



United States
Department of
Agriculture

Forest
Service

Alaska Region
Tongass National Forest

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File Code: 2440-2

Date: September 21, 2009

Dean Orbison
Engineering Manager
City of Sitka
105 Jarvis St.
Sitka, AK 99835

Dear Mr. Orbison,

Attached are the check cruise results for work done by Cascade Appraisers on the Blue Lake Dam expansion project. The check cruise is well within acceptable limits. This check satisfies the requirement of FSH 2400.12, 61.5 as an acceptable maintenance check for Ray Granvall, Jim Miles and Kim McConnell. The check cruise was conducted by district check cruiser Chris Budke and expanded by forest check cruiser Denis Callagher.

Sincerely,

FORREST COLE
Forest Supervisor

attachment



Blue Lake Hydro TS

2409.12_60

Field Measurement Evaluation

Check Cruise Elements	Tolerance plus or minus	Total Possible Right Answers	Number of Wrong Answer	Error Weight	Total Error (b*c)	Percent Correct (1-d/a)*100
		(a)	(b)	(c)	(d)	(e)
1) In/Out Trees	none	146	1	5	5	97
2) Species	none	146		3		100
3) DBH	3%	68	4	1	4	94
4) Height	8%	68	3	1	3	96
5) Defect	10%	204	8	1	8	96
6) Log Grades	none	68	3	1	3	96
Overall%						
Correct						96.3

Overall Percent Correct=Total of (e) / Number of items about which information is checked

Note: To pass this check items 1-4 have at least 80 percent correct and items 5 and 6 must have 85 percent correct. The overall correctness must be 85 percent.

The "Total possible right answers" (a) is the number of trees measured by the check cruiser. For plot or point cruises, the number of 'in/out trees' is the number of trees identified by the check cruiser. For all other elements, it is the number of correctly identified in/out trees.

MAXIMUM ALLOWABLE VARIANCES FOR THE VOLUME

Gross volume	Net volume	Means Abs. Diff
+/-5 percent	+/-10 Percent	Mean absolute difference (20% allowed)

VOLUME SUMMARY								
Species	Gross Volume/MBF			Net Volume/MBI			Percent Defect	
	Check Cruise	Original Cruiser	Percent Diff.	Check Cruiser	Original Cruise	Percent Diff.	Check Cruiser	Orig. Cruise
263 WH	42.16	43.07	2.16%	28.04	28.82	2.78%	33.49	33.09
098 SS	60.58	59.57	-1.67%	53.50	53.27	-0.43%	11.69	10.58
042 AC	0.20	0.20		0.11	0.11		45.00	45.00
242 RC								
Other								
TOTAL	102.94	102.84	-0.10%	81.65	82.20	0.67%	20.68	20.07

CHECK CRUISE RESULTS

Total Gross Volume		Total Net Volume		Mean Abs % Diff		Total Results	
Satisfactory	Unsatis.	Satisfactory	Unsatis.	Satisfact	Unsatis.	Satisfactory	Unsatisfactory
X		X		N/A		X	

Recommendation/Follow-up Action:

This check cruise completed on the Blue Lake Hydro Project and is within acceptable limits in all categories.