



Southwestern Petroleum Corporation

ENGINE LUBRICATION COST IMPROVEMENT ANALYSIS

*With a very small amount of information, we can show you in dollars and cents what a switch to Southwestern Petroleum Corporation's superior SWEPKO Brand Lubricants can mean to your operation. The actual cost of the lubricant is a very small portion of the story. Frequency of lubrication, waste lubricant disposal costs, lube labor, repair parts and labor, equipment service life, replacement cost, fuel or energy usage and cost of downtime must all be considered to reveal the **total cost of lubrication**. Knowing all of these factors permits today's maintenance professional to make good business decisions. Thank you.*

Company Information

Company Name: _____ Date ____/____/____
 Contact Name: _____ Department: _____
 Address: _____
 City: _____ State/Prov: _____ County: _____ Zip/Postal Code: _____
 Phone: (____) _____ Fax: (____) _____

Information About The Individual Unit Being Analyzed

Type of Equipment: _____ Manufacturer: _____ Model No: _____
 Component Being Lubricated: _____ Manufacturer: _____ Model No: _____
 Manufacturer's Lubricant Spec: _____ Current Lubricant Brand/Weight: _____
 Type of Service? Mobile Stationary High Heat High Speed High Load High Shock Water/Steam Contamination
 Other Special Service Notes: _____
 Number of Identical Units: _____ Number of Similar Units: _____

Questions About Your Current Lubrication Related Costs (Green Items Required)

- | | |
|---|---|
| <p>1. What is your current cost per gal/liter for engine oil?
_____</p> <p>2. How many average hours/miles per week is this engine operated?
_____</p> <p>3. What is the engine's oil capacity in gallons/liters?
_____</p> <p>4. How many gallons/liters of make up oil is used between drains?
_____</p> <p>5. What is the engine's current drain cycle in hours/miles?
_____</p> <p>6. How long does a routine oil change take?
_____</p> <p>7. What is your cost per gallon/liter for waste oil disposal?
_____</p> <p>8. What is your current yearly cost for oil analysis services for this engine?
_____</p> <p>9. What is your hourly cost for maintenance labor (including benefits, taxes, shop overhead, etc)?
_____</p> <p>10. What is your average hourly cost for downtime (lost revenue, productivity, wages, penalties, etc)?
_____</p> | <p>11. What is your average fuel usage rate for this unit (gal/liters per hour or mile)?
_____</p> <p>12. What is your average cost for fuel (per gal/liter)?
_____</p> <p>13. What is the projected life of this engine in years?
_____</p> <p>14. What is the replacement cost for this engine?
_____</p> <p>15. How many hours/miles do bearings/seals last?
_____</p> <p>16. How long does bearing/seal replacement take the unit out of service?
_____</p> <p>17. What was your last cost for bearing/seal replacement parts?
_____</p> <p>18. How many hours/miles do you get between rebuilds?
_____</p> <p>19. How long do rebuilds take the unit out of service?
_____</p> <p>20. What was your last cost for major rebuild parts?
_____</p> |
|---|---|

Please Complete In Black Ink And Fax Back To 1-817-348-7237 For A Complete Analysis

SWEPKO Field Service Representative: _____ Phone Number: (____) _____

ENGINE LUBRICATION COST IMPROVEMENT ANALYSIS

Company: Sweeney Manufacturing

Engine Description: Detroit Diesel Engine Model 215D

SECTION 1 -- CURRENT MAINTENANCE INFORMATION

How many average hours/miles per week is this engine operated?	80	Hours/Miles per Week
What is the engine's oil capacity in gallons/liters?	14	Gallons/Liters
How many gallons/liters of make up oil is used between drains?	2	Gallons/Liters
What is this engine's current drain cycle in hours/miles?	600	Hours/Miles
How long does a routine oil change take?	1.50	Hours
What is your cost per gallon/liter for waste oil disposal?	\$0.46	Per Gallon/Liter
What is your current yearly cost for oil analysis services for this engine?	\$240.00	Per Year
What is your hourly cost for maintenance labor (including benefits, taxes, shop overhead, etc)?	\$53.24	Per Hour
What is your average hourly cost for downtime (lost revenue, productivity, wages, penalties, etc)?	\$1,100.00	Per Hour

SECTION 2 -- CURRENT FUEL COST INFORMATION

What is your average fuel usage rate for this unit?	8.33	Gal/Liter per Mile or Hr
What is your average cost for fuel?	\$0.98	Per Gal/Liter

SECTION 3 -- EQUIPMENT COST INFORMATION

What is the projected life of this engine in years?	6.00	Years
What is replacement cost for this engine?	\$18,000.00	Each

SECTION 4 -- CURRENT REPAIR COST INFORMATION

How many hours/miles do bearings/seals last?	2,400	Hours/Miles
How long does bearing/seal replacement take the unit out of service?	10.00	Hours
What was your last cost for bearing/seal replacement parts?	\$685.00	Per Set
How many hours/miles do you get between major rebuilds?	9,600	Hours/Miles
How long do major rebuilds take the unit out of service?	16.00	Hours
What was your last cost for major rebuild parts?	\$4,300.00	Per Set

SECTION 5 -- LUBRICATION COST ANALYSIS

	Current Supplier	SWEPCO
Projected Drain Interval	100.00%	300.00% Of Current
Projected Equipment Life	100.00%	120.00% Of Current
Projected Energy/Fuel Savings	0.00%	2.50% Of Current
Cost of Engine Oil Per Gallon/Liter	\$4.92	\$11.86
In Service Hours/Miles Per Year	4,160	4,160
Oil Changes Per Year	6.93	2.31
Bearing/Seal Replacements Per Year	1.73	1.44
Major Rebuilds Per Year	0.43	0.36
Annualized New Oil Costs	\$545.79	\$438.56
Annualized Oil Analysis & Used Oil Disposal Costs	\$291.03	\$17.01
Annualized Labor Costs	\$1,845.65	\$1,261.20
Annualized Parts Costs	\$3,050.67	\$2,542.22
Annualized Cost of Downtime	\$38,133.33	\$26,057.78
Annualized Fuel Usage	\$33,959.74	\$33,110.75
Equipment Cost Per Year Of Service	\$3,000.00	\$2,500.00

THE BOTTOM LINE -- TOTAL ANNUALIZED ENGINE OPERATING COST

	\$80,826.22	\$65,927.51
Projected Yearly SWEPCO Savings In Dollars		\$14,898.71
Projected Yearly SWEPCO Savings As A Percent		18.43%

CONSIDER THE IMPACT OF THIS TYPE OF SAVINGS ACROSS YOUR ENTIRE EQUIPMENT INVENTORY

Number of Similar Units	7
Total Potential Annual Savings	\$104,290.94