

# FEEDBACK



605 ALMASOL® VARI-PURPOSE GEAR LUBRICANT  
MAJOR COAL FIRED POWER FACILITY IN PA  
CE Raymond model 843 Pulverizers  
SIC 4911 Electric Services  
Rev. 97-02-14 (LI70282)

## **CUSTOMER PROFILE**

LE Representative John Hayes services a Major Coal Fired Power Facility in Pennsylvania.

## **APPLICATION**

Their major pieces of equipment are the C.E. Raymond model 843 pulverizers.

## **AREA OF INTEREST**

This coal fired power facility was experiencing sludging and overheating in their C.E. Raymond pulverizers. They were using a commercial grade ISO 320 gear oil.

## **LE SOLUTION**

LE Representative John Hayes recommended LE's 605 ALMASOL Vari-Purpose Gear Lubricant to reduce operating temperatures, reduce wear and increase oil life. LE's 605 is an ISO 320 gear lubricant formulated for heavy-duty service in industrial gearing. It contains ALMASOL, LE's exclusive wear-reducing additive, is very adhesive, protects against corrosive wear and can reduce overheating. A conversion to LE's 605 was scheduled.

## **CUSTOMER COST SAVINGS**

LE's 605 ALMASOL Vari-Purpose Gear Lubricant lowered operating temperatures, reduced amperage draw and increased production. Because of the success with this conversion, this power facility has converted all sixteen pulverizers to LE's 605. LE Representative John Hayes has provided the following documentation on the success of LE's 605 versus the commercial grade lubricant.

### **UNIT #1**

<b>LE's 605 ALMASOL Vari-Purpose Gear Lubricant</b>					<b>Commercial Grade Gear Oil</b>				
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Mill	Amps	Temp°F	Coal lbs/hr	Coal Lbs/amp	Mill	Amps	Temp°F	Coal lbs/hr	Coal lbs/amp
1A	100	110	82,000	820	1C	93	119	72,000	774
1B	93	110	80,000	860	1E	90	123	76,000	844
1D	86	109	80,000	930	1F	96	118	76,000	791
1G	87	110	80,000	919	1H	96	123	80,000	833
Avg	91.5	109.75	80,500	882.25	Avg	93.75	120.75	76,000	810.50

LEADERS IN LUBRICANTS

**LUBRICATION ENGINEERS, Inc.**

Unit #1 gearboxes using LE's 605 ALMASOL Vari-Purpose Gear Lubricant crushed an average of 4,500 lbs. more coal per hour using 2.25 less amps than the units running on the commercial grade lubricant. **The gearboxes also ran 11°F. cooler. This results in an 8.8% improvement in efficiency.**

## UNIT #2

<b>LE's 605 ALMASOL Vari-Purpose Gear Lubricant</b>	<b>Commercial Grade Gear Oil</b>
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Mill	Coal lbs/hr	Coal lbs/amp	Mill	Amps	Temp°F	Coal lbs/hr	Coal lbs/amp
2B	94,000	1,000	2A	108	135	92,000	851
2F	92,000	1,000	2C	Off	Off	--	--
			2D	100	129	90,000	900
			2E	94	116	92,000	978
			2G	96	124	92,000	958
			2H	98	126	87,000	887
Avg	93,000	1,000	Avg	99.2	126	90,600	914.8

The gearboxes from Unit #2 using LE's 605 ALMASOL Vari-Purpose Gear Lubricant crushed an average of 2,400 lbs. more coal per hour using 6.2 less amps than the units running on the commercial grade lubricant. **The gearboxes also ran 18°F. cooler. This results in a 9.3% improvement in efficiency.**

LE Representative John Hayes was very pleased with the final data and shared it with a Plant Engineer for another Major Coal Fired Power Facility who stated, "While a temperature reduction is great, it is the energy saving results that will sell your oil throughout the entire power system."

LE's 605 ALMASOL Vari-Purpose Gear Lubricant is ordered as needed and a minimum amount is kept on site at this Major Coal Fired Power Facility. As a result of the energy savings at this particular plant, two other power generating facilities in this system have begun converting their mills to LE's 605.

We want to thank the personnel at this Major Coal Fired Power Facility and LE Representative John Hayes (pictured) for providing the information to prepare this report.

