

## Southwestern Petroleum Corporation

# COMPRESSOR 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 SWEPCO 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.

	pany Information
	Date//
Contact Name:Address:	
	County:Zip/Postal Code:
	Fax: ()
Information About T	he 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? O Mobile O Stationary O High Heat O	High Speed O High Load O High Shock O Water/Steam Contamination
Other Special Service Notes:	
Number of Identical Units:	Number of Similar Units:
What is your current cost per gal/liter for oil?	11. What is your average energy/fuel usage rate for this unit (kw per hr or gal/liter per hour)?
How many average hours per week is this compressor operated?	12. What is your average cost for energy/fuel (per kwhr/gal/liter)?
How many average hours per week is this compressor operated?      What is the unit's oil capacity in gallons/liters?	12. What is your average cost for energy/fuel (per
compressor operated?	12. What is your average cost for energy/fuel (per kwhr/gal/liter)?
compressor operated?  3. What is the unit's oil capacity in gallons/liters?  4. How many gallons/liters of make up oil is used	12. What is your average cost for energy/fuel (per kwhr/gal/liter)?  13. What is the projected life of this unit in years?
compressor operated?  3. What is the unit's oil capacity in gallons/liters?  4. How many gallons/liters of make up oil is used between drains?  5. What is the compressor's current drain cycle in	12. What is your average cost for energy/fuel (per kwhr/gal/liter)?  13. What is the projected life of this unit in years?  14. What is replacement cost for this compressor?
compressor operated?  3. What is the unit's oil capacity in gallons/liters?  4. How many gallons/liters of make up oil is used between drains?  5. What is the compressor's current drain cycle in hours?	12. What is your average cost for energy/fuel (per kwhr/gal/liter)?  13. What is the projected life of this unit in years?  14. What is replacement cost for this compressor?  15. How many hours do bearings/seals last?  16. How long does bearing/seal replacement take the
compressor operated?  3. What is the unit's oil capacity in gallons/liters?  4. How many gallons/liters of make up oil is used between drains?  5. What is the compressor's current drain cycle in hours?  6. How long does a routine oil change take?  7. What is your cost per gallon/liter for waste oil disposal?  8. What is your current yearly cost for oil analysis	12. What is your average cost for energy/fuel (per kwhr/gal/liter)?  13. What is the projected life of this unit in years?  14. What is replacement cost for this compressor?  15. How many hours do bearings/seals last?  16. How long does bearing/seal replacement take the compressor out of service?  17. What was your last cost for bearing/seal
compressor operated?  3. What is the unit's oil capacity in gallons/liters?  4. How many gallons/liters of make up oil is used between drains?  5. What is the compressor's current drain cycle in hours?  6. How long does a routine oil change take?  7. What is your cost per gallon/liter for waste oil disposal?	12. What is your average cost for energy/fuel (per kwhr/gal/liter)?  13. What is the projected life of this unit in years?  14. What is replacement cost for this compressor?  15. How many hours do bearings/seals last?  16. How long does bearing/seal replacement take the compressor out of service?  17. What was your last cost for bearing/seal replacement parts?

SWEPCO Field Service Representative: Phone Number: (\_\_\_\_\_)

### **COMPRESSOR LUBRICATION COST IMPROVEMENT ANALYSIS**

Company: Sweeney Manufacturing

Compressor Description: LeRoi Rotary Screw Model 810H

SECTION 1 CURRENT MAINTENANCE INFO	RMATION
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How many average hours per week is this compressor operated?	150	Hours per Week
What is this compressor's oil capacity in gallons/liters?	48	Gallons/Liters
How many gallons/liters of make up oil is used between drains?	10	Gallons/Liters

What is this compressor's current drain cycle in hours?

How long does a routine oil change take? 2.00 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 compressor? \$300.00 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 ENERGY/FUEL COST INFORMATION**

What is your average energy/fuel usage rate for this unit?

What is your average cost for energy/fuel?

\$0.0480 | Per KWHr/Gal/Liter

#### **SECTION 3 -- EQUIPMENT COST INFORMATION**

What is the projected life of this compressor in years?

What is replacement cost for this compressor?

\$100,000.00 Each

#### **SECTION 4 -- CURRENT REPAIR COST INFORMATION**

How many hours do bearings/seals last?

2,400 Hours

How long does bearing/seal replacement take the compressor out of service?

What was your last cost for bearing/seal replacement parts?

How many hours do you get between major rebuilds?

How long do major rebuilds take the compressor out of service?

Hours

What was your last cost for major rebuild parts?

SECTION 5 LUBRICATION COST ANALYSIS	<b>Current Supplier</b>	SWEPCO

Projected Drain Interval

\$9.300.00

100.00%

Per Set

Projected Equipment Life	100.00%	110.00%	Of Current
Projected Energy/Fuel Savings	0.00%	2.00%	Of Current
Cost of Compressor Oil Per Gallon/Liter	\$4.36	\$12.30	
In Service Hours Per Year	7,800	7,800	
Oil Changes Per Year	13.00	6.50	
Bearing/Seal Replacements Per Year	3.25	2.95	
Major Rebuilds Per Year	0.81	0.74	
Annualized New Oil Costs	\$3,287.44	\$4,637.10	
Annualized Oil Analysis & Used Oil Disposal Costs	\$646.84	\$173.42	
Annualized Labor Costs	\$3,806.66	\$2,894.32	
Annualized Parts Costs	\$9,782.50	\$8,893.18	
Annualized Cost of Downtime	\$78,650.00	\$59,800.00	
Annualized Energy/Fuel Usage	\$658,944.00	\$645,765.12	
Equipment Cost Per Year Of Service	\$25,000.00	\$22,727.27	

#### THE BOTTOM LINE -- TOTAL ANNUALIZED COMPRESSOR OPERATING COST \$780,117.44 \$744,890.41

Projected Yearly SWEPCO Savings In Dollars
Projected Yearly SWEPCO Savings As A Percent

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

Number of Similar Units

**Total Potential Annual Savings** 

\$70,454.05

\$35,227,03

4.52%

200.00% Of Current