HARZA-EBASCO
Susitna Joint Venture
Document Number

109

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UNIT PRICES - BACKUP CALCULATIONS

WATANA/DEVIL CANYON

BREAKDOWN OF EQUIPMENT COSTS/UNIT COSTS:

Hourly Rental Rate Details

Equipment Breakdown Costs

SUSITNA HYDROELECTRIC PROJECT
Sheet 1 of 8

Excavation Equipment
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
25 cy Dragline	$475.90	- - -	$213.80	$78.60	$45.60	$813.90
15 cy Dragline	163.20	- - -	141.10	54.10	27.90	386.30
15 cy Loader	83.00	- - -	20.50	41.50	20.00	165.00
10 cy Loader (arctic)	98.00	- - -	24.25	49.00	23.75	195.00
10 cy Loader (std.)	40.50	12.00	15.50	31.50	10.50	110.00
8 cy Loader	38.50	11.50	14.80	30.00	10.20	105.00
5 cy Loader/ Crawler	27.60	8.20	10.60	21.50	7.10	75.00
3 cy Loader	17.00	1.90	8.25	4.85	2.00	34.00
10 cy Shovel/ Backhoe	120.70	- - -	28.50	103.30	72.50	325.00
5 cy Shovel	48.40	- - -	14.00	41.00	31.60	135.00
5 cy Backhoe	98.00	- - -	22.00	82.00	58.00	260.00
2 cy Backhoe/ Clamshell	35.85	- - -	10.35	30.35	23.45	100.00
5 cy F.E.L.	31.00	9.10	11.80	24.00	8.10	84.00
Grader 250 HP	25.00	9.50	11.00	17.50	8.00	71.00

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SUSITNA HYDROELECTRIC PROJECT
Sheet 2 of 8

CONSTRUCTION EQUIPMENT COSTS
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
120 cy Athey	$79.60	$28.50	$24.00	$26.20	$21.70	$180.00
120 cy Athey(standby)	85.00	- - -	3.00	5.00	7.00	100.00
85 cy Truck	75.90	20.80	28.00	23.30	20.00	168.00
85 cy Truck(standby)	69.00	- - -	2.00	4.00	6.00	81.00
45cy Arctic Truck	58.50	17.00	19.30	21.50	18.70	135.00
45cy Arctic Truck (standby)	55.00	- - -	2.00	- - -	2.00	59.00
45 cy Truck	49.00	15.00	16.20	18.00	14.80	113.00
45 cy Truck (standby)	42.00	- - -	1.50	- - -	1.50	45.00
40 T Low Bed Truck	20.25	1.00	10.00	7.00	3.75	42.00
25 T Truck	22.50	6.90	7.45	8.25	6.90	52.00
Service Truck	14.50	.50	4.50	8.00	2.50	30.00
Fuel Truck	13.40	.60	7.00	5.00	2.00	28.00
Water Truck	13.00	.50	6.00	4.50	2.00	26.00
1 T Panel Truck	12.00	.50	6.00	4.50	2.00	25.00
1 T Truck	7.45	.80	6.00	4.50	1.25	20.00
4 X 4 Pickup	7.00	.75	6.00	4.75	1.50	20.00

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SUSITNA HYDROELECTRIC PROJECT
Sheet 3 of 8

CONSTRUCTION EQUIPMENT COSTS
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
D 10 Dozer	$77.20	- - -	$30.00	$52.30	$26.50	$186.00
D 9 Dozer	72.60	- - -	28.20	49.20	25.00	175.00
D 8 Dozer	65.50	- - -	20.50	42.50	26.50	155.00
D 8 Dozer (S Blade)	68.50	- - -	21.40	44.40	27.70	162.00
D 7 Dozer	35.50	- - -	15.00	25.00	14.50	90.00
D 6 Dozer	25.00	- - -	10.00	15.00	10.00	60.00

SUSITNA HYDROELECTRIC PROJECT
Sheet 4 of 8

CONSTRUCTION EQUIPMENT COSTS
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
75 kw Generator	$2.90	- - -	$6.20	$.90	$.60	$10.60
150 kw Generator	3.70	- - -	12.50	2.00	1.50	19.70
200 kw Generator	4.90	- - -	16.70	2.70	2.00	26.30
300 kw Generator	5.80	- - -	25.70	4.50	3.25	39.25
1000 kw Generator	11.00	- - -	46.40	8.20	5.90	71.50
6000 kw Generator	57.00	- - -	240.00	25.00	18.00	340.00
10 T Vibrator/ Self Prop.	25.60	- - -	15.00	9.15	8.25	58.00
15 T Vibrator/ Self Prop.	28.00	- - -	16.50	10.00	9.50	64.00
25 T Vibrator/ Self Prop.	48.40	- - -	28.30	17.20	16.10	110.00
15 T Compactor	30.70	- - -	18.00	10.90	10.40	70.00
350 CFM Compressor	5.40	- - -	6.25	4.00	2.35	18.00
600 CFM Compressor	7.70	- - -	11.00	5.00	3.30	27.00

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SUSITNA HYDROELECTRIC PROJECT
Sheet 5 of 8

CONSTRUCTION EQUIPMENT COSTS
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
35 T 200' Boom Crane	$35.50	$2.20	$17.10	$10.50	$6.70	$72.00
20 T Crane	32.00	2.00	15.50	9.50	6.00	65.00
15 T Hydracrane	17.50	2.00	8.50	5.00	2.00	35.00
Tractor with Disc	22.00	1.50	10.00	7.00	5.30	45.80
Tractor with Broom	6.50	.50	2.90	2.00	1.60	13.50
Towed (Wobble Wheel)	22.00	1.00	10.00	7.00	5.00	45.00
Air Track	15.00	- - -	.85	7.00	5.65	28.50
Bull Moose	17.50	2.00	8.50	5.00	2.00	35.00
6" Pump HI PR	5.80	- - -	.35	3.50	2.35	12.00
2" Monitor	12.50	- - -	- - -	3.00	1.00	16.50
Tagger Hoist	2.25	- - -	.25	2.00	1.10	5.60
Platform	3.00	- - -	- - -	- - -	- - -	3.00
Bit Grinder	2.00	- - -	- - -	1.00	- - -	3.00

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SUSITNA HYDROELECTRIC PROJECT
Sheet 6 of 8

CONCRETE AGGREGATE PROCESS PLANT
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
Feeder Hopper	$7.00	- - -	- - -	- - -	$1.00	$8.00
Primary Crusher	80.00	- - -	1.65	34.80	24.55	141.00
5 X 14 D.D. Sc	18.00	- - -	.40	8.30	5.30	32.00
48" X 60" Feeder	14.15	- - -	.37	9.45	3.03	27.00
4' X 14' D.D. Sc	14.45	- - -	.35	6.70	4.50	26.00
Sec. Roll Crusher	48.00	- - -	1.00	21.00	15.00	85.00
42" X 60" Feeder	13.10	- - -	.35	8.75	2.80	25.00
5' - 14' D.D. Sc.	18.00	- - -	.40	8.30	5.30	32.00
32' Eagle Class.	41.50	- - -	.95	19.00	13.55	75.00
4' - 12 S.D. Sc.	12.20	- - -	.30	5.60	3.90	22.00
48" X 72" Feeder	15.75	- - -	.40	10.50	3.35	30.00
48" - 60" Feeder	14.15	- - -	.37	9.45	3.03	27.00
D-6 Dozer	25.00	- - -	10.00	15.00	10.00	60.00
15 cy Loader	83.00	- - -	20.50	41.50	20.00	165.00
6000 kw Generator	57.00	- - -	240.00	25.00	18.00	340.00

SUSITNA HYDROELECTRIC PROJECT
Sheet 7 of 8

CONSTRUCTION EQUIPMENT COSTS
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
48" Belt Loader	$30.00	- - -	$12.80	$13.00	$12.00	$67.80
36" Screw Conv.	5.00	- - -	.25	3.50	1.50	10.25
Single Deck Screen	32.75	- - -	.75	15.00	10.00	58.50
600 Gal/M Pump	2.50	- - -	.15	1.50	1.00	5.15
200' 30" Conv.	18.75	- - -	.50	12.50	4.00	35.75
40' 36" Conv.	6.50	- - -	.15	4.40	1.45	12.50
100 cy Surge Bin	8.00	- - -	- - -	1.50	1.00	10.50
Light Plant/ Pit Light	1.25	- - -	1.50	1.50	.25	4.50
Grizzly Screen	1.00	- - -	- - -	.50	1.50	3.00

SUSITNA HYDROELECTRIC PROJECT
Sheet 8 of 8

CONCRETE AGGREGATE PROCESS PLANT
Provided by F. Toth Feb. 4, 1982

DESCRIPTION	DEPRECIATION/HR	TIRE/HR	FUEL AND LUBE/HR	REPAIR PARTS/HR	REPAIR LABOR/HR	TOTAL/HR
200' 48" Belt	$26.00	- - -	$.70	$17.30	$5.50	$49.50
180' 36" Belt +6"+3"	18.50	- - -	.45	12.50	4.05	35.50
200' 30" Belt -6"+3"	19.25	- - -	.45	13.00	4.30	37.00
180' 42" - 3" Surge	23.40	- - -	.55	15.80	5.25	45.00
180' 36" - 3 Sec.	18.50	- - -	.45	12.50	4.05	35.50
180' 30"-3 + 1½" Storage	17.60	- - -	.40	11.00	4.00	33.00
150' 24" - 1½ + 3/4 Storage	12.00	- - -	.32	8.00	2.68	23.00
90' 24" Crusher Run	9.95	- - -	.27	6.65	2.13	19.00
220' 30" - 3/4"	2.50	- - -	.60	14.30	4.60	41.00
150' 30" - 3/4"	14.70	- - -	.40	9.80	3.10	28.00
150' 24" -3/4 +#4	12.00	- - -	.32	8.00	2.68	23.00
80' 24" - 3/4"	9.45	- - -	.25	6.30	2.00	18.00
220' 24" -#4	20.00	- - -	.55	13.30	4.15	38.00
150' 24" Sand to Bin	12.00	- - -	.32	8.00	2.68	23.00
100' 18" Bin to Screen	7.30	- - -	.20	4.90	1.60	14.00
1200' Reclaim 42"	65.00	- - -	1.50	44.00	14.50	125.00

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ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item: MAIN DAM - ROCK EXCAVATION (BELOW EL. 1470 ½, to U/S and W/S to.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY PGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	5cy SHOVEL	48.40	–	14.00	41.00	31.60	135.00
1	10cy SHOVEL	120.70	–	28.50	103.30	72.50	325.00
18	45T HAULER	882.00	270.00	291.60	324.00	266.40	2034.00
2	45T HAULER (STBY)	84.00	–	3.00	–	3.00	90.00
3	1T TRUCK	22.35	2.40	18.00	13.50	3.75	60.00
6	4x4 PICKUP	42.00	4.50	36.00	28.50	9.00	120.00
3	4x4 PICKUP	21.00	2.25	18.00	14.25	4.50	60.00
1	FUEL TRUCK	13.40	0.60	7.00	5.00	2.00	28.00
1	SERVICE TRUCK	14.50	0.50	4.50	8.00	2.50	30.00
25	PIT LIGHTS	31.25	–	37.50	37.50	6.25	112.50
1	SERVICE CRANE	17.23	1.08	8.34	5.12	3.23	35.00
4	D-8 DOZER	262.00	–	82.00	170.00	106.00	620.00
	SUBTOTALS	1457.60	280.25	537.10	745.05	504.50	3524.50
	TOTAL	1474.83	281.33	545.44	750.17	507.73	3559.50
	Quantity/Prod: ⇒ UNIT COST	0.42	0.08	0.15	0.21	0.14	1.0

60.04.01 Form 148A

I12

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Overburden Removal Below El. 1470 ft.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labor (per hour)	TOTAL (per hour)
4 - 10 cy hydraulic shovel	482.80	—	114.00	413.20	290.00	1300.00
32 - 85 cy hauler	2428.80	665.60	896.00	745.60	640.00	5376.00
2 - 85 cy standby	138.00	—	4.00	8.00	12.00	162.00
4 - 1T truck	29.80	3.20	24.00	18.00	5.00	80.00
13 - 4x4 pickup	91.00	9.75	78.00	61.75	19.50	260.00
1 - Fuel truck	13.40	0.60	7.00	5.00	2.00	28.00
1 - Service truck	14.50	0.50	4.50	8.00	2.50	30.00
20 - Pit lights	25.00	—	30.00	30.00	5.00	90.00
1 - 15T hydracrane	17.50	2.00	8.50	5.00	2.00	35.00
4 - D8 dozer	262.00	—	82.00	170.00	106.00	620.00
TOTAL	3502.80	681.65	1248.00	1464.55	1084.00	7981.00
Quantity/Prod: 7 ⇒ UNIT COST	0.44	0.08	0.16	0.18	0.14	1.00

60.04.01 Form 148A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Main Dam Overburden Above 1470'

332.221

JOB NUMBER P 5700
FILE NUMBER
SHEET ___ OF ___
BY RDC Feb DATE 10/82
APP ___ DATE ___

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 – D8 dozer	157.00	—	42.80	88.80	55.40	324.00
TOTAL						
Quantity/Prod: ? ⟹ UNIT COST	0.42	0.00	0.13	0.28	0.17	1.00

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60.04.01 Form 148A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item : MAIN DAM - ROCK EXCAVATION ABOVE EL. 1470

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/7/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
12	AIRTRACK	180.00	—	10.20	84.00	67.80	342.00
6	700 cfm COMPRESSOR	46.20	—	66.00	30.00	19.80	162.00
2	1 TON TRUCK	14.90	1.60	12.00	9.00	2.50	40.00
2	4x4 PICKUPS.	14.00	1.50	12.00	9.50	3.00	40.00
2	BIT GRINDER	4.00	—	—	2.00	—	6.00
	SUBTOTALS:	255.10	3.10	100.20	132.50	93.10	584.00
	TOTAL	259.10	3.10	100.20	134.50	93.10	590.00
	Quantity/Prod: 1 ⇒ UNIT COST	0.44	0.01	0.17	0.22	0.16	1.00

60.04.01 Form 148A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Impervious Till ~ Excavation and 2 mile haul plus compact

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 – 5cy backhoe	196.00	—	44.00	164.00	116.00	520.00
6 – 85cy truck	455.40	124.80	168.00	139.80	120.00	1008.00
1 – 85cy (standby)	69.00	—	2.00	4.00	6.00	81.00
2 – D7 with rake	71.00	—	30.00	50.00	29.00	180.00
2 – D8 with S blade	137.00	—	42.80	88.80	55.40	324.00
4 – 166 grader	100.00	38.00	44.00	70.00	32.00	284.00
2 – tractor with disc	44.00	3.00	20.00	14.00	10.60	91.60
4 – self propelled comp 25T	193.60	—	113.20	68.80	64.40	440.00
2 – 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
2 – towed wobble wheel 15T	44.00	2.00	20.00	14.00	10.00	90.00
TOTAL	1324.00	169.30	496.00	622.90	446.40	3058.60
Quantity/Prod: % ⇒ UNIT COST	0.43	0.06	0.16	0.20	0.15	1.00

.04.01 Form .48A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: IMPERVIOUS TILL- REMOVAL OF OVERSIZE

JOB NUMBER P 5700
FILE NUMBER
SHEET 1 OF
BY RGA DATE 2/8/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	5 cy LOADER-CRAWLER	27.60	8.20	10.60	21.50	7.10	75.00
4	R45 TRUCK	196.00	60.00	64.80	72.00	59.20	452.00
1	D-6 DOZER	25.00	—	10.00	15.00	10.00	60.00
1	PICKUP 4X4	7.00	0.75	6.00	4.75	1.50	20.00
	SUBTOTALS:	228.00	68.75	80.80	91.75	70.70	532.00
	TOTAL	255.60	68.95	91.40	113.25	77.80	607.00
	Quantity/Prod: % ⇒ UNIT COST	0.42	0.11	0.15	0.19	0.13	1.00

0.04.01 Form 148A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: BORROW AREA D - TUNDRA REMOVAL (DOZING SEGMENT)

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
3 D-8 DOZER	196.50	—	61.50	127.50	79.50	465.00
1 D-7 DOZER	35.50	—	15.00	25.00	14.50	90.00
1/2 4x4 PICKUP	3.50	0.38	3.00	2.37	0.75	10.00
TOTAL	$ 235.50	$ 0.38	$ 79.50	$ 154.87	$ 94.75	$ 565.00
Quantity/Prod: % ⇒ UNIT COST	0.42	0.00	0.14	0.27	0.17	1.00

0.04.01 Form 148A

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AUTO MANUAL FEED

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: BORROW AREA D-TUNDRA REMOVAL (LOAD, HAUL & DUMP)

(LOAD, HAUL, DUMP)

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/8/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	10 cy LOADER (Artic)	98.00	—	24.25	49.0	23.75	195.00
2	45 T TRUCK (ARCTIC)	98.00	30.00	32.40	36.00	29.60	226.00
1	4x4 PICKUP	7.00	0.75	6.00	4.75	1.50	20.00
1	D-7 DOZER	35.50	—	15.00	25.00	14.50	90.00
	SUBTOTALS	140.5	30.75	53.40	65.75	45.60	336.00
	TOTAL	238.5	30.75	77.65	114.75	69.35	531.00
	Quantity/Prod: 1. ⇒ UNIT COST	0.45	0.06	0.15	0.21	0.13	

04.01 Form 148A

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Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : BORROW AREA D - TOPSOIL REMOVAL (DOZING SEGMENT)

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
10 D-8 DOZER	655.00	—	205.00	425.00	265.00	1550.00
1/2 4x4 PICKUP	3.50	0.38	3.00	2.37	0.75	10.00
TOTAL	658.50	0.38	208.00	427.37	265.75	$1560.00
Quantity/Prod: % ⟹ UNIT COST	0.42	0.00	0.13	0.28	0.17	1.00

60.04.01 Form 148A

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ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item: Borrow Area D: Topsoil Removal (Load, Haul, Dump, & Spread Segment)

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 10 cy LOADER	81.00	24.00	31.00	63.00	21.00	220.00
4 45T TRUCKS	234.00	68.00	77.20	86.00	74.80	590.00
1 D7 DOZER	35.50	—	15.00	25.00	14.50	90.00
½ 4x4 PICKUP	3.50	0.38	3.00	2.37	0.75	10.00
TOTAL	$ 354.00	$ 92.38	$ 126.20	$ 176.37	$ 111.05	$ 860.00
Quantity/Prod: % ⇒ UNIT COST	0.41	0.11	0.15	0.20	0.13	1.00

60.04.01 Form 148A

ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item : BORROW AREA D - DRAINAGE DITCHES (LOAD, HAUL, DUMP & SPREAD)

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	10 cy LOADER	40.50	12.00	15.50	31.50	10.50	110.00
2	45T TRUCKS	117.00	34.00	38.60	43.00	37.40	270.00
1	D-7 DOZER	35.50	—	15.00	25.00	14.50	90.00
1	4x4 PICKUP	7.00	0.75	6.00	4.75	1.50	20.00
	TOTAL	$200.00	$46.75	$75.10	$104.25	$63.90	$490.00
	Quantity/Prod: % ⇒ UNIT COST	0.41	0.10	0.15	0.21	0.13	1.00

0.04.01 Form 148A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: BORROW AREA D- DRAINAGE DITCHES (EXCAVATION only)

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
4	BACKHOE (2cy)	143.40	—	41.40	121.40	93.80	400.00
1	4x4 PICKUP.	7.00	0.75	6.00	4.75	1.50	20.00
	TOTAL	150.40	0.75	47.40	126.15	95.30	420.00
	Quantity/Prod: 1 ⇒ UNIT COST	0.36	0.00	0.11	0.30	0.23	1.00

60.04.01 Form 148A

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I 23

ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : BORROW AREA D- DRAINAGE DITCHES (LOAD, HAUL, DUMP, OVERSIZE MAT'L) — COBBLES.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	10 cy LOADER	40.50	12.00	15.50	31.50	10.50	110.00
6	R-45 HAULER	351.00	102.00	115.80	129.00	112.20	810.00
1	D-6 DOZER	25.00	—	10.00	15.00	10.00	60.00
1	4x4 PICKUP	7.00	0.75	6.00	4.75	1.50	20.00
	TOTAL	$ 423.50	$ 114.75	$ 147.30	$ 180.25	$ 134.20	$ 1000.00
	Quantity/Prod: 1 ⇒ UNIT COST	0.42	0.12	0.15	0.18	0.13	1.00

60.04.01 Form 148A

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Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Rock Excavation (Rock from Other Sources). General: Load, haul 2 miles, spread

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY DATE
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 - Shovel (5 cy)	96.80	—	28.00	82.00	63.20	270.00
12 - R45 (artic)	702.00	204.00	231.60	258.00	224.40	1620.00
1 - D8 (S blade)	68.50	—	21.40	44.40	27.70	162.00
2 - 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
2 - D8 dozer (spread)	137.00	—	42.80	88.80	55.40	324.00
2 - D9 dozer (spread)	145.20	—	56.40	98.40	50.00	350.00
TOTAL	1163.50	205.50	392.20	581.10	423.70	2766.00
Quantity/Prod: % ⇒ UNIT COST	0.42	0.08	0.14	0.21	0.15	1.00

60.04.01 Form 148A

FOLD LENGTH 12 IN 11 IN 8.5 IN 8 IN AUTO MANUAL FEED

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Construction Roads in Pit E (Levelling).

JOB NUMBER P 5700
FILE NUMBER
SHEET ___ OF ___
BY RDC Feb DATE 8/82
APP ___ DATE ___

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
162	4 - D8 dozer	274.00	—	85.60	177.60	110.80	648.00
85	2 - D7 dozer	71.00	—	30.00	50.00	29.00	180.00
71	4 - 116 Grader	100.00	38.00	44.00	70.00	32.00	284.00
64	4 - Compactor (15T)	112.00	—	66.00	40.00	38.00	256.00
180	2 - 120 cy hauler (Atlas)	159.20	57.00	48.00	52.40	43.40	360.00
183	1 - 10 cy loader (arctic)	98.00	—	24.25	49.00	23.75	195.00
20	4 - Pickup 4x4	28.00	3.00	24.00	19.00	6.00	80.00
26	1 - Water truck	13.00	0.50	6.00	4.50	2.00	26.00
	SUB.	757.20	98.50	303.60	413.50	261.20	1832.00
	TOTAL	855.20	98.50	327.85	462.5	284.95	2029.00
	Quantity/Prod: % ⇒ UNIT COST	0.42	0.05	0.16	0.23	0.14	1.0

30.04.01 Form 148A

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ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: CONSTRUCTION ROADS FOR PIT E – ROAD MAINTENANCE DURING CONSTRUCTION

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 D-7 DOZER	71.00	–	30.00	50.00	29.00	180.00
1 15 T SELF-PROP. COMP.	28.00	–	16.50	10.00	9.50	64.00
2 116 GRADER	50.00	14.00	22.00	35.00	16.00	142.00
1 4x4 PICKUP	7.00	0.75	6.00	4.75	1.50	20.00
2 45 T TRUCK	98.00	30.00	32.40	36.00	29.60	226.00
SUBTOTALS	204.00	30.75	84.90	100.75	69.60	$ 490.00
TOTAL	254.00	49.75	106.90	135.75	85.60	632.00
Quantity/Prod: %	0.40	0.08	0.17	0.22	0.13	

01 Form 148A

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I27

ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Overburden Removal in Pit 'E'.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 - D10 with U blade	154.40	—	60.00	104.60	53.00	372.00
1 - D7 with S blade	35.50	—	15.00	25.00	14.50	90.00
4 - R45 hauler (artic)	234.00	68.00	77.20	86.00	74.80	540.00
1 - 10 cy loader	71.80	21.27	27.48	55.84	18.61	195.00
1 - 4x4 pickup	7.00	0.75	6.00	4.75	1.50	20.00
SUB	430.90	68.75	158.20	220.35	143.80	1022.00
TOTAL	502.7	90.02	185.68	276.19	162.41	1217
Quantity/Prod: 1. ⇒ UNIT COST	0.41	0.08	0.15	0.23	0.13	1.0

60.04.01 Form 148A

ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Excavation of River Channel: Excavate, load, haul 1.5 miles, dump

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1 - loader (10 cy)	71.80	21.27	27.48	55.84	18.61	195.00
5 - hauler (85T)	379.50	104.00	140.00	116.50	100.00	840.00
1 - D8 dozer	65.50	—	20.50	42.50	26.50	155.00
1 - 4x4 pickup	7.00	0.75	6.00	4.75	1.50	20.00
SUB	452.00	104.75	166.50	163.75	128.00	1015.00
TOTAL	523.80	126.02	193.98	219.59	146.61	$ 1210.00
Quantity/Prod: ⇒ UNIT COST	0.43	0.11	0.16	0.18	0.12	1.0

60.04.01 Form 148A

I 29

ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Downstream Damfill Process

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 10/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
4 - D10 dozer	308.80	—	120.00	209.20	106.00	744.00
2 - D8 dozer	137.00	—	42.80	88.80	55.40	324.00
2 - D6 dozer	50.00	—	20.00	30.00	20.00	120.00
3 - 48" loader	90.00	—	38.40	39.00	36.00	203.40
2 - 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
1 - Service truck	14.50	0.50	4.50	8.00	2.50	30.00
6 - Light Plant	7.50	—	9.00	9.00	1.50	27.00
3 - Grizzly stationary.	3.00	—	—	1.50	4.50	9.00
TOTAL	624.80	2.00	246.70	395.00	228.90	1497.40
Quantity/Prod: % ⇒ UNIT COST	0.42	0.00	0.17	0.26	0.15	1.00

60.04.01 Form 148A

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I 30

ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : 10' PROTECTIVE LAYER - PLACE COVER INTO D/S FILL

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY DATE
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
6	250 HP GRADER	105.00	12.00	51.00	30.00	12.00	210.00
4	D-9 DOZER	290.40	—	112.80	196.80	100.00	700.00
4	15 T - SELF-PROP. COMPACTOR	193.60	—	113.20	68.80	64.40	440.00
2	WATER TRUCK	26.60	1.00	12.00	9.00	4.00	52.00
30	LIGHT PLANT	37.50	—	45.00	45.00	7.50	135.00
1	SERVICE TRUCK	14.50	0.50	4.50	8.00	2.50	30.00
1	FUEL TRUCK	13.40	0.60	7.00	5.00	2.00	28.00
4	4x4 PICKUP	28.00	3.00	24.00	19.00	6.00	80.00
4	1 TON TRUCK	29.80	3.20	24.00	18.00	5.00	80.00
1	HYDRACRANE (15T)	17.50	2.00	8.50	5.00	2.00	35.00
	TOTAL	$ 755.70	$ 22.30	$ 402.00	$ 404.60	$ 205.40	$ 1790.00
	Quantity/Prod: ⇒ UNIT COST	0.42	0.01	0.23	0.23	0.11	1.00

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60.04.01 Form 148A

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ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: 10' PROTECTIVE LAYER - HAUL & DUMP PROCESSED GRAVEL

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/10/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube. (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
12	ATLEY WAGON 120 TON	955.20	342.00	288.00	314.40	260.40	2160.00
2	STANDBY	170.00	–	6.00	10.00	14.00	200.00
3	166 GRADER	75.00	28.50	53.00	52.50	4.00	213.00
2	D-9 DOZER	145.20	–	56.40	98.40	50.00	350.00
30	LIGHT PLANT	37.50	–	45.00	45.00	7.50	135.00
1	SERVICE TRUCK	14.50	0.50	4.50	8.00	2.50	30.00
1	FUEL TRUCK	13.40	0.60	7.00	5.00	2.00	28.00
4	4x4 PICKUP	28.00	3.00	24.00	19.00	6.00	80.00
	SUBTOTALS	1363.80	346.10	430.90	499.80	342.4	$ 2983.00
	TOTAL	1438.80	374.60	463.90	552.30	366.40	3196.00
	Quantity/Prod: 1 ⇒ UNIT COST	0.45	0.12	0.15	0.17	0.11	1.00

0.04.01 Form 148A

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Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: 10' PROTECTIVE LAYER - SCARIFY ONE FOOT U/S & D/S FILL

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY REA DATE 2/10/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
4 166 GRADER	100.00	38.00	44.00	70.00	32.00	284.00
2 FARM TRACTOR W/DISC PLOW	44.00	3.00	20.00	14.00	10.60	91.60
TOTAL	144.00	41.00	64.00	84.00	42.60	375.60
Quantity/Prod: % ⇒ UNIT COST	0.38	0.11	0.17	0.23	0.11	1.00

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0.04.01 Form 148A

I 33

ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item : 10' PROTECTIVE LAYER - REMOVE ONE F.T. SPOILED FILL

JOB NUMBER P 5700
FILE NUMBER
SHEET 1 OF
BY RGA DATE 2/8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
3 D-8 DOZER	196.50	—	61.50	127.50	79.50	465.00
12 R45 TRUCKS (ART.) 135	702.00	204.00	231.60	258.00	224.40	1620.00
1 10 cy LOADER	81.00	24.00	31.00	63.00	21.00	220.00
2 PICKUP 4x4 (3/4 TON)	14.00	1.50	12.00	9.50	3.00	40.00
1 STANDBY (R45 artic)	42.00	—	1.50	—	1.50	45.00
SUB	993.50	229.50	336.10	458.00	327.90	2345.00
TOTAL	1035.50	229.50	337.60	458.00	329.40	2390.00
Quantity/Prod: % ⇒ UNIT COST						

50.04.01 Form 148A

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item: Surface Preparation (Horizontal), Rock

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 - D8 with Flipper	137.00	—	42.80	88.80	55.40	324.00
2 - 600 CFM compr.	15.40	—	22.00	10.00	6.60	54.00
2 - 6" pump. hi pr.	11.60	—	0.70	7.00	4.70	24.00
2 - 2" monitor	25.00	—	—	6.00	2.00	33.00
1 - tractor with broom	6.50	0.45	2.95	2.10	1.50	13.50
1 - 25t truck	22.50	6.90	7.45	8.25	6.90	52.00
1 - 3 cy loader	17.00	1.90	8.25	4.85	2.00	34.00
TOTAL	235.00	9.25	84.15	127.00	79.10	534.50
Quantity/Prod: 1 ⟹ UNIT COST	0.44	0.02	0.15	0.24	0.15	1.0

60.04.01 Form 148A

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Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Surface Preparation (Inclined) Rock

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 3/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1 35T 200ft boom crane	35.50	2.20	17.10	10.50	6.70	72.00
2 Monitor (2")	12.50	—	—	3.00	1.00	16.50
2 Pump	11.60	—	0.70	7.00	4.70	24.00
4 Tagger hoist	9.00	—	1.00	8.00	4.40	22.40
4 Platform	12.00	—	—	—	—	12.00
4 600 CFM compr	30.80	—	44.00	20.00	13.20	108.00
2 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
1 3 cy loader	17.00	1.90	8.25	4.85	2.00	34.00
1 25T truck	22.50	6.90	7.45	8.25	6.90	52.00
TOTAL	164.90	12.50	90.50	71.10	41.90	380.90
Quantity/Prod: 1 ⇒ UNIT COST	0.43	0.03	0.24	0.19	0.11	1.0

60.04.01 Form 148A

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Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Service Spillway (Drilling)

Note: Blasting as Previously.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
17 Airtracks	255.00	–	14.45	119.00	96.05	484.50
17 600 CFM compr	130.90	–	187.00	85.00	56.10	459.00
4 1 ton trucks	29.80	3.20	24.00	18.00	5.00	80.00
3 4x4 pickups	21.00	2.25	18.00	14.25	4.50	60.00
1 Bit grinder	2.00	–	–	1.00	–	3.00
TOTAL	438.70	5.45	243.45	237.25	161.65	$ 1086.50
Quantity/Prod: 1 ⟹ UNIT COST	0.40	0.005	0.22	0.22	0.15	

60.04.01 Form 148A

I 37

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Service Spillway Drilling

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
7 Airtrack	105.00	—	5.95	49.00	39.55	199.50
7 350 CFM compr.	37.80	—	43.75	28.00	16.45	126.00
1 1 ton truck	7.45	0.80	6.00	4.50	1.25	20.00
2 pick ups (4x4)	14.00	1.50	12.00	9.50	3.00	40.00
1 bit grinder	2.00	—	—	1.00	—	3.00
TOTAL	166.25	2.30	67.70	92.00	60.25	* 388.50
Quantity/Prod: 7 ⇒ UNIT COST	0.43	0.006	0.17	0.24	0.16	1.0

30.04.01 Form 148A

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Caiculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Service Spillway Blasting.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1 - Panel truck	12.00	0.50	6.00	4.50	2.00	25.00
1 - 4x4 pickup	7.00	0.75	6.00	4.75	1.50	20.00
TOTAL	19.00	1.25	12.00	9.25	3.50	45.00
Quantity/Prod: 1 ⇒ UNIT COST	0.42	0.02	0.27	0.21	0.08	1.00

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50.C4.01 Form 148A

I 39

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Service Spillway Load, haul 1.5 miles, dump, spread

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
5 - 85cy hauler	379.50	104.00	140.00	116.50	100.00	840.00
1 - 9cy hyd. shovel	120.70	—	28.50	103.30	72.50	325.00
1 - D9 dozer	72.60	—	28.20	49.20	25.00	175.00
2 - D8 dozer	131.00	—	41.00	85.00	53.00	310.00
2 - 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
2 - Pit light	2.50	—	3.00	3.00	0.50	9.00
-SUB	599.60	105.5	224.20	263.20	181.50	1374.00
TOTAL	720.30	105.50	252.70	366.50	254.00	1699.00
Quantity/Prod: % ⟹ UNIT COST	0.42	0.06	0.15	0.22	0.15	1.0

0.04.01 Form 148A

I 40

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : Service Spillway : Doze and Stockpile Shotrock.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 D10 dozer	154.40	—	60.00	104.60	53.00	372.00
2 D9 dozer	145.20	—	56.40	98.40	50.00	350.00
2 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
	313.60	1.50	128.40	212.50	106.00	762.00
TOTAL	0.41	0.00	0.17	0.28	0.14	1.00
Quantity/Prod: 7. ⇒ UNIT COST						

30.04.01 Form 148A

I 41

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Emergency Spillway : Overburden Removal

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY Roe Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 – 5 cy backhoe	196.00	—	44.00	164.00	116.00	520.00
2 – D7 dozer	71.00	—	30.00	50.00	29.00	180.00
6 – 85 cy hauler	455.40	124.80	168.00	139.80	120.00	1008.00
1 – 85 cy standby	85.00	—	3.00	5.00	7.00	100.00
2 – 4x4 pickup truck	14.00	1.50	12.00	9.50	3.00	40.00
TOTAL	821.40	126.30	257.00	368.30	275.00	1848.00
Quantity/Prod: % ⇒ UNIT COST	0.44	0.07	0.14	0.20	0.15	1.00

60.04.01 Form 148A

I42

ACRES **Calculations** SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Emergency Spillway Rock Excavation (Rock Useable)

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 9/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 – 10 cy hydraulic shovel	241.40	—	57.00	206.60	145.00	650.00
16 – 85T hauler	1214.40	332.80	448.00	372.80	320.00	2688.00
2 – standby (85T hauler)	170.00	—	6.00	10.00	14.00	200.00
3 – 1½ton truck	22.35	2.40	18.00	13.50	3.75	60.00
5 – 4x4 pickup	35.00	3.75	30.00	23.75	7.50	100.00
1 – service truck	14.50	0.50	4.50	8.00	2.50	30.00
1 – fuel truck	13.40	0.60	7.00	5.00	2.00	28.00
1 – 15T crane	17.50	2.00	8.50	5.00	2.00	35.00
TOTAL	1728.55	342.05	579.00	644.65	496.75	3791.00
Quantity/Prod: % ⇒ UNIT COST	0.46	0.09	0.15	0.17	0.13	1.00

80.04.01 Form 148A

42

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Dewatering Phase II

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 10/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1 – 16" 50 HP						
1 – 8" 50 HP	3.63	—	0.23	2.17	1.47	7.50
2 – 4" 25 HP	1.45	—	0.09	0.87	0.59	3.00
2 – 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
1 – 1 ton truck	7.45	0.80	6.00	4.50	1.25	20.00
1 – 200 kW Gen	4.90	—	16.70	2.70	2.00	26.50
TOTAL						

Quantity/Prod:
⇒ UNIT COST

60.04.01 Form 148A

I 44

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: DRAINAGE BLANKET – CLEARING & REMOVE TUNDRA

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY TGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2	10 cy LOADER	81.00	24.00	31.00	63.00	21.00	220.00
15	85 T TRUCK	1138.50	312.00	420.00	349.50	300.00	2520.00
2	D-9 W/RIP BLADE	157.65	—	61.23	106.83	54.29	380.00
2	D-7 DOZER	71.00	—	30.00	50.00	29.00	180.00
2	4x4 PICKUP	14.00	1.50	12.00	9.50	3.00	40.00
2	1 T TRUCK	14.90	1.60	12.00	9.00	2.50	40.00
	TOTAL	1477.05	339.10	566.23	587.83	409.79	$3380.00
	Quantity/Prod: 1/. ⇒ UNIT COST	0.44	0.10	0.17	0.17	0.12	1.0

60.04.01 Form 148A

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I 45

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item: MAIN DAM ROCK EXCAVATION (BELOW EL. 1470) LOAD & HAUL } USABLE ROCK TO D/S SHELL FILL.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2	5 cy SHOVEL	96.80	—	28.00	82.00	63.20	270.00
4	45 T HAULER	196.00	60.00	64.80	72.00	59.20	452.00
1	1 T TRUCK	7.45	0.80	6.00	4.50	1.25	20.00
2	4x4 PICKUP	14.00	1.50	12.00	9.50	3.00	40.00
1	D-8 DOZER	65.50	—	20.50	42.50	26.50	155.00
	TOTAL	379.75	62.30	131.30	210.50	153.15	$937.00
	Quantity/Prod: %/ ⟹ UNIT COST	0.41	0.07	0.14	0.22	0.16	1.0

80.04.01 Form 148A

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I-46

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Processing Gravel for Dam: Haul, Place & Compact

JOB NUMBER P 3700
FILE NUMBER
SHEET 1 OF 1
BY RGA DATE 2/5/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labor (per hour)	TOTAL (per hour)
12	PH180 ATLEY 120Ti	955.20	342.00	288.00	314.40	260.40	2160.00
2	" " STANDBY	170.00	–	6.00	10.00	14.00	200.00
6	166 GRADER 250Hp	150.00	57.00	66.00	105.00	48.00	426.00
4	D-9 DOZER	290.40	–	112.80	196.80	100.00	700.00
4	SELF-PROP. VIB. COMP (1ST)	112.00	–	66.00	40.00	38.00	256.00
2	WATER TRUCK	26.00	1.00	12.00	9.00	4.00	52.00
30	LIGHT PLANT	37.50	–	45.00	45.00	7.50	135.00
1	SERVICE TRUCK	14.50	0.50	4.50	8.00	2.50	30.00
1	FUEL TRUCK	13.40	0.60	7.00	5.00	2.00	28.00
4	4x4 PICKUP	28.00	3.00	24.00	19.00	6.00	80.00
4	1 TON TRUCK	29.80	3.20	24.00	18.00	5.00	80.00
1	BULL MOOSE	17.50	2.00	8.50	5.00	2.00	35.00
	SUB	1826.80	407.30	655.30	770.20	487.40	4147.00
	TOTAL	1844.30	409.30	663.80	775.20	489.40	4182.00
	Quantity/Prod: 1 ⇒ UNIT COST	0.44	0.10	0.16	0.18	0.12	

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60.04.01 Form 148A

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: CONCRETE AGGREGATE PROCESS PLANT: DUMP D/S PROCESSED GRAVEL.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/11/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	FEEDER HOPPER	$ 7.00	–	–	–	$ 1.00	$ 8.00
1	PRIMARY CRUSHER	80.00	–	1.65	34.80	24.55	141.00
2	5x14 D.D. SCREEN	36.00	–	0.80	16.60	10.60	64.00
2	48"x60" FEEDER	28.30	–	0.74	18.90	6.06	54.00
3	4'x14' D.D. SCREEN	43.35	–	1.05	20.10	13.50	78.00
1	SEC. ROLL CRUSHER	48.00	–	1.00	21.00	15.00	85.00
1	42"x60" FEEDER	13.10	–	0.35	8.75	2.80	25.00
4	5'x14' D.D. SCREEN	72.00	–	1.60	33.20	21.20	128.00
2	32' EAGLE CLASSIFIER	83.00	–	1.90	38.00	27.10	150.00
1	4'x12' S.D. SCREEN	12.20	–	0.30	5.60	3.90	22.00
4	48"x72" FEEDER	63.00	–	1.60	42.00	13.40	120.00
6	48"x60" FEEDER	84.90	–	2.22	56.70	18.18	162.00
2	D-6 DOZER	50.00	–	20.00	30.00	20.00	120.00
4	15 cy LOADER	332.00	–	82.00	166.00	80.00	660.00
1	6000 KW GENERATOR	57.00	–	240.00	25.00	18.00	340.00
200'	48" BELT	26.00	–	0.70	17.30	5.50	49.50
180'	36" BELT +6" +3°	18.50	–	0.45	12.50	4.05	35.50
200'	30" BELT -6" +3"	19.25	–	0.45	13.00	4.30	37.00
180'	42" - 3" SURGE	23.40	–	0.55	15.80	5.25	45.00
180'	36" - 3" SECTION	18.50	–	0.45	12.50	4.05	35.50
180'	30" -3 + 1½" STORAGE	17.60	–	0.40	11.00	4.00	33.00
150'	24" - 1½ & ¾" STORAGE	12.00	–	0.32	8.00	2.68	23.00
90'	24" CRUSHER RUN	9.95	–	0.27	6.65	2.13	19.00
220'	30" - ¾"	21.50	–	0.60	14.30	4.60	41.00
150'	30" - ¾"	14.70	–	0.40	9.80	3.10	28.00
150'	24" - ¾" & #4	12.00	–	0.32	8.00	2.68	23.00
80'	24" - ¾"	9.45	–	0.25	6.30	2.00	18.00
220'	24" #4	20.00	–	0.55	13.30	4.15	38.00
150'	24" SAND TO BIN	12.00	–	0.32	8.00	2.68	23.00
100'	18" BIN TO SCREEN	7.30	–	0.26	4.90	1.60	14.00
1200'	RECLAIMER (42")	65.00	–	1.50	44.00	14.50	125.00
	TOTAL	1317.00	–	362.94	722.00	342.56	2744.50
	Quantity/Prod: 1 ⇒ UNIT COST	0.48	0.00	0.13	0.26	0.13	1.00

04.01 Form 148A

Calculations SUSITNA HYDROELECTRIC PROJECT

332-221

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Cofferdams Excavation of Overburden plus load, haul 2 miles and dump.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
2 - shovel (5 cy)	96.80	—	28.00	82.00	63.20	270.00
12 - R45 (artic)	702.00	204.00	231.60	258.00	224.40	1620.00
1 - D8 dozer	68.50	—	21.40	44.40	27.70	162.00
2 - 4x4 pickup	14.00	1.50	12.00	9.50	3.00	40.00
TOTAL	881.30	205.50	293.00	393.90	318.30	2092.00
Quantity/Prod: % ⇒ UNIT COST	0.42	0.10	0.14	0.19	0.15	1.00

60.04.01 Form 148A

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Cofferdams Closure Dam End Dump Including load and haul 2 miles.

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1 Shovel (5 cy)	48.40	—	14.00	41.00	31.60	135.00
6 R45 (artic)	351.00	102.00	115.80	129.00	112.20	810.00
1 D8 dozer (rockblade)	68.50	—	21.40	44.20	27.70	162.00
1 4x4 pickup	7.00	0.75	6.00	4.75	1.50	20.00
1 D9 dozer	72.60	—	28.20	49.20	25.00	175.00
TOTAL	547.50	102.75	185.40	268.35	198.00	1302.00
Quantity/Prod: 1 ⇒ UNIT COST	0.42	0.08	0.14	0.21	0.15	1.00

60.04.01 Form 148A

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Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item : U/S SLOPE PROTECTION

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	5 cy SHOVEL	48.40	—	14.00	41.00	31.60	135.00
2	R-45 TRUCKS	98.00	30.00	32.40	36.00	29.60	226.00
1	D-7 DOZER	35.50	—	15.00	25.00	14.50	90.00
1	2 cy CLAMSHELL	35.85	—	10.35	30.35	23.45	100.00
1	PICKUP TRUCK	7.00	0.75	6.00	4.75	1.50	20.00
	SUBTOTALS	188.90	30.75	67.40	106.75	77.20	471.00
	TOTAL	224.75	30.75	77.75	137.10	100.65	571.00
	Quantity/Prod: 1 ⟹ UNIT COST	0.31	0.03	0.11	0.24	0.18	1.00

60.04.01 Form 148A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.
Item : D/S SLOPE PROTECTION

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RGA DATE 2/9/82
APP DATE

	Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
1	5 cy FRONT END LOADER	31.00	9.10	11.80	24.00	8.10	84.00
3	R-45 TRUCKS.	147.00	45.00	48.60	54.00	44.40	339.00
1	D-7 DOZER	35.50	—	15.00	25.00	14.50	90.00
1	2 cy CLAMSHELL	35.85	—	10.35	30.35	23.45	100.00
1	PICKUP	7.00	0.75	6.00	4.75	1.50	20.00
	SUBTOTALS:	189.50	45.75	69.60	83.75	60.40	449.00
	TOTAL	256.35	54.85	91.75	138.10	91.95	633.00
	Quantity/Prod: 1 ⇒ UNIT COST	0.20	0.09	0.12	0.22	0.12	1.00

60.04.01 Form 148A

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ACRES

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item : DRAINAGE BLANKET ~ Level Area

JOB NUMBER P 5700
FILE NUMBER
SHEET OF
BY RDC Feb DATE 8/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
4 - D8 with W. track	308.80	—	120.00	209.20	106.00	744.00
1 - 10 cy loader	40.50	12.00	15.50	31.50	10.50	110.00
1 - 15 cy loader	83.00	—	20.50	41.50	20.00	165.00
30 - 45 cy haulers (old)	1470.00	450.00	486.00	540.00	444.00	3390.00
3 - 45 cy hauler (stby)	126.00	—	4.50	—	4.50	135.00
1 - Service truck	14.50	0.50	4.50	8.00	2.50	30.00
1 - Fuel truck	13.40	0.60	7.00	5.00	2.00	28.00
4 - 1T truck	29.80	3.20	24.00	18.00	5.00	80.00
5 - 4x4 pickup	35.00	3.75	30.00	23.75	7.50	100.00
1 - 15T hydraulic	17.50	2.00	8.50	5.00	2.00	35.00
12 - light plant.	15.00	—	18.00	18.00	3.00	54.00
573	2027.50	472.05	734.00	899.95	607.00	4736.00
TOTAL	2153.50	472.05	738.50	899.95	607.00	4871.00
Quantity/Prod: 1 ⇒ UNIT COST	0.2[illegible]	0.10	0.15	0.11	0.12	1.00

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60-F-4.01 Form 148A

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MANUAL
FEED

Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: Processing Gravel for Dam (U/S Damfill)

JOB NUMBER P 5700
FILE NUMBER
SHEET 1 OF
BY RDC Feb DATE 4/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
4 - D10 dozer	308.80	—	120.00	209.20	106.00	744.00
2 - D8 dozer	131.00	—	41.00	85.00	53.00	310.00
2 - D6 dozer	50.00	—	20.00	30.00	20.00	120.00
3 - 48" belt loader	90.00	—	35.40	39.00	39.00	203.40
3 - 36" Rev Flight Sep.	15.00	—	0.75	10.50	4.50	30.75
5 - Single deck scr	163.75	—	3.75	75.00	50.00	292.50
3 - 600 GPM Pump	7.50	—	0.45	4.50	3.00	15.45
3 - 200 30' conv	56.25	—	1.50	37.50	12.00	107.25
5 - 40' 36" conv	32.50	—	0.75	22.00	7.25	62.50
3 - 100 cy surge bin	24.00	—	—	4.50	3.00	31.50
4 - 4x4 pickup	28.00	3.00	24.00	19.00	6.00	80.00
2 - service truck (Panel)	24.00	1.00	12.00	9.00	4.00	50.00
14 - light plant	17.50	—	21.00	21.00	3.50	63.00
3 - grizzly scr.	3.00	—	—	1.50	4.50	9.00
TOTAL	951.30	4.00	280.60	567.70	315.75	2119.35
Quantity/Prod: 1. ⟹ UNIT COST	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.00

60.04.01 Form 148A

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Calculations SUSITNA HYDROELECTRIC PROJECT

SUBJECT: Breakdown of Construction Equipment Costs.

Item: PROCESSING GRAVEL FOR DAM – EXCAVATION

JOB NUMBER P 5700
FILE NUMBER
SHEET 1 OF
BY REA DATE 3/5/82
APP DATE

Description	Depreciation (per hour)	Tire (per hour)	Fuel and Lube (per hour)	Repair Parts (per hour)	Repair Labour (per hour)	TOTAL (per hour)
3 680-M DRAGLINE	1427.70	—	641.40	235.80	136.80	2441.70
3 380-M DRAGLINE	489.60	—	423.30	162.30	83.70	1158.90
12 LIGHT PLANT	$ 15.00	—	$ 18.00	$ 18.00	$ 3.00	$ 54.00
12 4X4 PICKUP	84.00	$ 9.00	72.00	57.00	18.00	240.00
2 FUEL TRUCK	26.80	1.20	14.00	10.00	4.00	56.00
3 SERVICE TRUCK	43.50	1.50	13.50	24.00	7.50	90.00
6 1 TON TRUCK	44.70	4.80	36.00	27.00	7.50	120.00
3 D-7 DOZER	106.50	—	45.00	75.00	43.50	270.00
1 20 TON CRANE	32.00	2.00	15.50	9.50	6.00	65.00
1 40T WHEELED TRUCK	20.25	1.00	10.00	7.00	3.75	42.00
	342.75	19.50	224.00	227.50	93.25	937.00
TOTAL	2290.05	19.50	1288.70	625.60	313.75	4537.60
Quantity/Prod: ⇒ UNIT COST	1	[illegible]	0.71	[illegible]	0.07	1.00 st

.04.01 Form 148A