U-N	Deciduous Type with understory – Natural
Aw-S-U-S	Deciduous Type with understory – Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

149. NET_DEN- Current forest state associated with overstory		
Code	Description	
А	6-30%	
В	31 - 50%	
С	51 - 70%	
D	71 - 100%	
Х	No density	

150. STATE – Current forest state associated with overstory		
Code	Description	
NAT	Natural	
DELAY	Regen delay	
ADEN	'A' Density	
NSR	Non sufficiently restocked	
NONE	Non forested	

151. USTATE – Current forest state associated with understory		
Code	Description	
NAT	Natural	
DELAY	Regen delay	
ADEN	'A' Density	
NSR	Not sufficiently restocked	
NONE	Non forested	





152. NET_STATE – Current forest state associated with layer selected to manage		
Code	Description	
NAT	Natural	
DELAY	Regen delay	
ADEN	'A' Density	
NSR	Non sufficiently restocked	
NONE	Non forested	

153. ST_USED – Flag identifying the layer selected to manage	
Code	Description
OVER	Strata assignment based on overstory layer
UNDER	Strata assignment based on understory layer
(())	Non-forested

154. NHA – Net area in hectares.	
Code	Description
####	Area in hectares designated as [area] – [priha] – [horzha]

155. PRIHA – Private land reduction area in hectares.	
Code	Description
####	Area in hectares

156. EX1– Exclusions that prohibits timber harvesting.	
Code	Description
LIEGE	Liege Protected Area
PARK	Provincial Parks and Natural Areas
PNT	Protected Notations
PSP	Permanent Sample Plot Buffers (100m)
AB_RES	Aboriginal Reserve
GRA-RES	Grazing Reserve
EC_RES	Ecological Reserve
DRIV-BRK	River Breaks (Deciduous Only)
CRIV-BRK	River Breaks (Coniferous Only)
BOREAL	Boreal Sites
NOEXCL	No exclusion

157. OEX2– Overstory inoperable/isolated stands exclusions.	
Code	Description
SLOPE	Steep Slopes
PPRDall	Potentially Productive (burns, windfall, snags, etc)
PPRDcc	Potentially Productive (pre 91 cutblocks with no valid AVI forest label)
ISO	Isolated Stands
NFV	Non-Forest Vegetated





AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
(())	No exclusion

158. UEX2– Understory inoperable/isolated stands exclusions.	
Code	Description
SLOPE	Steep Slopes
PPRDall	Potentially Productive (burns, windfall, snags, etc)
PPRDcc	Potentially Productive (pre 91 cutblocks with no valid AVI forest label)
ISO	Isolated Stands
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
(())	No exclusion

159. EX2 – Net inoperable/isolated stands exclusions based on selected layer.	
Code	Description
SLOPE	Steep Slopes
PPRDall	Potentially Productive (burns, windfall, snags, etc)
PPRDcc	Potentially Productive (pre 91 cutblocks with no valid AVI forest label)
ISO	Isolated Stands
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
NOEXCL	No exclusion



160. EX3 – Watercourse buffer exclusions.	
Code	Description
BUF	Watercourse Buffers – No Harvesting (lakes 100m, large permanent
	streams 60m, Small permanent streams 30m)
D15BUF	Watercourse Buffers – No Harvesting deciduous only (intermittent 15m)
HARVBUF	Conifer inside 15m intermittent watercourse buffer – Open for harvesting
RESBUF	Big Bend IRP Lake Buffers flagging area of restricted harvesting activity
NOEXCL	No exclusion

161. HORZHA – Horizontal stand area reduction in hectares.	
Code	Description
####	Area in hectares

162. LANDBASE – Landbase assignment code.	
Code	Description
CLB	Coniferous
DLB	Deciduous
XLB	No landbase

163. TOWNSHIP – Township grid location.	
Code	Description
XXXXXXXX	Township, Range, Meridian

164. NET_SEASON– Net summer ground based on layer used.	
Code	Description
(())	Area designated as summer ground
win	Area designated as winter ground

165. NET_INVENT – Inventory Location.	
Code	Description
"j"	Inside FMU
"non"	Outside FMU

166. PLAN_UNIT- Planning Unit.		
Code	Description	
XXXXX	Planning unit number	
non	No planning unit	

167. CURR_AGE – Current age in years for overstory layer		
Code	Description	
####	Stands current age: 2000 - [origin]	





168. P_AGE– Period age (5 year intervals) for overstory layer		
Code	Description	
####	Stands period age (5 year intervals	

169. UCURR_AGE – Current age in years for understory layer		
Code	Description	
####	Stands current age: 2000 - [uorigin]	

170. UP_AGE– Period age (5 year intervals) for understory layer		
Code	Description	
####	Stands period age (5 year intervals	

171. NET_PERIOD_AGE– Period age (5 year intervals) for layer selected to manage		
Code	Description	
####	Stands period age (5 year intervals	

172. CC_YR – Harvest Years for existing cutblocks		
Code	Description	
####	Cut year	

173. – CC_LB – Landbase designation for existing cutblocks.		
Code	Description	
С	Coniferous	
D	Deciduous	

174. HAR_COV– Harvestable Landbase		
Code	Description	
0	Non-harvestable or non-productive	
1	Open to harvesting, productive forest land	

175. ISOL_FLAG– Isolated Stand Flag		
Code	Description	
0	Not Isolated	
1	Isolated	

176. NET_LABEL – Netdown classification label.		
Code	Description	
0 AREA OUTSIDE FMA	See netdown doc.	
1.a Provincial Park	See netdown doc.	
11.a Forested Provincial Park	See netdown doc.	
1.b Aboriginal Reserve	See netdown doc.	
11.b Forested Aboriginal Reserve	See netdown doc.	
1.c Ecological Reserve	See netdown doc.	





11.c Forested Ecological Reserve	See netdown doc.
1.c2 PNTs	See netdown doc.
11.c2 Forested PNTs	See netdown doc.
1.d PSP Buffers	See netdown doc.
11.d Forested PSP Buffers	See netdown doc.
1.e Liege Area	See netdown doc.
11.e Forested Liege Area	See netdown doc.
1.f River Breaks	See netdown doc.
11.f Forested River Breaks	See netdown doc.
1.g Private Land Reduction	See netdown doc.
2.a Fire	See netdown doc.
2.b Oil and Gas	See netdown doc.
3.a Slope	See netdown doc.
33.a Slope	See netdown doc.
3.b Isolated Harvestable stands	See netdown doc.
3.c Non-Forested (CC)	See netdown doc.
3.d Non-Forested Natural Disturbance	See netdown doc.
3.e Non-Forested Vegetated	See netdown doc.
3.f Anthropogenic Vegetated	See netdown doc.
3.g Anthropogenic Non-Vegetated	See netdown doc.
3.h Naturally Non-Vegetated	See netdown doc.
3.i Non-Commercial TPR	See netdown doc.
3.j Non-Commercial Species	See netdown doc.
3.k Non-Commercial Stand Density	See netdown doc.
3.1 Non-Commercial Site Index	See netdown doc.
3.m Horizontal Stand Adjustment	See netdown doc.
4.a Rivers	See netdown doc.
4.b Lakes	See netdown doc.
4.c Flooded Areas	See netdown doc.
5.a Water Course Buffer Productive	See netdown doc.
55.a Water Course Buffer Non-Productive	See netdown doc.
6.a Harvestable Deciduous	See netdown doc.
6.b Harvestable DC	See netdown doc.
6.c Harvestable CD	See netdown doc.
6.d Harvestable Coniferous	See netdown doc.
6.e Harvestable Deciduous with Coniferous Understory	See netdown doc.

177. SW_SPH– Understory Conifer (Sw, Sb & Pj) Stems Per Hectare of Valid Deciduous		
with Conifer Understory Stands		
Code	Description	
0	Null	
###	Combined understory conifer (Sw, Sb & Pj) stems/ha	







178. DU_LEADCON – Leading Understory Confier for Valid Deciduous with Confier			
Understory Stands			
Code	Description		
Fa	Alpine Fir – Abies lasiocarpa		
Fb	Balsam Fir – Abies balsamea		
Fd	Douglas Fir – Pseudotsuga menziesii		
La	Alpine Larch – Larix lyallii		
Lt	Tamarack – Larix laricina		
Lw	Western Larch – Larix occidentalis		
Р	Pine		
Pa	White-bark Pine – Pinus albicaulis		
Pb	Balsam Poplar – Populus balsamifera		
Pf	Limber Pine – Pinus flexilis		
Pj	Jack Pine – Pinus banksiana		
Pl	Lodgepole Pine – Pinus contorta		
Sb	Black Spruce – Picea mariana		
Se	Engelmann Spruce – Picea engelmannii		
Sw	White Spruce – Picea glauca		
(())	No Conifer Species		

179. NET_DU –Flag for Deciduous with Conifer Understory Stands with Greater than 600		
Stems/Ha of Conifer (Sw, Sb & Pj) Understory and Lead Conifer is Sw, Sb or Pj		
Code	Description	
Х	Not a harvestable DU type	
Y	Combined understory conifer (Sw, Sb & Pj) ≥ 600 stems/ha	
Ν	Combined understory conifer (Sw, Sb & Pj) < 600 stems/ha	

180. NET_CGRP – Net cover group assigned based upon crown closure percents		
Code	Description	
Х	No Cover Group	
D	Deciduous	
DC	Deciduous/Coniferous	
CD	Coniferous/ Deciduous	
Sw	Coniferous = White Spruce Leading	
Sb	Coniferous = Black Spruce Leading	
Рј	Coniferous = Pine Leading	






Appendix X: Phase 3 Landbase Database Dictionary



1	2003 Phase 3 Inventory Netdown Database	Database Name	
ALBERTA PACIFIC	(version 3.0	FMU_p3gis	<u>Egrest Inventory Consultants</u>

Originator:	Created by Timberline Forest Inventory Consultants.	
Point of Contact:	For further information contact	Glen Foley Timberline Forest Inventory Consultants. Phone: (780) 425-8826 Dave Cheyne Alberta-Pacific Forest Products Inc Phone: (780) 525-8000
Format of Data	Visual Fox Pro	

Description	
Theme	Phase 3 Inventory (PH3) Attribute Data; 2003 Netdown Attributes
Keywords:	
Abstract:	The PH3 attribute data describes the contents of the PH3 forest polygons
Purpose:	To provide a complete data directory structure.
Supplemental	Information presented in these tables are directly associated with Alberta
Info:	Pacific's 2003 netdown document-Appendix I.
Cross	Database contains several of the PH3 items as well as other redefined items
Reference:	required in the netdown procedure.
Place	Alberta-Pacific Forest Products Inc. Timberline Forest Inventory Consultants;
Keywords:	Forest Management Area (FMA); 2003 netdown.



Table Index	Defined Item Name	Туре	Width	Decimal
1	LOCKEDBY	Numeric	6	0
2	DATESTMP	Character	8	0
3	CORP_R	Character	3	0
4	F	Character	1	0
5	MU	Numeric	2	0
6	MGR	Character	1	0
7	TWP	Numeric	3	0
8	RG	Numeric	2	0
9	Μ	Numeric	1	0
10	PHOTOYR	Numeric	4	0
11	stand	Numeric	4	0
12	А	Character	1	0
13	MCELL	Character	4	0
14	D	Character	1	0
15	Н	Character	1	0
16	S1	Character	2	0
17	S2	Character	2	0
18	S3	Character	2	0
19	S4	Character	2	0
20	С	Character	1	0
21	VSR	Numeric	2	0
22	OG	Numeric	1	0
23	UD	Character	1	0
24	UH	Character	1	0
25	U1	Character	2	0
26	U2	Character	2	0
27	U3	Character	2	0
28	U4	Character	2	0
29	UC	Character	1	0
30	UG	Numeric	1	0
31	S	Character	1	0
32	SP	Character	2	0
33	STS	Character	3	0
34	Z	Numeric	1	0
35	GW	Character	1	0
36	VD	Numeric	1	0
37	WD	Numeric	1	0
38	CD	Numeric	1	0
39	BD	Numeric	1	0

Entity and Attribute Information







Table Index	Defined Item Name	Туре	Width	Decimal
40	ID	Numeric	1	0
41	Т	Character	1	0
42	WATERSHED	Character	9	0
43	ORGN	Numeric	4	0
44	UORGN	Numeric	4	0
45	AREAHA	Numeric	10	1
46	AAC_ID	Character	5	0
47	USER1	Character	2	0
48	USER2	Numeric	2	0
49	USER3	Logical	1	0
50	LB	Numeric	1	0
51	AGEC1	Numeric	3	0
52	DEL	Character	1	0
53	YCLASS	Character	2	0
54	GRD1FACT	Numeric	6	5
55	GRD1	Numeric	15	6
56	GRD2	Numeric	15	6
57	CMPT	Numeric	2	0
58	L	Character	1	0
59	STRAT	Character	4	0
60	STY	Character	2	0
61	NETAREA	Numeric	18	6
62	CON	Integer	4	0
63	DEC	Integer	4	0
64	CGRP	Character	10	0
65	UCON	Integer	4	0
66	UDEC	Integer	4	0
67	UCGRP	Character	10	0
68	LEADCON	Character	10	0
69	ULEADCON	Character	10	0
70	SECCON	Character	10	0
71	USECCON	Character	10	0
72	ST_NUM	Integer	4	0
73	UST_NUM	Integer	4	0
74	NET_ST_NUM	Integer	4	0
75	STRATA	Character	10	0
76	USTRATA	Character	10	0
77	NET_STRATA	Character	12	0
78	NET_DEN	Character	6	0
79	STATE	Character	6	0
80	USTATE	Character	6	0
81	NET_STATE	Character	6	0
82	ST_USED	Character	6	0





Table Index	Defined Item Name	Туре	Width	Decimal
83	AGE	Integer	4	0
84	UAGE	Integer	4	0
85	NHA	Numeric	18	6
86	PRIHA	Numeric	18	6
87	PNTHA	Numeric	18	6
88	EX1	Character	10	0
89	OEX2	Character	10	0
90	UEX2	Character	10	0
91	EX2	Character	10	0
92	EX3	Character	10	0
93	LNDUSE_PCT	Numeric	6	4
94	LNDUSE_RED	Numeric	6	4
95	LANDBASE	Character	5	0
96	TOWNSHIP	Character	5	0
97	NET_SEASON	Character	6	0
98	NET_INVENT	Character	5	0
99	PLAN_UNIT	Integer	4	0
100	LINK_KEY	Numeric	16	0
101	CURR_AGE	Integer	4	0
102	P_AGE	Integer	4	0
103	UCURR_AGE	Integer	4	0
104	UP_AGE	Integer	4	0
105	NET_P_AGE	Integer	4	0
106	NET_LABEL	Character	75	0
107	FMU	Character	6	0





1. LOCKEDBY		
Code	Description	
##	Database Lock Code	

2. DATESTMP		
Code	Description	
	Database Time Stamp	

3. CORP_R	
Code	Description
	Database Code

4. F – Forest	
Code	Description
A	Athabasca
В	Bow
С	Crow
E	Edson
F	Footner Lake
G	Grade Prairie
L	Lac la Biche
Р	Peace River
R	Rocky/Clearwater
S	Slave Lake
W	Whitecourt

5. MU – Management Unit.		
Code	Description	
####	Management unit number	

6. MGR – Manager.		
Code	Description	
XXX	Manager abbreviation	

7. TWP – Township		
Code	Description	
###	Township	

8. RG – Range	
Code	Description
##	Range





9. M – Meridian.		
Code	Description	
#	Meridian	

10. STAND – Stand Number		
Code	Description	
####	Always west of given meridian	

11. A – Stand Alpha		
Code	Description	
XXX	Letter designating subsection of a stand	

12. MCELL – Map Cell		
Code	Description	
XX	Map cell designation	

13. STY – Story level		
Code	Description	
0	Overstory	
U	Understory	

14. D – Overstory Density Class		
Code	Description	
А	6 - 30%	
В	31 – 50%	
С	51 – 70%	
D	71 – 100%	

15. H– Overstory Height Class.		
Code	Description	
0	0 – 6.0 m	
1	6.1 – 12.0 m	
2	12.1 – 18.0 m	
3	18.1 – 24.0 m	
4	24.1 – 30.0 m	
5	> 30.0 m	

16. S1 – Overstory Species 1		
Code	Description	
А	Deciduous	
AW	Trembling aspen	
BR	Brush	
BS	Barren soil	





BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
Р	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

17. S2 – Overstory Species 2	
Code	Description
А	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub





CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
Р	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

18. S3 – Overstory Species 3	
Code	Description
А	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir





FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
Р	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

19. S4 – Overstory Species 4	
Code	Description
А	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg





Р	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
ТМ	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

20. C – Commercialism	
Code	Description
Н	High un-commercial
L	Lumber
R	Round wood
U	Low un-commercial

21. VSR – Volume Sampling Region	
Code	Description
1	Lowland Bow/Crow
2	Lowland Rocky
3	Highland Rocky
4	Centre
5	Northern Foothills
6	Peace
7	Wabasca
8	North East
10	Footner
11	Highland Bow/Crow
12	Special Data

22. OG – First Story Coded Cover Group	
Code	Description
1	Productive coniferous
2	Productive coniferous Mixedwood
3	Productive deciduous Mixedwood
4	Productive deciduous





5	Potentially productive
6	Non-productive forested
7	Non-productive non-forested
8	Water
9	Unclassified

23. UD – Understory Density Class	
Code	Description
А	6 - 30%
В	31 – 50%
С	51 – 70%
D	71 – 100%

24. UH – Understory Height Class	
Code	Description
0	0 – 6.0 m
1	6.1 – 12.0 m
2	12.1 – 18.0 m
3	18.1 – 24.0 m
4	24.1 – 30.0 m
5	> 30.0 m

25. U1 – Understory Species 1		
Code	Description	
А	Deciduous	
AW	Trembling aspen	
BR	Brush	
BS	Barren soil	
BU	Burn	
BW	White birch	
CC	Clear-cut	
CL	Clearing	
CS	Coniferous shrub	
CU	Cultivated	
DS	Deciduous shrub	
FA	Alpine fir	
FB	Balsam fir	
FD	Douglas fir	
FL	Flooded land	
GL	Glacier	
GR	Grass	
IK	Insect kill	
LT	Larch	
OM	Open muskeg	





Р	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
ТМ	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

26. U2 - Understory Species 2		
Code	Description	
А	Deciduous	
AW	Trembling aspen	
BR	Brush	
BS	Barren soil	
BU	Burn	
BW	White birch	
CC	Clear-cut	
CL	Clearing	
CS	Coniferous shrub	
CU	Cultivated	
DS	Deciduous shrub	
FA	Alpine fir	
FB	Balsam fir	
FD	Douglas fir	
FL	Flooded land	
GL	Glacier	
GR	Grass	
IK	Insect kill	
LT	Larch	
OM	Open muskeg	
Р	Pine	
PB	Balsam poplar	
PJ	Jack pine	
PL	Lodgepole pine	
RB	Rock barren	
SA	Sand	



SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall
27. U3 - Unders	story Species 3
Code	Description
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
Р	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine

ΓL	
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
SB SC SE SW TM UC	Black spruce Scarified Engelmann spruce White spruce Treed muskeg Unclassified





VK	Various kill
WA	Water
WF	Windfall

28. U4 - Understory Species 4	
Code	Description
А	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
Р	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall





29. UC – Understory commercialism		
Code	Description	
Н	High un-commercial	
L	Lumber	
R	Round wood	
U	Low un-commercial	

30. UG – Understory Coded Cover Group	
Code	Description
1	Productive coniferous
2	Productive coniferous Mixedwood
3	Productive deciduous Mixedwood
4	Productive deciduous
5	Potentially productive
6	Non-productive forested
7	Non-productive non-forested
8	Water
9	Unclassified

31. S - Site	
Code	Description
G	Good
Μ	Medium
F	Fair

32. SP – Slope	
Code	Description
00 or blank	Slope percent unknown
45	Slope greater than or equal to 45 %

33. STS – Land Status	
Code	Description
First Characte	r
С	Federal agency
E	Environment
F or blank	Forest service (FLW)
G	Energy
Н	Housing and public works
Μ	Municipal affairs
L	Public lands (FLW)
Р	Private holdings
R	Recreation and parks
S	Social development
Т	Transportation





U	Education
Х	Town sites (incorporated)
Second two le	etters identifies type of land holding
СР	Cache Percotte Forest
ER	Ecological reserve
ES	Experimental
FD	Reserved area
FM	Forest management agreement
FO	DTA overlap with FMA
FR	Provisional reserve
FW	Community farm woodlot
GR	Grazing reserve
IR	Indian reserve
LZ	Forest Land Use Zone
MC	Metis colony
MT	Miscellaneous timber use
ND	Air weapons range
PA	Patent
PK	Park
QA	Quota
RA	Recreation area
UA	University of Alberta forest
UN	Unspecified (crown land in "O" units)
WA	Wilderness area
WP	Wildland park

34. Z – ESIP Zone.	
Code	Description
1	Prime protection
2	Critical wildlife
3	Special use
4	General recreation
5	Multiple use
6	Agriculture
7	Industrial
8	Facility
9	Outside

35. GW – Green or White Area		
Code	Description	
G	Green area	
W	White area	







36. VD – Miscellaneous Disturbance Factor	
Code	Description
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

37. WD – Wind Disturbance Factor	
Code	Description
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

38. CD – Cut Disturbance Factor	
Code	Description
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

39. BD – Burn Disturbance Factor	
Code	Description
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

40. ID – Insect and Disease Disturbance Factor		
Code	Description	
1	1 to 25% loss of stand volume vigour	
2	26 to 50% loss of stand volume vigour	
3	51 to 75% loss of stand volume vigour	
4	76% loss of stand volume vigour	

41. T – Treatment Condition	
Code	Description
А	Site improved (fertilization, drainage, etc.)
В	Seedbed prepared (scarification, weed control, etc.)
С	Planted and/or seeded (regardless of success)
D	Thinned
S	Stagnant (not realizing the site's productive potential due to overstocking
	and stagnation)
Т	Terminating (decadent, visible loss of gross volume due to over maturity)





42. WATERSHED – Watershed Basin		
Code	Description	
#####	Basin number	

43. ORGN - Overstory Origin		
Code	Description	
####	Year of origin	

44. UORGN - Understory Origin		
Code	Description	
####	Year of origin	

45. AREAHA – Gross Stand Area (Hectares)		
Code	Description	
###########	Gross Area (Note: one decimal implied)	

46. AAC_ID	
Code	Description
####	Landpro Code

1			
	47.	USER1	

Code Description	47. USERT		
#### Landnra Codo	Code	Description	Τ
	####	Landpro Code	

48. USER2	
Code	Description
####	Landpro Code

49. USER3

49. USER3	
Code	Description
####	Landpro Code

50. LB	
Code	Description
####	Landpro Code

51. AGEC1	
Code	Description
####	Landpro Code

52. DEL	
Code	Description
####	Landpro Code







53. YCLASS	
Code	Description
####	Landpro Code

54. GRD1FAC	
Code	Description
####	Landpro Code

55. GRD1	
Code	Description
####	Landpro Code

56. GRD2	
Code	Description
####	Landpro Code

57. CMPT	
Code	Description
####	Landpro Code

58. L	
Code	Description
####	Landpro Code

59. STRAT	
Code	Description
####	Landpro Code

60. STY	
Code	Description
####	Landpro Code

61. NETAREA	
Code	Description
####	Net Area

62. CON – Percentage coniferous crown closure in overstory.	
Code	Description
##	Sum of conifer crown closure percentages in overstory (0-10)

63. DEC – Percentage deciduous crown closure in overstory.		
Code	Description	
##	Sum of deciduous crown closure percentages in overstory	







64. CGRP – Cover group assigned based upon crown closure percentages in overstory (0-	
10)	
Code	Description
D	Deciduous
С	Coniferous
DC	Deciduous/Coniferous
CD	Coniferous/Deciduous

65. UCON– Percentage coniferous crown closure in understory.		
Code	Description	
##	Sum of conifer crown closure percentages in understory (0-10)	

66. UDEC – Percentage deciduous crown closure in understory.		
Code	Description	
##	Sum of deciduous crown closure percentages in understory (0-10)	

67. UCGRP– Cover group assigned based upon crown closure percentages in understory		
Code	Description	
D	Deciduous	
С	Coniferous	
DC	Deciduous/Coniferous	
CD	Coniferous/Deciduous	

68. LEADCON – Leading conifer species in overstory layer	
Code	Description
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix Iyallii
Lt	Tamarack – Larix Iaricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Ра	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
PI	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
""	No Conifer Species







69. ULEADCON – Leading conifer species in understory layer	
Code	Description
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix Iyallii
Lt	Tamarack – Larix Iaricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
PI	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
ш т	No Conifer Species

70. SECCON – Second leading conifer species.	
Code	Description
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix Iyallii
Lt	Tamarack – Larix Iaricina
Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
PI	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
ш ш	No Conifer Species

71. USECCON – Second leading conifer species.	
Code	Description
Fa	Alpine Fir – Abies Iasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix Iyallii
Lt	Tamarack – Larix Iaricina





Lw	Western Larch – Larix occidentalis
Р	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
PI	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
и п	No Conifer Species

72. ST_NUM – Unique number identifier associated overstory stratum.		
Code	Description	
1	Deciduous Type – Natural	
2	Deciduous Type – Natural	
3	Deciduous Type – Natural	
4	Deciduous Type – Natural	
5	Deciduous Type – Natural	
6	Deciduous Type – Natural	
7	Deciduous Type – Natural	
8	Deciduous/Coniferous Types - Natural	
9	Deciduous/Coniferous Types - Natural	
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural	
11	Coniferous/Deciduous Types - Natural	
12	Coniferous/Deciduous Types - Natural	
13	Coniferous Types - Natural	
14	Coniferous Types - Natural	
15	Coniferous Types - Natural	
16	Coniferous Types - Natural	
17	Coniferous Types - Natural	
18	Coniferous Types - Natural	
19	Coniferous Types - Natural	
20	Coniferous Types - Natural	
21	Coniferous Types - Natural	
22	Deciduous Type with understory – Natural	
23	Deciduous Type with understory – Natural	
24	Deciduous Type with understory – Natural	
25	Deciduous Type with understory – Natural	
200	Non-forested cutblocks	
201	Non-forested natural disturbance	
300	Non-forested Vegetated	
400	Anthropogenic Vegetated	
500	Anthropogenic Non-vegetated	





600	Naturally Non-vegetated
700	Unclassified
	•
73. UST_NU	M – Unique number identifier associated understory stratum.
Code	Description
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

74. NET_ST_NUM – Unique number identifier associated stratum selected to manage		
Code	Description	
1	Deciduous Type – Natural	
2	Deciduous Type – Natural	
3	Deciduous Type – Natural	
4	Deciduous Type – Natural	





5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

75. STRATA – Unique code for overstory stratum.	
Code	Description
Aw-comp	Deciduous Type – Natural
Aw-S-O	Deciduous Type – Natural
Aw-S-C-N	Deciduous Type – Natural
Aw-S-C-S	Deciduous Type – Natural
Aw-Pj	Deciduous Type – Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural





Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory – Natural
Aw-U-G	Deciduous Type with understory – Natural
Aw-S-U-N	Deciduous Type with understory – Natural
Aw-S-U-S	Deciduous Type with understory – Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

76. USTRATA – Unique code for understory stratum.	
Code	Description
Aw-comp	Deciduous Type – Natural
Aw-S-O	Deciduous Type – Natural
Aw-S-C-N	Deciduous Type – Natural
Aw-S-C-S	Deciduous Type – Natural
Aw-Pj	Deciduous Type – Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory – Natural
Aw-U-G	Deciduous Type with understory – Natural
Aw-S-U-N	Deciduous Type with understory – Natural
Aw-S-U-S	Deciduous Type with understory – Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated





AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

77. NET_STRATA –	Unique code for layer selected to manage -overstory or understory
stratum	•
Code	Description
Aw-comp	Deciduous Type – Natural
Aw-S-O	Deciduous Type – Natural
Aw-S-C-N	Deciduous Type – Natural
Aw-S-C-S	Deciduous Type – Natural
Aw-Pj	Deciduous Type – Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory – Natural
Aw-U-G	Deciduous Type with understory – Natural
Aw-S-U-N	Deciduous Type with understory – Natural
Aw-S-U-S	Deciduous Type with understory – Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

78. Net Den– Current forest state associated with overstory		
Code	Description	
А	6 - 30%	
В	31 – 50%	
С	51 – 70%	
D	71 – 100%	
Х	No density	



79. STATE – Unique code for layer selected to manage -overstory or understory density		
Code	Description	
NAT	Natural	
DELAY	Regen delay	
ADEN	'A' Density	
NSR	Non sufficiently restocked	
NONE	Non forested	

80. USTATE – Current forest state associated with understory	
Code	Description
NAT	Natural
DELAY	Regen delay
ADEN	'A' Density
NSR	Non sufficiently restocked
NONE	Non forested

81. NET_STATE – Current forest state associated with layer selected to manage		
Code	Description	
NAT	Natural	
DELAY	Regen delay	
ADEN	'A' Density	
NSR	Non sufficiently restocked	
NONE	Non forested	

82. ST_USED – Flag identifying the layer selected to manage		
Code	Description	
OVER	Strata assignment based on overstory layer	
UNDER	Strata assignment based on understory layer	
	Non-forested	

83. AGE – Overstory age	
Code	Description
0	Added for consistency base on AVI

84. UAGE – Understory age	
Code	Description
0	Added for consistency base on AVI

85. NHA – Net area in hectares.	
Code	Description
####	Area in hectares designated as [area] – [priha] – [horzha]







86. PRIHA – Private land reduction area in hectares.	
Code	Description
####	Added for consistency base on AVI

87. PNTHA – Protective notation land reduction area in hectares.		
Code	Description	
####	Added for consistency base on AVI	

88. EX1– Exclusions that prohibits timber harvesting.	
Code	Description
EC-RES	Ecological Reserve
PARK	Provincial Parks and Natural Areas
PRIVATE	Private Land
GRA-RES	Grazing reserve
AB-RES	Aboriginal reserve
UNCLASS	Unspecified crown land in white area
NOEXCL	No exclusion

89. OEX2– Overstory inoperable/isolated stands exclusions.	
Code	Description
SLOPE	Steep Slopes
NFCC	Potentially Productive (pre 91 cutblocks wit no valid AVI forest label)
NFALL	Potentially Productive (burns, windfall, snags, etc)
UNCL	Unclassed
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
	No exclusion

90. UEX2– Understory inoperable/isolated stands exclusions.	
Code	Description
SLOPE	Steep Slopes
NFCC	Potentially Productive (pre 91 cutblocks wit no valid AVI forest label)
NFALL	Potentially Productive (burns, windfall, snags, etc)
UNCL	Unclassed
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated





UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
ш ш	No exclusion

91. EX2– Net inoperable stands exclusions based on selected layer.	
Code	Description
OIL	Oil and Gas Deletion Areas
SLOPE	Steep Slopes
NFCC	Potentially Productive (pre 91 cutblocks wit no valid AVI forest label)
NFALL	Potentially Productive (burns, windfall, snags, etc)
UNCL	Unclassed
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
NOEXCL	No exclusion

92. EX3 – Watercourse buffer exclusions.		
Code	Description	
NOBUF	No exclusion	

93. LNDUSE_PCT- Percentage reduction to account for oil/gas	
Code	Description
%	Percent removal

94. LNDUSE_RED- Percentage reduction to account for oil/gas		
Code	Description	
###	Hectares removal	

95. LANDBASE – Landbase assignment code.	
Code	Description
CLB	Coniferous
DLB	Deciduous
XLB	No landbase

96. TOWNSHIP- Township grid location.	
Code	Description
XXXXXXX	Township, Range, Meridian





97. NET_SEASON- Net summer ground based on layer used.		
Code	Description	
NUL	Null value	

98. NET_INVENT- Inventory type.	
Code	Description
NON	To keep consistent with AVI netdown procedures

99. PLAN_UNIT- Planning Unit.	
Code	Description
Non/999	No planning unit

100. LINK_KEY – Primary key used to join spatial coverages with database files.	
Code	Description
######	Unique number

101. CURR_AGE – Current age in years for overstory layer	
Code	Description
####	Stands current age: 2000 - [origin]

102. P_AGE- Period age (5 year intervals) for overstory layer		
Code	Description	
####	Stands period age (5 year intervals)	

103. UCURR_AGE – Current age in years for understory layer	
Code	Description
####	Stands current age: 2000 - [uorigin]

104. UP_AGE- Period age (5 year intervals) for understory layer		
Code	Description	
####	Stands period age (5 year intervals)	

105. NET_P_AGE- Period age (5 year intervals) for layer selected to manage		
Code	Description	
####	Stands period age (5 year intervals)	

106. NET_LABEL – Netdown classification label.		
Code	Description	
0 AREA OUTSIDE FMA	See netdown doc.	
1.a Provincial Park	See netdown doc.	
1.b Aboriginal Reserve	See netdown doc.	
1.c Ecological Reserve	See netdown doc.	



1.c2 PNTs	See netdown doc.
1.d PSP Buffers	See netdown doc.
1.e Liege Area	See netdown doc.
1.f River Breaks	See netdown doc.
1.g Private Land	See netdown doc.
11.a Forested Provincial Park	See netdown doc.
11.b Forested Aboriginal Reserve	See netdown doc.
11.c Forested Ecological Reserve	See netdown doc.
11.c2 Forested PNTs	See netdown doc.
11.d Forested PSP Buffers	See netdown doc.
11.e Forested Liege Area	See netdown doc.
11.f Forested River Breaks	See netdown doc.
11.g Forested Private Land	See netdown doc.
2.a Fire	See netdown doc.
2.b Oil and Gas	See netdown doc.
2.c Oil-AP	See netdown doc.
2.d Oil-Gov	See netdown doc.
3.a Slope	See netdown doc.
3.b Isolated Harvestable stands	See netdown doc.
3.c Non-Forested (CC)	See netdown doc.
3.d Non-Forested Natural	See netdown doc.
Disturbance	
3.e Non-Forested Vegetated	See netdown doc.
3.f Anthropogenic Vegetated	See netdown doc.
3.g Anthropogenic Non-Vegetated	See netdown doc.
3.h Naturally Non-Vegetated	See netdown doc.
3.i Non-Commercial TPR	See netdown doc.
3.j Non-Commercial Species	See netdown doc.
3.k Non-Commercial Stand Density	See netdown doc.
3.1 Non-Commercial Site Index	See netdown doc.
3.m Horizontal Stand Adjustment	See netdown doc.
33.a Slope	See netdown doc.
4.a Rivers	See netdown doc.
4.b Lakes	See netdown doc.
4.c Flooded Areas	See netdown doc.
5.a Water Course Buffer Productive	See netdown doc.
55.a Water Course Buffer Non-	See netdown doc.
Productive	
6.a Harvestable Deciduous	See netdown doc.
6.b Harvestable DC	See netdown doc.
6.c Harvestable CD	See netdown doc.
6.d Harvestable Coniferous	See netdown doc.
6.e Harvestable Deciduous with	See netdown doc.
Coniferous Understory	
6.1 M.O.F. Blocks	See netdown doc.





107. FMU – Forest Management Unit	
Code	Description
XX	FMU Code

